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### THE MAMMALS OF LAKE MEREDITH NATIONAL RECREATION AREA AND ADJACENT AREAS, HUTCHINSON, MOORE, AND POTTER COUNTIES, TEXAS

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The mammals of the northern Texas Panhandle have received less attention than the mammals in more "attractive" parts of the state. Jones et al. (1988) treated 54 species of mammals that occur or were known to occur in this region. They also listed 22 species with possible distributions in the Panhandle.

The primary objective of this study was to conduct field surveys, as well as museum and literature surveys, to determine the diversity and distribution of mammals at the Lake Meredith National Recreation Area (hereafter referred to as Lake Meredith NRA). This type of baseline information is necessary for scientists and land managers in terms of long-term planning, sustained use, and future research at the Lake Meredith NRA.

#### METHODS AND MATERIALS

Between July 1991, and July 1992, periodic visits were made to the Lake Meredith NRA to collect and observe mammals. Small mammals usually were collected with Sherman live-traps baited with oatmeal. Traps were set 10 meters apart in line transects through various habitats. They were set before sundown and retrieved after dawn the following morning. Some mammals, such as pocket gophers, required specialized traps. Other mammals were collected with firearms. Mist nets were used to attempt to capture bats. Field notes were kept on all observations of mammals and mammal signs.

Mammals acquired during field work were identified, prepared as voucher specimens (standard museum skins and skulls), and deposited in the Collection of Recent Mammals in the Natural Science Research Laboratory of the Museum of Texas Tech University. In addition, specimens of mammals from Hutchinson, Moore, and Potter counties housed in this facility, as well as literature records from these counties, were used to supplement our field data. Results of efforts are reported in the Accounts of Species.

## DESCRIPTION OF THE STUDY AREA

Lake Meredith NRA is located in parts of Hutchinson, Moore, and Potter counties in the Texas Panhandle (Fig. 1). This area is considered part of the High Plains physiographic region. The lake itself resulted from the construction of Sanford Dam on the Canadian River. Three major types of habitats occur in the area; they are riparian, rocky uplands with brush, and mesquite grasslands. Each of these is described beyond.

**Riparian habitat.**— The dominant deciduous tree found along watercourses on Lake Meredith NRA is plains cottonwood (*Populus sargentii*) (Fig. 2). Other common plants found growing on the sandy soils include: salt cedar (*Tamarix gallica*), net leaf hackberry (*Celtis reticulata*), false willow (*Baccharis salicina*), choke cherry (*Prunus virginiana*), sand bar willow (*Salix interior*), panhandle grape (*Vitis acerifolia*), soapberry (*Sapindus saponaria*), big bluestem (*Andropogon gerardi*), three-awn grass (*Aristida longiseta*), and sedges (*Carex* sp. and *Cyperus* sp.).

**Rocky Uplands.**— As the name implies, the dominant features in these areas are large boulders on coarse soils with scattered, rather low-profile vegetation (Fig. 3). Slopes generally are about 30-45 degrees. Dominant woody plants include: mesquite (*Prosopis glandulosa*) and juniper (*Juniperus monosperma*). Common shrubs and other understory plants include: dalea (*Dalea formosa*), skunkbush (*Rhus trilobata*), catclaw acacia (*Mimosa biuncifera*), sideoats grama (*Bouteloua curtipendula*), and little bluestem (*Schizachyrium* sp.).

**Mesquite-grasslands.**— Grasslands with scattered mesquite (Fig. 4) were grazed in past years, however, little, if any grazing occurs today on Lake Meredith NRA. As a result, there may be a dense understory in some areas. The main floristic elements in this habitat are: mesquite, yucca (*Yucca augustifolia*), prickly pear (*Opuntia* sp.), sand sage (*Artemisia* sp.), grama grasses (*Bouteloua* sp.), buffalograss (*Buchloë* sp.), little bluestem, and brome (*Bromus* sp.).

## ACCOUNTS OF SPECIES

In the following accounts, we discuss 52 species of mammals recorded from the Lake Meredith NRA and elsewhere in Hutchinson, Moore, and Potter counties. Ordinal and familial headings are not included; however, accounts are arranged in currently accepted phylogenetic order through genera and species are arranged alphabetically within genera. Scientific and vernacular names follow those of Jones and Jones (1992). For each species, we comment on its presence within Lake Meredith NRA. Also included is a summary of records from throughout Hutchinson, Moore, and Potter counties based on museum specimens and "additional records" reported in the literature. All linear measurements provided are in millimeters. Specimens examined are deposited in the Collections of Recent Mammals at the Museum of Texas Tech University.

*Didelphis virginiana virginiana*

Kerr, 1792

Virginia Opossum

In the northern Texas Panhandle, the Virginia opossum favors wooded areas along streams and watercourses (Blair, 1954; Jones et al., 1988), but also may occur in juniper woodlands (Packard and Judd, 1968). This marsupial frequently is found near human structures (Jones et al., 1988). No sign of *D. virginiana* was recorded during our field work, but it is known to occur in the Sanford Dam area and additional sightings by residents of the Lake Meredith NRA have been reported (Killebrew, 1979).

