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New Records of Mammals from Oklahoma

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ABSTRACT

This report presents a review of regional and national mammal collections to update the distributions of Oklahoma mammals. In the 30 years since the publication of *Mammals of Oklahoma*, collecting continues to increase the numbers of specimens and species in the state, as well as their distributions by counties. Unreported county records were found and include 61 species represented by 497 specimens from 66 counties. New localities represent all major ecoregions of the state. The addition of these records expands the understanding of the distribution of mammals in Oklahoma.

Key words: county records, mammals, Oklahoma

Introduction

Twelve EPA level III ecoregions (High Plains, Southwestern Tablelands, Central Great Plains, Flint Hills, Cross Timbers, East Central Texas Plains, South Central Plains, Quachita Mountains, Arkansas Valley, Boston Mountains, Ozark Highlands, and Central Irregular Plains) occur in the state of Oklahoma (Woods et al. 2005). The number of ecoregions makes this region of North America biologically significant and ideal for research to examine the influence(s) of global climate change. Unlike the nearby states of Texas and New Mexico, no formal biological survey of Oklahoma has ever been undertaken. Thus, the mammalian fauna of Oklahoma was perhaps less well known than that of many other states for many years. The earliest compilation of the mammals of Oklahoma, based on validated records, was that of Elliot (1899). Forty years later, Blair (1939) published the first comprehensive listing of the mammal diversity in the state. In 1989, 50 years after that, the second major review of the state's mammal fauna was published (Caire et al. 1989). At this time, however, there existed a paucity of taxonomic, distributional, and natural history information for most species as far as museum specimens were concerned.

Since the publication of *Mammals of Oklahoma* by Caire et al. (1989), significant records have contributed to a better understanding of the diversity and distribution of Oklahoma's mammals (e.g., Dalquest et al. 1990; Sheffield and Chapman 1992; Clark and Tumlison 1992; Stangl et al. 1992; Tyler and Donelson 1996; Clark and Clark 1997; Payne et al. 2001; Braun and Revelez 2005; McDonald et al. 2006; Roehrs et al. 2008; Caire et al. 2010; Braun et al. 2011; Roehrs et al. 2012; Eguren and McBee 2013; Dreier et al. 2015). In addition to adding new county records and extending known geographic ranges, species of probable occurrence have been reported in the state (e.g., *Blarina brevicauda*, Pfau and Braun 2013; *Sorex longirostris*,

Taylor and Wilkinson 1988; *Mustela nivalis*, Clark and Clark 1988; *Pecari tajacu*, McDonald et al. 2012).

New county records are reported for 61 species of mammals represented by 497 specimens from 66 of Oklahoma's 77 counties. New records were found in all major physiognomic regions of the state (Caire et al. 1989). The addition of these fundamental data greatly expands our understanding of mammals in Oklahoma

and enhances our knowledge of their diversity and distribution. This basic knowledge forms the foundation for future research in ecology, evolutionary biology, and behavior, including research on the impact of climate change on natural communities and ecosystems. Finally, these data also are of critical importance for the development of conservation and management plans by state and other agencies, including the Oklahoma Department of Wildlife Conservation.

METHODS AND MATERIALS

Mammalian orders are arranged according to Wilson and Reeder (2005). Families, genera, and species are arranged alphabetically. Taxonomy and common name usage follows Wilson and Reeder (2005), with minor exceptions following Bradley et al. (2014) and Caire et al. (2019). Because many distributions have been significantly altered, a brief description of the mammal's range in Oklahoma is given followed by a summary of records reported subsequent to Caire et al. (1989). All specimens represent the first record(s) of the species for the counties reported. The specimens are listed alphabetically. Per the guidelines for manuscripts submitted to the Occasional Papers, directional locality data and elevation data have been converted to metric units and coordinates converted to degrees, minutes, seconds. