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## DISTRIBUTIONAL RECORDS AND COMMENTS ON MAMMALS FROM SIX TEXAS COUNTIES

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As a result of ongoing fieldwork and research in Comanche, Erath, and Mills counties in the western Cross-Timbers and Webb County in South Texas, we have obtained several mammalian species which represent first records within these counties of Texas. Aside from the monograph of Dalquest and Horner (1984), which included a portion of the northwestern Cross-Timbers region, and the work of Riddle et al. (1999), little research concerning mammalian distributions and biogeography has been conducted in this region of Texas. An additional specimen described below was obtained in Llano County and represents a first record for this area of the northeastern Edwards Plateau. Also, life history information for a chiropteran species from Kleberg County, Texas, was obtained

*Didelphis virginiana*.—The Virginia opossum is relatively common over most of the state of Texas (Davis and Schmidly, 1994; Manning and Jones, 1998); however, it has not been reported for several counties in central and south Texas. We have acquired three specimens, which represent first records for three Texas counties. On 3 July 1988, the second author collected a male opossum (MWSU 21594) from 1.1 mi. NE intersection County Road 146 and Farm-to-Market Highway 588 in Comanche County. The opossum was residing in an abandoned pecan orchard ad-

during our research and is presented in this report. Information presented herein will be of use to biologists and wildlife scientists studying the ecology and distributional patterns of mammals within Texas.

Mammalian species accounts are arranged according to Manning and Jones (1998). Scientific names of plants are taken from Correll and Johnston (1979). Voucher specimens of all reported species, usually skins and skulls or associated skeletal material (with measurements), are deposited in the Collection of Recent Mammals of Midwestern State University (MWSU) or the Mammal Collection of the Museum, Texas Tech University (TTU).

adjacent to a native pasture dominated by post oak (*Quercus stellata*), little bluestem (*Schizachyrium scoparium*), and ragweed (*Ambrosia* sp.).

A second opossum was obtained on 27 February 1997 in Webb County on the campus of Laredo Community College, where the animal was residing underneath a residence. The animal (MWSU 21575) was an adult male. The opossum is common in the region.

A third specimen was collected on 21 June 1998 in Mills County (MWSU 21568). The skull of this animal was salvaged from a roadside 0.5 mi. W Center City. The habitat was in a valley area dominated by live oak trees (*Quercus virginiana*) and side oats grama grass (*Bouteloua curtipendula*). The valley was dissected by a small stream.

***Cryptotis parva*.**—Two female least shrews (MWSU 21300,21301) were collected on 29 December 1997 in Mills County at a locality 3 mi. S, 2 mi. W Mullin. The habitat of capture was dominated by bluestem and lovegrass (*Eragrostis* sp.) species. Ground cover was one hundred percent. Water was readily available at this site and part of the habitat was an abandoned field that had been reseeded to grass.

The report of *Cryptotis parva* from Mills County extends the range of this species to near the Colorado River in Central Texas. The closest previous records of this species are from Taylor and Palo Pinto counties in the west and north, and McLennan and Bell counties in the east (Davis and Schmidly, 1994). The least shrew has not been reported from the Edwards Plateau region immediately south of the Colorado River in San Saba County (Goetze, 1998), but its capture in Mills County brings the range of this species closer to the region.

***Scalopus aquaticus*.**—A female eastern mole (MWSU 21596) was captured on 4 July 1999, 3 mi. S Stephenville, Erath County. The specimen was non-reproductive. The mole was obtained from sandy soils within an elm (*Ulmus americana*) and post oak overstory with a cool season grass understory. Numerous mole runs were evident at this locality and burrowing activities have been observed throughout the past year. The eastern mole has been reported from adjacent Bosque, Eastland, and Palo Pinto counties of the western and central Cross-Timbers, but records are lacking for the southern portion of this region (Davis and Schmidly, 1994). Our specimen represents the first record for Erath County and helps define the range of the eastern mole within the Cross-Timbers of Texas.

***Nycticeius humeralis*.**—We obtained two evening bats in Kleberg County on 9 August 1997. The bats were taken from a wooden dock support at Riviera Beach, where they had been roosting for sev-

eral days. Upon removal from their diurnal retreat, it was discovered that the bats were male (MWSU 21269) and female (MWSU 21270). These were the only two individuals noted at the time of capture.

Although *N. humeralis* previously has been reported for Kleberg County, Davis and Schmidly (1994) reported that individuals of the opposite sex usually do not share the same roost space in the summer months in Texas. However, Schmidly (1991) reported the discovery of a mixed colony of evening bats in Brazos County following dispersal of a nursery colony in late August. Our capture of cohabitating individuals in August may indicate a similar reunion of the sexes at this time in South Texas.