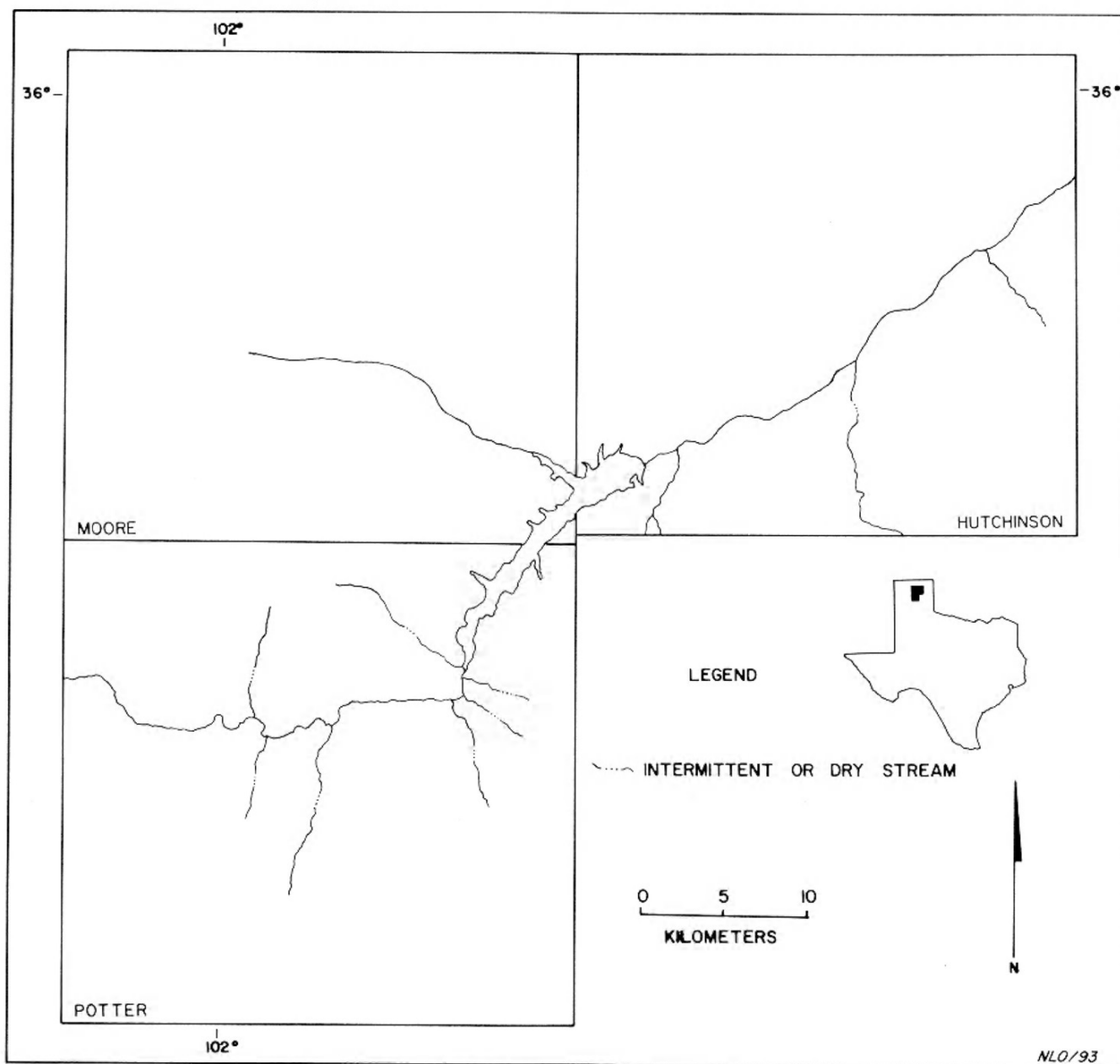


Figure 1. Geographic location of Lake Meredith National Recreation Area.

*Specimens examined* (1).— Hutchinson Co.: Sanford Dam, 1.

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett (Blair, 1954:241). Moore Co.: 12 mi. E Dumas (Jones et al., 1988:11). Potter Co.: Unspecified locality (Davis and Schmidly, 1994:16).

*Cryptotis parva parva*  
(Say, 1823)  
Least Shrew

This diminutive, somewhat gregarious shrew appears to be restricted to mesic areas (Jones, et al., 1988), especially those associated with grassy habitats (Nowak,



Figure 2. Typical riparian habitat along the Canadian River at Lake Meredith National Recreation Area. Dense vegetation at foreground is sand sage; mature cottonwood trees flank salt cedar and false willow in background.

1991). No specimens were taken during our survey and there are no records from Lake Meredith NRA. However, this species is known from Hutchinson County.

*Specimens examined* (0).

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:12).

*Notiosorex crawfordi crawfordi*  
(Coues, 1877)  
Desert Shrew

The desert shrew favors xeric environments, especially desert scrub (Jones et al., 1985), but also has been recorded from mesic situations (Blair, 1954). As was the case with *C. parva*, no specimens of *N. crawfordi* were obtained during our field work, but it is known to occur in Hutchinson and Moore counties.

*Specimens examined* (1).— Moore Co.: 7 mi. S, 14 mi. E Dumas, 1.

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:12)

*Scalopus aquaticus aereus*  
(Bangs, 1896)  
Eastern Mole

The eastern mole is known to favor areas with moist, sandy soil (Jones et al., 1988). In the Lake Meredith NRA, these soils mostly are restricted to drainages of the Canadian River and its tributaries (Blair, 1954).

One specimen of *S. aquaticus* was taken during our study. It was obtained in a sandy riparian area near Big Blue Creek. Numerous mole tunnels were observed at several other localities at Lake Meredith NRA, including Spring Canyon and Bates Canyon recreation





Figure 3. Typical rocky upland habitat at Lake Meredith National Recreation Area. Note common shrub and grass species amongst the boulders.

areas. The individual we took (collected on 10 July) was a male with testes that measured 10 x 5.

*Specimens examined* (1).— Moore Co.: Big Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 1.

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett; below dam, Lake Meredith National Recreation Area (Jones et al., 1988:14).

*Myotis velifer magnamolaris*  
Choate and Hall, 1967  
Cave Myotis

The cave myotis resides in caves and tunnels throughout the Panhandle (Schmidly, 1991). We did not document the presence of this bat at Lake Meredith NRA. In the study area, it is known only from Potter County (Schmidly, 1991; Davis and Schmidly, 1994).

*Specimens examined* (0).

*Additional records*.— Potter Co.: Amarillo (Schmidly, 1991:85).

*Lasionycteris noctivagans*  
Le Conte, 1831  
Silver-haired Bat

The silver-haired bat primarily roosts in trees, but has been found to inhabit buildings. It is known from scattered records across Texas, but appears to be rare in the Panhandle (Schmidly, 1991). We failed to document the presence of *L. noctivagans* at Lake Meredith NRA, but this bat has been reported from Potter County (Schmidly, 1991; Davis and Schmidly, 1994).

*Specimens examined* (0).

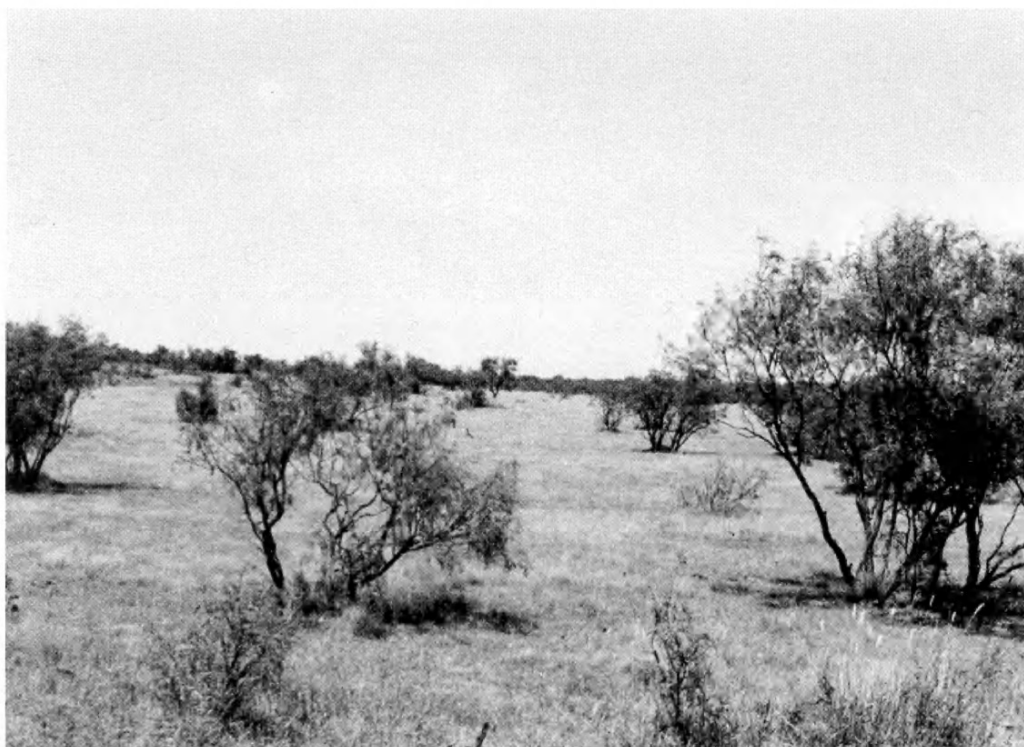


Figure 4. Mesquite grassland habitat at Lake Meredith National Recreation Area.

