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MUSEUM SPECIMEN RECORDS CONTRIBUTING TO THE KNOWN DISTRIBUTION OF MAMMALS IN TEXAS

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ABSTRACT

Mammal distributions in Texas are well understood but new specimen records continue to add to our knowledge of species' ranges. Recent field studies and examination of museum specimen records in the Angelo State Natural History Collections have added 43 county records representing 28 species of mammals. These records contribute to our understanding of mammalian distributions in Texas. Specimens of *Neotoma floridana* from Coryell County slightly extend the range of the species in Texas. Previously published specimen records from Willacy and Kenedy counties clarify published distributions for *Oryzomys couesi*.

Key words: county records, distribution, mammals, Texas

INTRODUCTION

The distribution of fauna is both plastic and temporal, but understanding the current and historical distributions of species is important to a better understanding of the planet's biodiversity. In Texas, the distribution of mammals is well documented relative to many other groups of animals (Schmidly 2004). Despite this, field work in the state and assessment of museum specimen holdings continue to elucidate mammalian distributions in the state. Field studies throughout Texas and examination of specimens in the Angelo State Natural History Collections (ASNHC) have revealed numerous new county records for the state. Twelve of the records are from Irion County, a little-studied area bordering the Rolling Plains and the western Edwards Plateau. Most of the Irion County records resulted from field work conducted by two of us (RAM, TCM) in an effort to document mammal

species in that county. In some cases, we collected specimens or located others catalogued in the ASNHC that augment the published distribution of mammals in the state. We have compared our records to Schmidly (2004) and to other more recent studies that have occurred during the last six years.

We report 43 county records representing 28 species from 19 counties. These counties cover seven ecological regions, including the Gulf Prairies and Marshes, Cross Timbers and Prairies, South Texas Plains, Edwards Plateau, Rolling Plains, High Plains, and Trans-Pecos, Mountains and Basins. Species are arranged as in Schmidly (2004), but classification and common names follow Wilson and Reeder (2005). Although Helgen et al. (2009) recognized new genera for ground squirrels, we conservatively have retained

the use of *Spermophilus* herein. Localities have been converted to the metric system from those originally written on specimen tags. In addition, latitude and longitude data have been standardized as decimal degrees

for all localities. When latitude and longitude were not taken in the field with a hand-held GPS unit, locations were georeferenced by locating the points using Google Earth 6.

SPECIES ACCOUNTS

ORDER CINGULATA

Family Dasypodidae

Dasypus novemcinctus Linnaeus 1758

Nine-banded Armadillo

The nine-banded armadillo occurs throughout the state, excluding the western half of the Trans-Pecos region (Schmidly 2004). One juvenile male armadillo was collected on 18 March 1996 (ASNHC 12852) in Knox County 8.0 km north of Rhineland (33.603250°N, 99.651778°W). Another male armadillo (ASNHC 13834), a road-killed animal, was salvaged on 27 April 2008 in Runnels County 8.0 km northeast of Miles on Hwy 67 (31.623675°N, 100.103242°W). These specimens represent two new county records from the Rolling Plains region.

ORDER SORICOMORPHA

Family Soricidae

Notiosorex crawfordi (Coues 1877)

Crawford's Gray Shrew

The distribution of this shrew includes the western half of the state, as well as portions of the South Texas Plains and Gulf Prairies and Marshes regions (Schmidly 2004). One female (ASNHC 11431) was captured 8.0 km north, 15.8 km west of Mertzon (31.334828°N, 100.983293°W) in Irion County on 19 May 1995. This specimen represents a new county record from the Edwards Plateau region.

ORDER CHIROPTERA

Family Vespertilionidae

Myotis yumanensis (H. Allen 1864)

Yuma Myotis

This species occurs in the southern Trans Pecos east to Val Verde County (Schmidly 2004). One male Yuma myotis (ASNHC 13280) was captured in Ter-

rell County, San Francisco Canyon (29.882315°N, 102.321431°W) on 30 May 2005. Two additional specimens from Terrell County also are housed in the ASNHC. These specimens represent new records in the Trans-Pecos, Mountains and Basins region.

ORDER CARNIVORA

Family Canidae

Canis latrans Say 1823

Coyote

The coyote is ubiquitous throughout the state and few counties lack records in Schmidly (2004). Coryell County in the Cross Timbers and Prairies region is one such county. Carroll et al. (1999) documented tracks of *Canis latrans* at scent stations at three sites on Fort Hood in Coryell County, although no voucher specimen was reported. One road-killed coyote (ASNHC 9595) was recovered at Fort Hood, Area 36 (31.215401°N, 97.846773°W) on 1 February 1997.