***Dasypus novemcinctus*.**—The nine-banded armadillo occurs throughout most of Texas, but records are uncommon from the western Cross-Timbers area of the state. We collected the skull from a female armadillo (MWSU 21521) on 10 June 1998, 1 mi. N Goldthwaite in Mills County. The site of collection was dominated by juniper trees (*Juniperus* sp.) and silver bluestem grass (*Bothriochloa saccharoides*). The armadillo contained no embryos.

This specimen represents the first reported occurrence of the nine-banded armadillo in Mills County. Closest reported records are from Burnet and San Saba counties to the south (Goetze, 1998) and McLennon and Bosque counties to the northeast (Davis and Schmidly, 1994).

***Sciurus niger*.**—On 11 October 1997, a female eastern fox squirrel (MWSU 21587) that had been struck by an automobile on the campus of Laredo Community College was salvaged. This individual is the first eastern fox squirrel reported in Webb County. Eastern fox squirrels have resided on the college campus, which is situated along the Rio Grande, for several years. Here they occupy boles of ash (*Fraxinus velutina*), hackberry (*Celtis* sp.), elm, and pecan (*Carya illinoensis*) trees. The eastern fox squirrel may be extending its range in Texas along the Rio Grande, where it has been reported from the bordering counties of Maverick to the north, and Hidalgo and Cameron counties to the south (Davis and Schmidly, 1994).

*Reithrodontomys fulvescens*.—A male and female fulvous harvest mouse (MWSU 21550, 21546) were collected in Mills County on 6 June 1998 at a locality 3 mi. N Goldthwaite. The habitat was a grassy valley containing live oak, mesquite (*Prosopis glandulosa*), Canadian wild rye (*Elymus canadensis*), side-oats grama, and ragweed. These specimens are the first records of the fulvous harvest mouse for Mills County.

On 16 March 1999, we captured two female fulvous harvest mice (MWSU 21529, 21580) 2 mi. NE Proctor Cemetery in Comanche County. Habitat of capture was an upland pasture dominated by oak mottes, little bluestem, and scattered yucca (*Yucca* sp.) plants. These mice represent the first reported specimens for Comanche County.

The acquisition of these specimens from the western Cross-Timbers region helps to clarify the range of *R. fulvescens* in this area. Records are available from Eastland and Brown counties to the northwest, but no records have been reported from counties immediately south of Mills on the Edwards Plateau (Goetze, 1998).

*Peromyscus attwateri*.—The Texas mouse is a common resident of the central portion of the state (Manning and Jones, 1998), but is not well documented from the western Cross-Timbers region of Texas. We herein report this species for the first time from Comanche and Mills counties to help define its range in this region.

A female *P. attwateri* (MWSU 21581) was collected in Comanche County at the intersection of State Highway 587 and County Road 431 on 28 July 1998. Habitat at this locality was pastureland with associated vegetation that included post oak, silver bluestem, and coastal bermudagrass. Another female Texas mouse (MWSU 21582) was collected on 17 March 1999 at Proctor Cemetery in the aforementioned county. The capture locality was a riparian area adjacent to a small stream. Vegetation included elm trees, smilax (*Smilax* sp.), wild plum (*Prunus* sp.), and Johnsongrass (*Sorghum halapense*). Capture of the Texas mouse in this type of habitat within central Texas is rather uncommon.

Specimens of *P. attwateri* have been obtained from three localities within Mills County. Two individuals (MWSU 21308, 21309) were obtained from 2 mi. N, 7.5 mi. W Mullin on 28 December 1997. The capture locality was a rocky slope dominated by juniper and side-oats grama. Three additional individuals (MWSU 21538, 21539, 21540) were obtained on 12 June 1998, 3.5 mi. S, 1 mi. E Goldthwaite. The collection locality was along a railroad right-of-way and consisted of shallow, gravelly soils, juniper and live oak trees, and various species of grasses. Another Texas mouse (MWSU 21541) was obtained 3.5 mi. S, 1 mi. W Priddy on 18 June. Habitat at this site was a rocky slope dominated by juniper and side-oats grama.