*Additional records.*— Potter Co.: Unspecified locality (Schmidly, 1991:100; Davis and Schmidly, 1994:49).

*Eptesicus fuscus fuscus*  
(Palisot de Beauvois, 1796)  
Big Brown Bat

Big brown bats prefer buildings as roost sites, but they also are known to roost in hollow trees, rock crevices, and tunnels (Schmidly, 1991). We acquired no specimens of *E. fuscus* from Lake Meredith NRA, but Killebrew (1979) reported collecting these bats among cottonwood trees at unspecified localities within the area.

*Specimens examined* (6).— Potter Co.: 16 mi. N Amarillo, 5; 15 mi. N Amarillo, 1.

*Additional Records.*— Unspecified localities, Lake Meredith National Recreation Area (Killebrew,

1979:48). Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:15).

*Lasiurus borealis*  
(Müller, 1776)  
Eastern Red Bat

The eastern red bat is a migratory, tree-roosting species (Jones et al., 1988; Schmidly, 1991) that rarely is recorded from the Panhandle (Hollander, et al., 1987). These bats have been collected among cottonwood trees along waterways in Hutchinson County by Blair (1954) and at undisclosed sites at Lake Meredith NRA by Killebrew (1979).

*Specimens examined* (0).

*Additional records.*— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:47). Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:15). Potter Co.: Unspecified locality (Schmidly, 1991:115; Davis and Schmidly, 1994:56).

*Lasiurus cinereus cinereus*  
(Palisot de Beauvois, 1796)

Hoary Bat

The hoary bat is a forest-dwelling bat that has been recorded from scattered localities across Texas (Schmidly, 1991). It probably occurs in the Panhandle only as a migrant (Jones et al., 1988). We did not encounter this bat during our study, but it has been reported from Hutchinson and Potter counties.

*Specimens examined* (0).

*Additional records*.— Hutchinson Co.: Unspecified locality. Potter Co.: Unspecified locality (Schmidly, 1991:125; Davis and Schmidly, 1994:57).

*Plecotus townsendii pallescens*  
(Miller, 1897)

Townsend's Big-eared Bat

Townsend's big-eared bat primarily is a cave dweller (Schmidly, 1991). We did not record this bat at Lake Meredith NRA, however, Killebrew (1979:48) reported it as "...the most common bat species at Lake Meredith." In addition, we examined museum specimens from both Hutchinson and Potter counties. The specimen from Potter County reported herein, which is from Lake Meredith NRA, represents the first published record for *P. townsendii* from that county.

*Specimens examined* (2).— Hutchinson Co.: Butane plant, Borger, 1. Potter Co.: Area McBride House, Lake Meredith National Recreation Area, 1.

*Additional records*.— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:48).

*Antrozous pallidus bunkerii*  
Hibbard, 1934

Pallid Bat

Pallid bats often roost in caves, crevices, and buildings near rocky outcrops (Schmidly, 1991), such as those near the breaks of the Canadian River and its

tributaries (Jones et al., 1988). We were unable to collect pallid bats during our study, but they have been taken along waterways at Lake Meredith NRA (Killebrew, 1979).

*Specimens examined* (33).— Potter Co.: 16 mi. N Amarillo, 33.

*Additional records*.— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:48).

*Nyctinomops macrotis*  
(Gray, 1839)

Big Free-tailed Bat

The big free-tailed bat mostly roosts in rock crevices, but has been found in buildings. It is a rare inhabitant of Texas, especially in the Panhandle (Schmidly, 1991). This bat was not encountered during our study at Lake Meredith NRA, but it has been documented from Potter County (Schmidly, 1991; Davis and Schmidly, 1994).

*Specimens examined* (0).

*Additional records*.— Potter Co.: Unspecified locality (Schmidly, 1991:161; Davis and Schmidly, 1994:78).

*Dasypus novemcinctus mexicanus*  
Peters, 1864

Nine-banded Armadillo

The nine-banded armadillo prefers savannas, woodlands, and scrub areas (Jones et al., 1985), especially those found in association with friable soils (Davis and Schmidly, 1994). The northward expansion of its range has resulted in the presence of this mammal in the Texas Panhandle (Hollander et al., 1987; Jones et al., 1988), as well as adjacent southwestern Oklahoma (Stangl et al., 1992). We know of no specimens collected near Lake Meredith NRA, but there have been sightings reported by local residents (Killebrew, 1979).

*Specimens examined* (0).

*Sylvilagus audubonii neomexicanus*

Nelson, 1907

Desert Cottontail

An inhabitant of primarily upland habitats (Jones and Jones, 1992), *S. audubonii* is one of two species of cottontails collected while conducting field work in the area. One specimen was shot within Lake Meredith NRA and another was taken just outside the park boundary. A male undergoing seasonal molt had abdominal testes measuring 21 x 7 on 24 July. Desert cottontails seemingly are more common than our records indicate.

*Specimens examined* (3).— Moore Co.: 3.5 mi. W Etter, 1. Potter Co.: 0.5 mi. S, 7 mi. W Fritch, 1; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 1.

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett (Blair, 1954:243); Spring Canyon Recreation Area, Lake Meredith National Recreation Area. Moore Co.: 4 mi. W Dumas. Potter Co.: 18 mi. SE Channing (Jones et al., 1988:17).

*Sylvilagus floridanus llanensis*

Blair, 1938

Eastern Cottontail

The eastern cottontail of the northern Texas Panhandle is reported to favor bottomland streamside habitats (Jones et al., 1988). The two individuals we secured were no exception, as one was shot along Bugbee Creek, and the other adjacent to Blue Creek. One, a male obtained on 22 July, had testes measuring 15 x 4, the other was a nonpregnant female collected on 9 July.

*Specimens examined* (3).— Hutchinson Co.: 13 mi. S, 10 mi. E Stinnett, 1; Bugbee Canyon, 2 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 1. Moore Co.: Big Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 1.

*Additional records*.— Hutchinson Co.: 7 mi. N Stinnett. Moore Co.: 7.5 mi. N Dumas; 5 mi. E Dumas (Jones et al., 1988:18).

*Lepus californicus melanotis*

Mearns, 1890

Black-tailed Jackrabbit

The black-tailed jackrabbit has been reported as a common resident of northern Panhandle rangelands (Jones et al., 1988). None, however, was taken by us during this study. Killebrew (1979) reported jackrabbits at Saddle Horse Canyon, Blue West, and Bonita Creek areas, all in prairie-mesquite grassland habitat.

*Specimens examined* (0).

*Records*.— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:15). Moore Co.: 10 mi. W Dumas (Jones et al., 1988:18).

*Spermophilus spilosoma marginatus*

V. Bailey, 1890

Spotted Ground Squirrel

Spotted ground squirrels, which usually inhabit areas with sandy soils (Jones et al., 1988), were not collected during this study. They rarely were seen at Spring Canyon Recreation Area. Heavy public use at this site made collection of specimens difficult. In contrast to our observations, Killebrew (1979) declared *S. spilosoma* as common, being found at all recreation areas within the Lake Meredith preserve.

*Specimens examined* (0).

*Additional records*.— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:52). Hutchinson Co.: 4 mi. S, 13 mi. E Pringle; 9 mi. E Stinnett (Jones et al., 1988:19).