Family Procyonidae

Bassariscus astutus (Lichtenstein 1830)

Ringtail

The ringtail is found throughout much of Texas (Schmidly 2004). A female ringtail (ASNHC 12767) was collected 15 November 1999 at 3.2 km south, 1.3 km west of Mertzon (31.232961°N, 100.831198°W). This specimen is a record for Irion County in the Edwards Plateau region.

Procyon lotor (Linnaeus 1758)

Raccoon

The raccoon's distribution as depicted in The Mammals of Texas (Schmidly 2004) includes the entire state; however, records are not shown on the range map for Jeff Davis and Cameron counties, for which we have

specimens. The absence of Jeff Davis County for the raccoon is an obvious omission in Schmidly (2004) as The Mammals of Trans-Pecos Texas (Schmidly 1997) reported six records for this county. Our records for Cameron County, in the Gulf Prairies and Marshes region, include one male (ASNHC 5374) and one female (ASNHC 8764), both collected on 17 November 1985 in Port Isabel (26.073412°N, 97.208626°W).

Family Mustelidae
Taxidea taxus (Schreber 1777)
 American Badger

Badgers are found throughout the state, excluding the most eastern portions (Schmidly 2004). We report new records from the Edwards Plateau and Rolling Plains regions. A male (ASNHC 10453) was collected 13.7 km north, 16.7 km west of Mertzon (31.385207°N, 100.993388°W) in Irion County. A female badger (ASNHC 11347) was collected 16 August 1994 in Runnels County, 1.6 km south of Rowena (31.632504°N, 100.046204°W).

Family Mephitidae
Spilogale gracilis Merriam 1890
 Western Spotted Skunk

The distribution of the western spotted skunk includes the southwestern portion of the state (Schmidly 2004) and recently was reviewed by Dowler et al. (2008). We report a new record from the southern edge of the Edwards Plateau region in Bandera County. A male *S. gracilis* was recovered by a landowner on 25 March 2009 when it drowned in a rain barrel. The specimen (ASNHC 13833) is from 3.2 km east of Vanderpool on Route 337 (29.75938°N, 99.52229°W).

Mephitis mephitis (Schreber 1776)
 Striped Skunk

The striped skunk is found throughout the state (Schmidly 2004). We report new records from the Cross Timbers and Prairies, South Texas Plains, and Rolling Plains regions. One male (ASNHC 11753) was collected 13 February 1992 in Coryell County, 8.0 km east of Evant (31.473689°N, 98.067063°W). A male striped skunk (ASNHC 13636) was collected on 24

November 2007 in Duval County, 6.9 km north of Freer on Hwy 16 (27.94236°N, 98.61859°W). Another male specimen (ASNHC 13640) was collected in Anson (32.746195°N, 99.888749°W) in Jones County.

Conepatus leuconotus (Lichtenstein 1832)
 American Hog-nosed Skunk

The distribution of this species includes the central and western portions of the state, as far north as Lubbock County in the west and Collin County in the east. An isolated population that once occurred in the Big Thicket region of east Texas is thought to have been extirpated (Schmidly 2004). New records, all salvaged as road-killed animals, are from the Cross Timber and Prairies, Rolling Plains, and Edwards Plateau regions.

A male hog-nosed skunk (ASNHC 13523) was collected 30 May 2004 at 4.8 km south of Talpa (31.727536°N, 99.709418°W) in Coleman County. A male specimen (ASNHC 12929) was collected 15 November 2003 in Glasscock County 10.1 km west of Garden City (31.863501°N, 101.589451°W). A male specimen (ASNHC 13544) was salvaged on 24 February 2008 in Irion County at the junction of U.S. 67 and FM 915 (31.225374°N, 100.829846°W). A male hog-nosed skunk (ASNHC 13569) was collected 30.6 km west of Goldthwaite on FM 574 (31.467957°N, 98.869335°W) in Mills County. A male (ASNHC 14387) was collected in Sterling County 18.3 km east of the Glasscock County line on Texas Hwy 158 (31.857389°N, 101.091885°W) on 25 October 2010. Another male hog-nosed skunk (ASNHC 12934) was collected 14.0 km north of Sonora (30.679829°N, 100.646279°W) in Sutton County on 10 September 1999. One additional specimen from Coleman County, three additional specimens from Sutton County, and five additional specimens from Irion County are housed in the ASNHC.

ORDER RODENTIA
 Family Sciuridae
Spermophilus spilosoma Bennett 1833
 Spotted Ground Squirrel

The spotted ground squirrel is found in the western and southern portions of the state (Schmidly

2004). Two males, collected 11 April 1992, and one female, collected 29 March 1992, (ASNHC 12373-12375) from 32.2 km east of Lubbock (33.578127°N, 100.509872°W) represent a new record for this species in Crosby County in the High Plains region.