*Peromyscus leucopus*.—The white-footed mouse has been reported throughout Texas, but records are scarce from some areas within the state. A female, white-footed mouse (MWSU 21583) was obtained on 28 July 1998, 1.1 mi. NE intersection County Road 146 and Farm-to-Market Road 588 in Comanche County. The habitat at this site consisted of a post oak-mesquite pasture adjacent to an abandoned pecan orchard. The mouse was nonreproductive. On 17 March 1999, we collected a male and female white-footed mouse (MWSU 21584, 21585) at Proctor Cemetery in Comanche County. Habitat at the locality has been described in the previous account of *P. attwateri*. These records of the white-footed mouse are the first for Comanche County and help define its range within the western Cross-Timbers region.

*Peromyscus maniculatus*.—The distribution of the deer mouse is not well-documented on the western Cross-Timbers of Texas, where its occurrence may be uncommon. The deer mouse is a denizen of grasslands throughout much of its range in Texas and thus may be absent from many areas within the Cross-Timbers.

We have obtained two specimens of *P. maniculatus* which represent first records from Mills County. On 8 June 1998, we collected a female deer mouse (MWSU 21543) at a locality 1 mi. N, 1 mi. W Mullin. That habitat was a mesquite pastureland with relatively tall grasses. An additional deer mouse (MWSU 21544) was collected on 18 June 1998, 3.5 mi. S, 1 mi. W Priddy. This mouse was obtained at

the base of a rocky slope in a stand of tall Johnsongrass. Closest reported records are from McCulloch and Burnet counties to the south (Goetze, 1998) and Eastland and Erath counties to the north (Davis and Schmidly, 1994).

*Peromyscus pectoralis*.—The white-ankled mouse ranges throughout much of western and central Texas, but has not been reported previously from Mills County. On 30 December 1997 we obtained three individuals (one female and two males; MWSU 21310, 21311, 21312, respectively) from a rocky, slope habitat 3 mi. S, 2 mi. W Mullin. Vegetation at the site consisted of live oak, juniper, yucca, and prickly pear cactus (*Opuntia* sp.). Nearest reported records are from San Saba, Erath, and Coryell counties (Davis and Schmidly, 1994).

*Sigmodon hispidus*.—We have obtained specimens of the hispid cotton rat from Comanche and Mills counties, which represent the first reported records from those counties. There is a noticeable hiatus in records of this species from the western Cross-Timbers (Davis and Schmidly, 1994) that these specimens help to fill.

On 17 March 1999, we collected a female hispid cotton rat from Proctor Cemetery in Comanche County. The collection site was in a riparian area that has been described in the species account of *P. attwateri*. We have collected hispid cotton rats from several sites in Mills County. These localities are listed below, along with catalog numbers of the specimens. On 29 December 1997, we collected a male (MWSU 21314) and female (MWSU 21313) hispid cotton rat 3 mi. S, 2 mi. W Mullin in a small valley area. On 6 June 1998, we collected a female *S. hispidus* (MWSU 21515) 3 mi. N Goldthwaite in another valley, and on 7 June 1998, one male and two female cotton rats (MWSU 21548, 21549, 21552, respectively) were obtained 2 mi. N Goldthwaite at the base of a rocky slope. An additional male (MWSU 21556) was obtained on 11 June 1998 from 6 mi. S, 2 mi. E Goldthwaite in a grassy, mesquite pasture. A male hispid cotton rat (MWSU 21554) was captured 3.5 mi. S, 1 mi. E Goldthwaite on 12 June 1998 along a railroad right-of-way. On 17 June 1998, we obtained a male *S. hispidus* (MWSU 21555) 6 mi. S, 0.5 mi. E Goldthwaite adja-

cent to a mesquite-live oak livestock pasture, and on 25 June 1998 we captured a female (MWSU 21547) cotton rat 2 mi. S, 2 mi. W Goldthwaite in a rocky, valley dominated by juniper, yucca, and side-oats grama.

*Neotoma micropus*.—We have collected the Southern Plains woodrat at three localities in Mills County. On 7 June 1998, a female (MWSU 21532) and male (MWSU 21533) *N. micropus* were collected 2 mi. N Goldthwaite along a rocky slope with juniper and mesquite vegetation. Two more females (MWSU 21534, 21535) were obtained 3.5 mi. S, 1 mi. E Goldthwaite on 12 June 1998. This locality was along an overgrown railroad right-of-way dominated by juniper, mesquite, and Johnsongrass. Finally, a female (MWSU 21536) and male (MWSU 21537) were collected 3.5 mi. S, 1 mi. W Priddy at the base of a rocky slope with live oak, juniper, and sumac (*Rhus* sp.) vegetation.

These six specimens represent first records for Mills County. Davis and Schmidly (1994) included the northern margin of Mills County within the range of *N. micropus*, but the closest reported records were from McCulloch County to the south and Erath County to the north. Goetze (1998) reported two specimens from San Saba County immediately south of Mills County. The addition of Mills County specimens help delineate the known eastern range of this species within Texas.