*Spermophilus tridecemlineatus arenicola*

(A. H. Howell, 1928)

Thirteen-lined Ground Squirrel

Thirteen-lined ground squirrels are common inhabitants of short-grass habitats across the Panhandle (Jones et al., 1988). Even so, we were unsuccessful in obtaining a specimen during our study. As was the case



with *S. spilosoma*, Killebrew (1979) recorded *S. tridecemlineatus* from throughout Lake Meredith NRA.

*Specimens examined* (1).— Moore Co.: 2 mi. N Masterson by U.S. 87, 1.

*Additional records*.— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:52). Hutchinson Co.: 9 mi. E Stinnett. Moore Co.: 4 mi. W Dumas (Jones et al., 1988:20). Potter Co.: no specific locality (Davis and Schmidly, 1994:110).

*Cynomys ludovicianus ludovicianus*  
(Ord, 1815)

Black-tailed Prairie Dog

Black-tailed prairie dogs occur in colonies on short grass rangelands (Jones et al., 1988). We did not collect any specimens from Lake Meredith NRA. However, we noted a respectable-sized "town" just outside the park boundaries near Fritch. In addition, one large colony has been reported near North Turkey Creek (Killebrew, 1979:50).

*Specimens examined* (0).

*Additional records*.— Hutchinson Co.: 0.5 mi. W Plemons; North Turkey Creek, Lake Meredith National Recreation Area (Jones et al., 1988:20; Killebrew, 1979:50); mouth Moore Creek (Blair, 1954:244). Moore Co.: 4 mi. W Dumas (Jones et al., 1988:20).

*Sciurus niger rufiventer*  
É. Geoffroy St.-Hilaire, 1803  
Fox Squirrel

The fox squirrel occurs along the Canadian River and some of its tributaries, primarily in riparian habitat (Jones et al., 1988). None was observed during the course of our field work, and, although known from nearby areas, there are no published records of their occurrence within Lake Meredith NRA boundaries.

*Specimens examined* (1).— Potter Co.: W Side Amarillo, 1.

*Additional record*.— Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:21).

*Geomys bursarius major*  
Davis, 1940  
Plains Pocket Gopher

With its distribution possibly enhanced by land-use practices, the plains pocket gopher is widespread throughout northwestern Texas (Jones et al., 1987). It favors sandy soils (Goetze and Jones, 1992), where it often is common and sometimes abundant (Jones et al., 1988). We collected no specimens of this species from our study area. However, this pocket gopher has been recorded from McBride Canyon, Blue West, Spring Canyon, Bugbee Canyon, Plum Creek, and Saddle Horse Canyon (Killebrew, 1979).

*Specimens examined* (9).— Moore Co.: 3 mi. S Dumas, 4. Potter Co.: 20 mi. N Amarillo, 5.

*Additional records*.— Hutchinson Co.: 2 mi. W Stinnett; 9 mi. E Stinnett; dam, Lake Meredith National Recreation Area (Jones et al., 1988:22); Bugbee Canyon, Lake Meredith National Recreation Area (Jones et al., 1988:22; Killebrew, 1979:28); Spring Canyon, Lake Meredith National Recreation Area. Moore Co.: Blue West, Lake Meredith National Recreation Area. Potter Co.: Plum Creek, Lake Meredith National Recreation Area; McBride Canyon, Lake Meredith National Recreation Area; Saddle Horse Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:28).

*Cratogeomys castanops perplanus*  
Nelson and Goldman, 1934  
Yellow-faced pocket gopher

As is the plains pocket gopher, the yellow-faced pocket gopher is a widespread inhabitant on the Texas Panhandle (Jones et al., 1987; 1988; Hollander, 1990). In contrast to *G. bursarius*, however, *C. castanops* favors soils that are calcareous and of clay or clay-loam, but may occupy sandy soils in the absence of *G. bursarius* (Goetze and Jones, 1992). This separation of habitat results in parapatric distribution of the two



species (Jones et al., 1988). Three individuals were taken during this study.

Two males trapped on 16 March and 10 July had testes measuring 16 x 8 and 8 x 5, respectively. A female taken on 17 March was nongravid. Seasonal molt was observed on an animal taken on 16 March.

*Specimens examined* (5).— Moore Co.: 3 mi. S Dumas, 2; Big Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 1. Potter Co.: McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 2.

*Additional records*.— Hutchinson Co.: Fritch Fortress, Lake Meredith National Recreation Area (Killebrew, 1979:28). Moore Co.: Blue West Recreation Area, Lake Meredith National Recreation Area. Potter Co.: Plum Creek Recreation Area, Lake Meredith National Recreation Area; Saddle Horse Canyon, Lake Meredith National Recreation Area (Jones et al., 1988:23); Bonita Creek, Lake Meredith National Recreation Area (Killebrew, 1979:28).

### *Perognathus flavescens copei*

Rhoads, 1894

Plains Pocket Mouse

Limited to sandy soils, the range of the plains pocket mouse in the northern Panhandle is described as patchy (Jones et al., 1988). This species was not collected in our current study at Lake Meredith, but is known from Hutchinson County (Jones et al., 1988).

*Specimens examined* (0).

*Additional records*.— Hutchinson Co.: 9 mi. Stinnett (Jones et al. 1988:24)

### *Perognathus flavus*

Silky Pocket Mouse

The systematic relationships and taxonomy of silky pocket mice from western Texas and adjacent New Mexico are far from resolved. For many years, two species of small pocket mice were recognized;

*Perognathus flavus* and *P. merriami*. Wilson (1973) concluded that these taxa probably represented a single species, with *flavus* having nomenclatorial priority. This classification scheme was followed until Lee and Engstrom (1991) resurrected *merriami* to specific status; but see Choate et al. (1992). In their most recent checklist of Texas mammals, Jones and Jones (1992) followed the conservative course and recognized only *flavus* at the species level. However, they acknowledged the need for future systematic research before the question is completely settled. Furthermore, they suggested that the boundary between two adjacent subspecies on the Texas Panhandle is the Canadian River. Those found north of the river were assigned to *P. f. flavus* Baird, 1855, whereas those south of the river were thought to represent *P. f. gilvus* Osgood, 1900.

During our field work, we collected these small heteromyids from both sides of the Canadian River (six adult "*flavus*" from the north; eight adult "*gilvus*" from the south). In direct comparisons, we were unable to find any morphological characteristics that could be used to separate these supposed subspecies. Clearly, larger samples from several areas are needed before the taxonomic questions can be answered.

We most frequently trapped silky pocket mice in upland habitats on relatively hard, dry soil with scant vegetation. None was taken in riparian habitat. Individuals reported herein from Potter County represent the first documentation of *P. flavus* from that county.

A female taken on 25 June carried five fetuses (crown-rump length, 2.5), whereas two pregnant females taken on 24 July had four fetuses (crown-rump length, 10) and five fetuses (crown-rump length, 3). Adult males had testes that measured 7 and 5 on 17 March; one taken on 24 June had testes that measured 5. Juveniles were caught on the following dates: 5, 23, and 24 June; 9 and 24 July; and 27 August. A subadult undergoing postjuvenile molt was taken on 9 July. Adult pocket mice were in the process of seasonal molt in March, July, and August.

*Specimens examined* (22).— Hutchinson Co.: Spring Canyon, 2 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 1; 0.5 mi W Sanford, Lake Meredith National Recreation Area, 3.