***Spermophilus variegatus* (Erxleben 1777)**
Rock Squirrel

The rock squirrel can be found throughout the Trans-Pecos and central portions of the state (Schmidly 2004). This report represents a new record from Irion County in the Edwards Plateau region. Two females (ASNHC 9364, 12757) were collected on 30 September 1995 and 27 August 1995, respectively, 3.9 km north, 18.7 west of Mertzon in the Big Hollow Draw drainage (31.296325°N, 101.013616°W).

***Sciurus carolinensis* Gmelin 1788**
Eastern Gray Squirrel

The native distribution of the eastern gray squirrel includes the eastern one-third of Texas, but anthropogenically translocated individuals have established populations west of their native range (Schmidly 2004). A female gray squirrel (ASNHC 14147) collected on 23 October 2009 in Fort Bend County in Brazos Bend State Park (29.374596°N, 95.582578°W) represents a new record from the Gulf Prairies and Marshes region.

***Sciurus niger* Linnaeus 1758**
Eastern Fox Squirrel

The fox squirrel is found throughout the eastern three-fourths of the state (Schmidly 2004). A male fox squirrel (ASNHC 13925) collected 18 May 2009 in Mertzon (31.26175°N, 100.81719°W) represents a new record for Irion County. Another male (ASNHC 13832) collected on 25 January 2009 in Eldorado (30.86026°N, 100.60160°W) is the first reported specimen from Schleicher County.

Family Heteromyidae
***Perognathus merriami* A. Allen 1892**
Merriam's Pocket Mouse

The distribution of this species includes the western two-thirds of the state, excluding the northern and

western portions of the panhandle and Trans-Pecos, respectively (Schmidly 2004). This report represents a new record from the Edwards Plateau region. A female Merriam's pocket mouse (ASNHC 9441) was collected on 17 September 1995 at 3.9 km south, 0.6 km west of Barnhart (31.090205°N, 101.173185°W) in Irion County. Nine additional specimens from Irion County are housed in the ASNHC.

***Chaetodipus hispidus* Baird 1858**
Hispid Pocket Mouse

The hispid pocket mouse can be found across Texas, excluding the extreme southeast portion of the state (Schmidly 2004). A new record is reported from the Edwards Plateau region from Irion County. A female specimen (ASNHC 14157) was collected on 17 September 1995 from 3.9 km south, 0.6 km west of Barnhart (31.090205°N, 101.173185°W). Eighteen additional specimens from Irion County are housed in the ASNHC.

Family Castoridae
***Castor canadensis* Kuhl 1820**
American Beaver

The distribution and density of this species is dependent on suitable aquatic habitats in Texas. It is found across the state with the exception of most of the Llano Estacado and Trans-Pecos (Schmidly 2004). We report the first record of this species from Irion County on the western edge of its range. A female beaver (ASNHC 14386) with two embryos was collected on 18 April 2008 from Sherwood, Spring Creek (31.286842°N, 100.802662°W). A second specimen (ASNHC 14157) represents a new record from Jones County in the Rolling Plains region. This animal was collected 3.2 km north of I-20 on FM 600, Lake Fort Phantom Hill (32.610964°N, 99.688896°W) in December of 2007.

Family Cricetidae
***Oryzomys couesi* Alston 1877**
Coues's Oryzomys

The distribution of this species is reported to include only Cameron and Hidalgo counties in the Rio Grande Valley (Schmidly 2004). Records for this spe-

cies in Willacy and Kenedy counties were reported by Schmidt and Engstrom (1994), but these county records do not appear in Schmidly (2004). We hold voucher specimens from that study that include a female specimen (ASNHC 2850) collected 29 November 1985 in Kenedy County, 30.6 km north of Raymondville (26.757140°N, 97.782661°W). Fourteen additional specimens from Kenedy County are housed in the ASNHC. A male rice rat (ASNHC 2865) was captured 14 March 1985 6.4 km west of Port Mansfield (26.554847°N, 97.489568°W) in Willacy County.

Reithrodontomys fulvescens J. A. Allen 1894
Fulvous Harvest Mouse

The distribution of the fulvous harvest mouse includes eastern and central Texas, and portions of the Trans-Pecos (Schmidly 2004). A new record from Fort Bend County in the Gulf Prairies and Marshes region is reported. A male fulvous harvest mouse (ASNHC 14148) was captured 24 October 2009 in Brazos Bend State Park (29.371445°N, 95.638343°W).