*Erethizon dorsatum*.—The range of the porcupine extends throughout the western half of the state (Davis and Schmidly, 1994; Manning and Jones, 1998), but specimen records to support much of this extensive range are scarce. On 13 August 1998, the first author obtained a partial right ramus fragment with dentition (MWSU 21591) from an individual that had been struck by an automobile 3 mi. E Goldthwaite. Surrounding habitat was a juniper and mesquite pasture with interspersed rocky slopes. The nearest records of *E. dorstaum* are from Mason County to the south (Goetze, 1998) and Erath County to the north (Davis and Schmidly, 1994).

*Vulpes vulpes*.—The red fox was reintroduced in the Cross-Timbers region around 1891 (Bailey,

1905), but, interestingly, its presence has not been recently verified within many of the counties of the Cross-Timbers (Davis and Schmidly, 1994). On 24 December 1998, we collected the skulls of two red foxes (MWSU 21592, 21593) from 1 mi. S Mullin, Mills County. Surrounding habitat was a mesquite pasture bordered by rocky slopes and cultivated coastal bermudagrass fields. The vouchers were obtained from partial skeletons; consequently, sexes and external measurements were impossible to obtain. These red foxes represent the first records for Mills County. Nearest records of *V. vulpes* are from Bosque and Hamilton counties to the east. According to Bailey (1905), red foxes were introduced into Bosque and Erath counties of the Cross-Timbers, but records are lacking from Erath County.

*Urocyon cinereoargenteus*.—The first author obtained the skull of a female gray fox (MWSU 21597) from 1 mi. S, 1 mi. W Mullin, Mills County, on 4 August 1999. The fox had been struck by an automobile while crossing a road. She evinced no reproductive activity. Surrounding habitat was a short-grass pasture with scattered oak trees. This specimen represents the first reported record of *U. cinereoargenteus* from Mills County. The nearest record is from Brown County immediately west of Mills County (Davis and Schmidly, 1994). Local residents report that both gray and red foxes are common carnivores in Mills County (Roberts, pers. comm., 1999).

*Procyon lotor*.—We obtained the skull of a subadult, female raccoon (MWSU 21595) on 28 July 1998 in Comanche County. The specific locality was 4.2 mi. W Gustine. The raccoon had been struck by an automobile on a road adjacent to a field containing coastal bermudagrass and small oak mottes. This

specimen represents the first report of the raccoon from Comanche County. Goetze and Nelson (1998) reported the raccoon in adjoining Mills County to the south, and the raccoon has been recorded from Eastland County to the north (Davis and Schmidly, 1994). This specimen helps to clarify the species' range on the western Cross-Timbers.

*Taxidea taxus*.—The range of the American badger includes the western half of the state (Davis and Schmidly, 1994), but few records of its occurrence are available from areas such as the Edwards Plateau (Goetze, 1998). On 4 January 1997, the first author collected a partial palate and maxillary from an American badger (TTU 81860) in Llano County, 10 mi. S Llano. The surrounding habitat included a small stream with elm and oak trees. This specimen represents the first record of the badger from Llano County, and helps to define the badger's range on the eastern Edwards Plateau.

*Mephitis mephitis*.—The striped skunk occurs throughout most of Texas (Manning and Jones, 1998), but its range is poorly documented on the western Cross-Timbers. On 10 June 1998, we collected the skull of a female striped skunk (MWSU 21562) 1 mi. N, 2 mi. W Goldthwaite. This individual contained no embryos. The collection locality was an upland mesquite pasture with interspersed juniper trees. Our voucher represents the first record of the striped skunk in Mills County and helps clarify the range of *M. mephitis* on the western Cross-Timbers. Closest records of this species are from Eastland County to the north, Bell County to the east (Davis and Schmidly, 1994), and McCulloch County to the southwest (Goetze, 1998).

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## **PUBLICATIONS OF THE MUSEUM OF TEXAS TECH UNIVERSITY**

It was through the efforts of Horn Professor J Knox Jones, as director of Academic Publications, that Texas Tech University initiated several publications series including the Occasional Papers of the Museum. This and future editions in the series are a memorial to his dedication to excellence in academic publications. Professor Jones enjoyed editing scientific publications and served the scientific community as an editor for the Journal of Mammalogy, Evolution, The Texas Journal of Science, Occasional Papers of the Museum, and Special Publications of the Museum. It is with special fondness that we remember Dr. J Knox Jones.

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