Moore Co.: Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 3. Potter Co.: Plum Creek, 3 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 4; 4 mi. S, 5 mi. W Fritch, Lake Meredith National Recreation Area, 3; Bates Canyon, 4 mi. S, 6 mi. W Fritch, Lake Meredith National Recreation Area, 3; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 4; U.S. Hwy 87, 4.5 mi. S Canadian River, 1.

Additional records.— Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:25). Moore Co.: no specific locality (Davis and Schmidly, 1994:134).

*Chaetodipus hispidus paradoxus*  
(Merriam, 1889)

Hispid Pocket Mouse

This pocket mouse, which primarily occurs in sparsely vegetated prairies (Dalquest and Horner, 1984) as well as grassy and brushy habitats (Jones et al., 1988), was captured throughout much of the Lake Meredith area, but never in large numbers. Gravid females were collected on 4 June (eight fetuses, crown-rump length, 12) and 5 June (six fetuses, crown-rump length, 5). For males collected, testes measured as follows: June, 9 x 5; July, 7 x 3.5 and 11 x 5; August, 4 x 2. Juveniles were collected from the population on 9 July, 23 July, and 18 August. Subadults were taken on 24 June, 28 September, and 26 October. Seasonal molting of adults was noted on specimens collected on 23 July.

*Specimens examined* (21).— Hutchinson Co.: 4.8 mi. NW Sanford, 1; 0.5 mi. W Sanford, Lake Meredith National Recreation Area, 2; below dam, 1 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 3; Spring Canyon, 2 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 1; 2.5 mi. N, 1.5 mi. W, Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 2 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 3. Moore Co.: 4 mi. N, 1 mi. E Dumas, 3; 3 mi. S Dumas, 1; Blue West Area, 3 mi. N, 2 mi. W Fritch, Lake Meredith National Recreation Area, 1; Evans Canyon, 4.5 mi. W Fritch, Lake Meredith National Recreation Area, 1. Potter Co.: Plum Creek, 2.5 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 1;

Plum Creek, 3 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 1; 4 mi. S, 5 mi. W Fritch, Lake Meredith National Recreation Area, 1; Bates Canyon, 4 mi. S, 6 mi. W Fritch, Lake Meredith National Recreation Area, 1.

*Additional records*.— Hutchinson Co.: 1 mi. S, 10 mi. E Pringle; 9 mi. E Stinnett (Jones, et al., 1988:25); Fritch Fortress, Lake Meredith National Recreation Area (Killebrew, 1979:20). Potter Co.: Saddle Horse Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:25).

*Dipodomys ordii richardsoni*

(J. A. Allen, 1891)

Ord's Kangaroo Rat

This kangaroo rat inhabits areas with sandy soils (Jones et al., 1988), and was trapped frequently on these soils during our study. No pregnant females were taken. Adult males had measurements of testes as follows: March, 7 x 3; June 7 x 3, 12 x 6; July, 11 x 4, 11 x 5; August, 12 x 9, September, 11. A subadult was collected from the population on 5 June, and adults were undergoing seasonal molt on 24 June and 24 July.

*Specimens examined* (29).— Hutchinson Co.: 4.8 mi. NW Sanford, 1; 4 mi. NW Sanford, 7; 3.5 mi. NW Sanford, 3; 0.5 mi. W Sanford, Lake Meredith National Recreation Area, 1; below dam, 1 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 1; 2.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National Recreation Area, 1. Moore Co.: 3 mi. S Dumas, 2; 7 mi. S, 14 mi. E Dumas, 1. Potter Co.: Plum Creek, 3 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 3; 4 mi. S, 5 mi. W Fritch, Lake Meredith National Recreation Area, 2; Bates Canyon, 4 mi. S, 6 mi. W Fritch, Lake Meredith National Recreation Area, 1; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 6.

*Additional records*.— Hutchinson Co.: 1 mi. S, 10 mi. E Pringle, 3400 ft.; 2 mi. S, 11 mi. E Pringle; 4 mi. S, 11 mi. E Pringle; 5 mi. S, 10 mi. E Pringle, 3400 ft.; 9 mi. E Stinnett (Jones et al., 1988:26); Spring Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:21); Fritch Fortress, Lake Meredith

National Recreation Area (Killebrew, 1979:20). Moore Co.: Blue West Recreation Area, Lake Meredith National Recreation Area (Killebrew, 1979:23). Potter Co.: 18 mi. N Amarillo, 3500 ft.; Canadian River, 2 mi. W Lake Meredith, 2700 ft.; Saddle Horse Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:18).

*Castor canadensis texensis*

V. Bailey, 1905

Beaver

This large, semi-aquatic rodent of the Canadian River and its tributaries was not observed by us during this study. Reports of beavers at Lake Meredith NRA include Bonita Creek, Chicken Creek (Killebrew, 1979), and below the dam (Hollander, 1987; Killebrew, 1979).

*Specimens examined* (0).

*Additional records*.— Hutchinson Co.: below dam, Lake Meredith National Recreation Area (Hollander et al., 1987:99; Killebrew, 1979:50). Potter Co.: Bonita Creek, Lake Meredith National Recreation Area; Chicken Creek, Lake Meredith National Recreation Area (Killebrew, 1979:50); Pitcher Creek, 16 mi. N Amarillo (Hollander et al., 1987:99).

*Reithrodontomys megalotis aztecus*

J. A. Allen, 1893

Western Harvest Mouse

The western harvest mouse has an affinity for grassy habitats (Jones et al., 1988; Davis and Schmidly, 1994). These mice were not common at Lake Meredith, but were taken in all three counties. The specimen reported herein from Potter County represents a county record for *R. megalotis*.

A lactating female was observed on 26 October. Two males, one taken on 5 June, the other on 23 June, both had testes measuring 8 x 4.

*Specimens examined* (6).— Hutchinson Co.: 2.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National

Recreation Area, 1. Moore Co.: 4 mi. N, 1 mi. E Dumas, 2; 3 mi. S Dumas, 1; 3 mi. N, 2 mi. W Fritch, Lake Meredith National Recreation Area, 1. Potter Co.: McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 1.

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:28).

*Reithrodontomys montanus griseus*

V. Bailey, 1905

Plains Harvest Mouse

This harvest mouse is reported to favor more xeric, upland conditions than does *R. megalotis* (Jones, et al., 1985; 1988). We did however, capture both species at the same locality on two different occasions.

As was the case with the western harvest mouse, the plains harvest mouse was rather uncommon in the Lake Meredith NRA, but was acquired from all three counties. The individuals taken in Potter County represent the first of this species to be documented from that county.

Two gravid females were examined during this study, one on 17 March, the other on 26 October. They carried three fetuses (crown-rump length, 15), and five fetuses (crown-rump length, 9), respectively. Three adult males captured on 17 March, 5 June, and 26 October had testes measuring 6, 6 x 4, and 4 x 2, respectively.

*Specimens examined* (12).— Hutchinson Co.: 3.5 mi. NW Sanford, 1; 2.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 1.5 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 1. Moore Co.: 3 mi. S Dumas, 5; Blue West Area, 3 mi. N, 2 mi. W Fritch, Lake Meredith National Recreation Area, 1. Potter Co.: 10 mi. E Amarillo Pantex Research, 1; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 2.

*Additional records*.— Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:29).