Reithrodontomys montanus (Baird 1855)
Plains Harvest Mouse

The plains harvest mouse is found across much of Texas, excluding the southeastern quarter and portions of the Edwards plateau and Trans Pecos, Mountains, and Basins regions (Schmidly 2004). One new record from Irion County in the Edwards Plateau region is reported. A male plains harvest mouse (ASNHC 9436) was collected 19 March 1995 13.7 km north, 16.7 km west of Mertzon (31.385276°N, 100.993289°W).

Peromyscus attwateri J. A. Allen 1895
Texas Mouse

The distribution of this species includes a large portion of central Texas (Schmidly 2004). Two males (ASNHC 9392-9393) were captured 19 August 1995 from Irion County, 4.2 km north, 17.9 km west Mertzon in the Big Hollow Draw drainage (31.298870°N, 101.005850°W). Fifty additional specimens from Irion County are housed in the ASNHC.

Peromyscus leucopus (Rafinesque 1818)
White-footed Mouse

The distribution of the white-footed mouse covers the entire state with the exception of a few counties in the extreme southeast (Schmidly 2004). This report represents new records from Coleman County in the Rolling Plains region and Fort Bend County in the Gulf Prairies and Marshes region. A female specimen (ASNHC 10375) was collected 15 December 1995 in Coleman County 1.6 km north, 1.6 km west of Valera (31.763435°N, 99.564121°W). A male white-footed mouse was collected 23 October 2009 in Fort Bend County at Brazos Bend State Park (29.369565°N, 95.627605°W). Two additional specimens from the state park also are housed in the ASNHC.

Peromyscus maniculatus (Wagner 1845)
Deer Mouse

The distribution of this species covers the entire state (Schmidly 2004). A new record from the Trans-Pecos, Mountains, and Basins region is reported. A male specimen (ASNHC 13831) was collected 8 October 2005 at Independence Creek Preserve (30.46890°N, 101.78547°W) in Terrell County.

Baiomys taylori (Thomas 1887)
Northern Pygmy Mouse

The northern pygmy mouse occurs across much of Texas, with the exceptions of the Trans-Pecos and northeastern portions of the state (Schmidly 2004). A new record from Irion County in the Edwards Plateau region is reported. A male northern pygmy mouse (ASNHC 9442) was collected 17 September 1995 from 3.9 km south, 0.6 km west Barnhart on CR 302-1 (31.090205°N, 101.173185°W).

Sigmodon hispidus Say and Ord 1825
Hispid Cotton Rat

The hispid cotton rat is ubiquitous throughout Texas (Schmidly 2004). This report represents new records from the Edwards Plateau and Rolling Plains

regions from Irion County and Jones County, respectively. A male hispid cotton rat (ASNHC 9437) was captured 3 June 1995 in Irion County 9.8 km north, 11.7 km east of Mertzon on Hwy 67 (31.345437°N, 100.694057°W). A female hispid cotton rat (ASNHC 14018) was collected 2 June 2002 in Jones County 17.7 km east of Anson at the junction of Hwy 180 and FM 600 (32.750735°N, 99.713502°W).

Neotoma floridana (Ord 1818)
Eastern Woodrat

The eastern woodrat can be found in the eastern portion of the state; its range reaches as far west as Edwards County in the south and Wichita County in the north (Schmidly 2004). Specimens collected in Coryell County in the Cross Timbers and Prairies region of the state represent a slight range extension just west of the known distribution in central Texas for this species. A male eastern woodrat (ASNHC 9590) was collected on 18 May 1997 from Fort Hood, Area 44B, 31.283484°N, 97.805827°W. In addition to this woodrat, an additional six specimens were taken at Fort Hood. In Fort Bend County, a male *N. floridana* (ASNHC 14154) was captured 24 October 2009 at Brazos Bend State Park (29.369565°N, 95.627605°W), representing a county record for the Gulf Prairies and Marshes region of Texas.

Neotoma micropus Baird 1855
Southern Plains Woodrat

The southern plains woodrat occurs in the western two-thirds of the state (Schmidly 2004). This report represents a new record from Jones County in the Rolling Plains region. Two females (ASNHC 13991-13992) were captured 28 April 2002 from 17.7 km east of Anson at the junction of Hwy 180 and FM 600 (32.750735°N, 99.713502°W).

Family Erethizontidae
Erethizon dorsatum (Linnaeus 1758)
North American Porcupine

The porcupine's expanding distribution includes the western portion of Texas (Schmidly 2004). New records from the Edwards Plateau and Rolling Plains regions are reported. One male specimen (ASNHC 14158) was collected 26 March 2006 in Coleman County, 13.5 km east of Talpa (31.771080°N, 99.567013°W). A female porcupine (ASNHC 14160) was collected 21 September 2003 in Runnels County, 2.4 km east of Ballinger on Hwy 67 (31.723244°N, 99.960983°W).

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