*Peromyscus leucopus tornillo*

Mearns, 1896

White-footed Mouse

Jones et al. (1988:30) report the white-footed mouse as the most widespread and abundant rodent of the northern Panhandle. They state that "...it occurs in most major habitats excepting heavily agriculturized areas and open rangelands." Our results are in accordance, as we trapped far more members of this species than any other kind of mammal. With one locality excepted, individuals of *P. leucopus* were taken at all sites sampled.

Pregnant females (numbers of fetuses and crown-rump lengths in parentheses) were noted on 5 June (3, 4), (3, 3); 6 June (1, 8); 9 July (4, 26); 24 July (5, 16); 28 September (4, 3), (6, 16); 26 October (4, 6), (6, 7), (4, 10), (3, 11), (4, 11). Postlactating females were noted on 24 July and 26 October. Males taken had measurements of testes that ranged as follows: June, 6 x 4 to 13 x 6; July, 5 x 3 to 13 x 7; August, 12 x 8 to 15 x 9; September, 11 to 13; October, 9 x 5 to 16 x 8. Juveniles were recorded from the population on 23 June; 9 and 23 July; 28 September; and 28 October. Subadults were noted in the population on 5 and 23 June; 10, 23, and 24 July; 17 August; and 26 October. Seasonal molting of adult pelage was observed on 5, 6, and 24 June; 9 and 24 July; 18 and 27 August.

*Specimens examined* (148).— Hutchinson Co.: 4.8 mi. NW Sanford, 10; 4 mi. NW Sanford, 8; 3.5 mi. NW Sanford, 7; 0.5 mi. W Sanford, Lake Meredith National Recreation Area, 4; below dam, 1 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 6; Spring Canyon, 2 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 4; 2.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National Recreation Area, 2; Bugbee Canyon, 1.5 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 19; Bugbee Canyon, 2 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 3. Moore Co.: 7 mi. S, 14 mi. E Dumas, 9; 17.2 mi. NW Sanford, 8; Big Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 8; Blue West Area, 3 mi. N, 2 mi. W Fritch, Lake Meredith National Recreation Area, 3; Evans Canyon, 4.5 mi. W Fritch, Lake Meredith National Recreation Area, 2. Potter Co.: 15 mi. N

Amarillo, 16; Plum Creek, 2.5 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 2; Plum Creek, 3 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 7; 4 mi. S, 5 mi. W Fritch, Lake Meredith National Recreation Area, 3; Bates Canyon, 4 mi. S, 6 mi. W Fritch, Lake Meredith National Recreation Area, 15; 4.5 mi. S, 5.5 mi. W Fritch, Lake Meredith National Recreation Area, 2; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 10.

*Additional records*.— Hutchinson Co.: 18 mi. S, 1 mi. W Spearman; 1 mi. S, 10 mi. E Pringle, 3400 ft.; 2 mi. S, 11 mi. E Pringle; 9 mi. E Stinnett (Jones et al., 1988:31). Potter Co.: Saddlehorse Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:25); Bonita Creek, Lake Meredith National Recreation Area (Killebrew, 1979:26).

*Peromyscus maniculatus luteus*

Osgood, 1905

Deer Mouse

Due to its ability to exploit numerous types of habitats, the deer mouse is the most broadly distributed species of *Peromyscus* in North America (Glazier, 1980). The range of *P. maniculatus* extends from coast to coast (Hall, 1981), and this mouse is known to inhabit every major ecological area of North America (Baker, 1968). The subspecies that occurs on the Panhandle, *P. m. luteus*, has an ecological affinity for mesquite grassland and grasslands on sandy soils (Cooper et al., 1993).

During this study, we took five individuals, four of which were from localities in sympatry with *P. leucopus*. One deer mouse was a nonpregnant female; three were adult males taken on 9, 11, and 23 July with testes measuring 9 x 6, 10 x 6, and 9 x 5, respectively; and one was a juvenile male (captured on 26 October). One adult taken on 23 July was in the process of seasonal molt.

*Specimens examined* (47).— Hutchinson Co.: 6 mi. N, 6 mi. W Stinnett, 1; 6 mi. E Borger, 1; 4.8 mi. SW Sanford, 4; 13 mi. S, 6.5 mi. E Stinnett, 1; 0.5 mi. W Sanford, Lake Meredith National Recreation Area,

1; 1.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 2 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 2. Moore Co.: 2 mi. N Masterson by U.S. 87, 1; 4 mi. N, 1 mi. E Dumas, 27; 3 mi. S Dumas, 1; Blue West Area, 3 mi. N, 2 mi. W Fritch, Lake Meredith National Recreation Area, 1. Potter Co.: 10 mi. E Amarillo Pantex Research, 6.

*Additional Records.*— Hutchinson Co.: Fritch Fortress, Lake Meredith National Recreation Area (Killebrew, 1979:20); Spring Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:21) 5 mi. S, 10 mi. E Pringle, 3400 ft.; 6 mi. N Stinnett; 9 mi. E Stinnett (Jones et al., 1988:33). Potter Co.: Plum Creek Recreation Area, Lake Meredith National Recreation Area (Jones et al., 1988; Killebrew, 1979:24); Saddle Horse Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:25); Bonita Creek, Lake Meredith National Recreation Area (Killebrew, 1979:26); McBride Canyon, Lake Meredith National Recreation Area (Killebrew, 1979:18).

*Onychomys leucogaster arcticeps*

Rhoads, 1898

Northern Grasshopper Mouse

The northern grasshopper mouse primarily is an upland species that often occurs on rangelands with sandy substrates (Jones, et al., 1988). We found it to be uncommon, having taken only two specimens during our field work. One, taken on 23 July, was a pregnant female carrying four fetuses (crown-rump length, 14).

*Specimens examined* (30).— Hutchinson Co.: 4.8 mi. NW Sanford, 1; 3.5 mi. NW Sanford, 4; Spring Canyon, 2 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 2 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 1. Moore Co.: Sam Hardwick Farm 4 mi. W Dumas, 2; 2 mi. N Masterson by U.S. 87, 1; 4 mi. N, 1 mi. E Dumas, 3; 3 mi. S Dumas, 14; 17.2 mi. NW Sanford, 2. Potter Co.: 5 mi. W Amarillo, 1.

*Additional records.*— Hutchinson Co.: 1 mi. S, 10 mi. E Pringle, 3400 ft.; 2 mi. S, 11 mi. E Pringle; 4 mi. S, 13 mi. E Pringle; 9 mi. E Stinnett. Potter Co.: 18

mi. N Amarillo, 3500 ft (Jones et al., 1988:33-34); Fritch Fortress, Lake Meredith National Recreation Area (Killebrew, 1979:20);.

*Sigmodon hispidus berlandieri*

(Baird, 1855)

Hispid Cotton Rat

The hispid cotton rat is a common resident of several habitat types, including riparian situations (Jones et al., 1988), areas of dense herbaceous vegetation, and field edges (Jones et al., 1985). Second in captures only to *P. leucopus*, we found these rats to be both widespread and abundant throughout the Lake Meredith NRA. Specimens taken in Potter County represent the first county records for *S. hispidus*. Populations of cotton rats in western Texas are deserving of serious taxonomic study.

Gravid females were obtained on 24 June (7 fetuses, crown-rump length, 7; 9 fetuses, crown-rump length, 14); 9 July (6 fetuses, crown-rump length, 1.5); 10 July (9 fetuses, crown-rump length, 6; 7 fetuses, crown-rump length, 16); 27 August (6 fetuses, crown-rump length, 4); and 26 October (3 fetuses, crown-rump length, 7). Males taken had testes with measurements that ranged as follows: June, 19 x 10 to 23 x 13; July, 22 x 11 to 23 x 13; August, 19 x 10 to 25 x 11; September, 23; October, 6 x 3 to 11 x 7. The presence of juveniles was noted on 5 June, 18 and 19 August, and 26 October. Adults were undergoing seasonal molt on 5, 6, and 24 June; 23 and 24 July; and 19 August.

*Specimens examined* (68).— Hutchinson Co.: 4.8 mi. NW Sanford, 18; 3.5 mi. NW Sanford, 1; 0.5 mi. W Sanford, Lake Meredith National Recreation Area, 3; Spring Canyon, 2 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 3; 2.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National Recreation Area, 2; Bugbee Canyon, 1.5 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 5; Bugbee Canyon, 2 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 3. Moore Co.: 4 mi. N, 1 mi. E Dumas, 15; Big Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 3; Blue West Area, 3 mi. N, 2 mi. W Fritch, Lake Meredith National Recreation Area, 1; Evans Canyon, 4.5 mi. W



Fritch, Lake Meredith National Recreation Area, 1. Potter Co.: 4 mi. S, 5 mi. W Fritch, Lake Meredith National Recreation Area, 2; Bates Canyon, 4 mi. S, 6 mi. W Fritch, Lake Meredith National Recreation Area, 6; 4.5 mi. S, 5.5 mi. W Fritch, Lake Meredith National Recreation Area, 4; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 1.

*Additional records.*— Hutchinson Co.: 6 mi. N Stinnett, 9 mi. E Stinnett; Spring Canyon, Lake Meredith National Recreation Area (Jones et al., 1988:35). Potter Co.: Bonita Creek, Lake Meredith National Recreation Area (Killebrew, 1979:26)

*Neotoma albigula warreni*

Merriam, 1908

White-throated Woodrat

This woodrat resides among rocky outcroppings and slopes, often in association with juniper (Jones et al., 1988). Fourteen specimens were collected at five of 16 localities sampled, indicating moderate abundance within the park. No pregnant females were taken, however, a postlactating female with two placental scars was taken on 10 July, and one with three placental scars was captured on 27 August. Measurements of testes of adult males by date of capture were: 23 June, 9 x 5 and 17 x 9; 17 August, 13 x 6; 28 September, 14 x 7. Juveniles were recorded on 10 July and 26 October.

*Specimens examined* (17).— Hutchinson Co.: 4.8 mi. NW Sanford, 1; 0.5 mi. W Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 1.5 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 2. Moore Co.: 7 mi. S, 14 mi. E Dumas, 2; Big Blue Creek, 1.75 mi. N, 7 mi. W Sanford, Lake Meredith National Recreation Area, 6. Potter Co.: Bates Canyon, 4 mi. S, 6 mi. W Fritch, Lake Meredith National Recreation Area, 2; McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 3.

*Additional records.*— Hutchinson Co.: 1 mi. S, 10 mi. E Pringle (Jones et al., 1988:37); Fritch Fortress, Lake Meredith National Recreation Area. Moore Co.: Blue West, Lake Meredith National Recreation Area. Potter Co.: Plum Creek, Lake Meredith National Recreation Area (Killebrew, 1979:20-24).

*Neotoma micropus canescens*

J. A. Allen, 1891

Southern Plains Woodrat

In contrast to the white-throated woodrat, the southern plains woodrat favors open areas associated with such vegetation as brush, mesquite, prickly pear cactus, and yucca, next to which it often builds its nest (Jones et al., 1988). It has, however, been known to inhabit rocky outcrops in the absence of *N. albigula* (Finley, 1958; Jones et al., 1988). Jones et al. (1988) found this rat to be common in several areas throughout the northern Panhandle. Our trapping efforts suggest that Lake Meredith NRA is not one of these areas, as only three specimens were trapped during the course of our field activities. These three individuals are represented by a nongravid female and two juveniles taken on 23 June and 9 July.

*Specimens examined* (4).— Hutchinson Co.: 0.5 mi. W Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 1.5 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 1. Moore Co.: 4 mi. N, 1 mi. E Dumas, 1. Potter Co.: McBride Canyon, 7 mi. S, 7 mi. W Fritch, Lake Meredith National Recreation Area, 1.

*Additional records.*— Hutchinson Co.: 9 mi. E Stinnett; Spring Canyon, Lake Meredith National Recreation Area. Moore Co.: 7 mi. E Dumas (Jones et al., 1988:38). Potter Co.: Plum Creek Recreation Area, Lake Meredith National Recreation Area (Killebrew, 1979:24).

*Ondatra zibethicus cinnamominus*

(Hollister, 1910)

Common Muskrat

No specimens of this semi-aquatic rodent were obtained during our study. Jones et al. (1988) reported records from the vicinity of the dam below Lake Meredith, and Killebrew (1979) considered the muskrat as common at Lake Meredith.

*Specimens examined* (0).

*Additional records.*— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:12). Hutchinson Co.: 9 mi. E Stinnett; 11 mi. E Stinnett; Sanford dam, Lake Meredith National Recreation Area; behind and below dam, Lake Meredith National Recreation Area; spillway, Lake Meredith National Recreation Area (Jones et al., 1988:41).

*Rattus norvegicus*  
(Berkenhout, 1769)  
Norway Rat

The Norway rat is an introduced species indigenous to the Old World. It usually is associated with human dwellings. No Norway rats were collected during our study.

*Specimens examined* (1).—Potter Co.: 2 mi. N Bushland, 1.

*Mus musculus*  
Linnaeus, 1758  
House Mouse

As is the Norway rat, the house mouse is a non-native species frequently affiliated with human settings. A juvenile female was taken on 5 June and two adult males were collected on 5 June and 26 October (measurements of testes, 6 x 3 and 7 x 4, respectively).

*Specimens examined* (3).— Hutchinson Co.: Spring Canyon, 2 mi. N, 1 mi. W Sanford, Lake Meredith National Recreation Area, 1; 2.5 mi. N, 1.5 mi. W Sanford, Lake Meredith National Recreation Area, 1; Bugbee Canyon, 1.5 mi. N, 3 mi. W Sanford, Lake Meredith National Recreation Area, 1.

*Additional records.*— Hutchinson Co.: 9 mi. E Stinnett. Potter Co.: Plum Creek Recreation Area, Lake Meredith National Recreation Area (Jones et al., 1988:41).

*Erethizon dorsatum epixanthum*  
Brandt, 1835  
Porcupine

This large, unique rodent has a habitat preference for forests, but adjusts well to rangelands, especially those containing riparian areas (Nowak, 1991). In the Texas Panhandle, they frequently are observed in the vicinity of the Canadian River and its tributaries (Jones et al., 1988). Although not collected, one individual was seen just outside the Lake Meredith NRA boundary near Bates Canyon, and another was recorded dead on the road over the Lake Meredith dam. Killebrew (1979) reports collecting this species from Lake Meredith NRA.

*Specimens examined* (0).

*Additional records.*— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:12). Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:42).

*Canis latrans latrans*  
Say, 1823  
Coyote

The coyote is widespread throughout North America (Nowak, 1991), and is especially common in the Panhandle (Jones et al., 1988). It frequently was heard, occasionally seen, and often detected by sign (tracks and scats) at several localities during the course of our field work.

*Specimens examined* (0).

*Additional records.*— Hutchinson Co.: 14 mi. SW Stinnett (Jones et al., 1988: 42); 1 mi. S, 5 mi. E Morse (Cutter, 1959:31); Turkey Track Ranch (Cutter, 1959:31); 9 mi. E Stinnett (Blair, 1954:254). Moore Co.: 6 mi. E Dumas (Jones et al., 1988:42).

*Vulpes velox velox*

(Say, 1823)

Kit or Swift fox

This fox is reported as fairly common in the flatlands of the northern Texas Panhandle (Jones et al., 1988). We failed to detect its presence and are unaware of any substantiated records from Lake Meredith NRA. However, there are reports of this fox occurring in all three counties in the study area (Davis and Schmidly, 1994).

*Specimens examined* (0)

*Additional records.*— Hutchinson Co.: 1 mi. SE Morse; 4 mi. S Morse. Moore Co.: 4 mi. S Dumas (Jones et al., 1988:43). Potter Co.: Unspecified locality (Davis and Schmidly, 1994:222).

*Urocyon cinereoargenteus scottii*

Mearns, 1891

Common Gray Fox

The gray fox is common in wooded areas throughout Texas (Davis and Schmidly, 1994), but apparently is rare in the northern Panhandle (Jones et al., 1988). This fox was not encountered at Lake Meredith NRA and is known from the area only on the basis of a literature record from Potter County (Davis and Schmidly, 1994).

*Specimens examined* (0)

*Additional records.*— Potter Co.: Unspecified locality (Davis and Schmidly, 1994:226).

*Procyon lotor hirtus*

Nelson and Goldman, 1930

Raccoon

The raccoon is common in wooded riparian areas adjacent to the Canadian River and its tributaries (Jones et al., 1988). It dens most often in trees and rock ledges, but in the absence of these structures, will utilize human structures or ground dens of opossums or striped skunks (Schmidly, 1984). We did not collect any of

these mammals. However, Killebrew (1979) collected individuals from Lake Meredith NRA, and reports them as common from the park.

*Specimens examined* (0).

*Additional records.*— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:13). Hutchinson Co.: 5 mi. S, 10 mi. E Pringle. Moore Co.: 15 mi. E Dumas (Jones et al., 1988:45).

*Taxidea taxus berlandieri*

Baird, 1858

American Badger

This mustelid is broadly distributed, but uncommon in the northern Texas Panhandle (Jones et al., 1988). Badgers favor open prairies and plains with sandy soil, and tend to avoid wooded regions and areas with rocky soils (Schmidly, 1984). We detected no evidence of badgers at Lake Meredith NRA. Killebrew (1979) collected badgers during his study at the lake site.

*Specimens examined* (0).

*Additional records.*— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:13). Hutchinson Co.: 3 mi. S, 4 mi. E Morse (Cutter, 1959:32); 9 mi. E Stinnett; 2 mi. SE Stinnett. Moore Co.: 5 mi. SE Dumas; 5 mi. S Dumas (Jones et al., 1988:45).

*Spilogale putorius interrupta*

(Rafinesque, 1820)

Eastern Spotted Skunk

This skunk is known from a wide range of habitats, such as prairies, woodlands, forest edges, and cultivated fields (Schmidly, 1984). It is rather uncommon throughout the Texas Panhandle (Jones et al., 1988), and was not noted at Lake Meredith NRA. It is, however, known from a single site in Moore County (Jones et al., 1988).

*Specimens examined* (0).

*Additional record*.— Moore Co.: 4 mi. W Dumas  
(Jones et al., 1988:46).

*Mephitis mephitis varians*

Gray, 1837

Striped Skunk

The striped skunk is known to occur in numerous types of habitats, including deserts, forests, grasslands, and montane situations (Schmidly, 1984). It is reported as common throughout the northern Texas Panhandle (Jones et al., 1988). However, no specimens were collected during this study. Specimens of this species were collected during Killebrew's (1979) survey of Lake Meredith NRA.

*Specimens examined* (1).— Moore Co.: 4 mi. N, 1 mi. E Dumas, 1.

*Additional records*.— Unspecified localities, Lake Meredith National Recreation Area (Killebrew, 1979:13). Hutchinson Co.: 9 mi. E Stinnett (Jones et al., 1988:46); 3 mi. S, 1 mi. E Morse (Cutter, 1959:32). Moore Co.: 5 mi. E Dumas (Jones et al., 1988:46).

*Felis concolor stanleyana*

Goldman, 1938

Mountain Lion

The mountain lion is a wide-ranging felid that, at one time, was known to inhabit suitable areas of the Texas Panhandle (Jones et al., 1988). However, its present status in the region is unknown. We detected no sign of this cat and there are no verifiable records of its existence in Lake Meredith NRA. The only evidence of it occurring at Lake Meredith NRA stems from sightings reported by local residents.

*Specimens examined* (0).

*Additional records*.— Moore Co.: Unspecified locality (Davis and Schmidly, 1994:256).

*Lynx rufus texensis*

J. A. Allen, 1895

Bobcat

The bobcat occurs throughout Texas where it favors wooded and broken habitats (Schmidly 1984). It has been recorded from the vicinity of Lake Meredith, but the only evidence of its occurrence within park boundaries is the observation of tracks by Killebrew (1979).

*Specimens examined* (0).

*Additional records*.— Hutchinson Co.: 2 mi. S, 10 mi. E Pringle (Cutter, 1959:32); Turkey Track Ranch (Cutter, 1959:32); 9 mi. E Stinnett (Blair, 1954:255). Moore Co.: Unspecified locality (Davis and Schmidly, 1994:263). Potter Co.: 37 mi. NE Amarillo (Jones et al., 1988:47).

*Odocoileus hemionus crooki*

(Mearns, 1897)

Mule Deer

In the northern Panhandle, the mule deer is a resident of rocky breaks and hillsides associated with juniper (Jones et al., 1988). These animals were seen on several occasions at a variety of localities within the park. Individuals of this species were introduced into the region as an enhancement to the native population (Jones et al., 1988).

*Specimens examined* (0).

*Odocoileus virginianus texanus*

(Mearns, 1898)

White-tailed Deer

The white-tailed deer favors wooded and riparian habitats, usually excluding itself from canyons and breaks (Jones et al., 1988; Killebrew, 1979; Davis and Schmidly, 1994). There are numerous sight records of white-tailed deer from Lake Meredith NRA (Killebrew, 1979), as well as from nearby localities (Blair, 1954; Cutter, 1959). The native population of this species



was supplemented by animals (thought to belong to the same subspecies) stocked into the area during the 1940's and 50's (Jones et al., 1988).

*Specimens examined* (0).

***Antilocapra americana***  
**(Ord, 1815)**  
 Pronghorn

The pronghorn once was a common resident of the Panhandle plains (Jones et al., 1988). Due to over

hunting in the 1800's, their numbers were reduced greatly. In response to protection and reintroductions, the Panhandle population of pronghorns has been restabilized (Jones et al., 1988).

We saw no pronghorns on Lake Meredith NRA during our survey. In contrast, Killebrew (1979) noted three herds, consisting of 10-23 animals each, in upland prairies within the confines of the park.

*Specimens examined* (0).

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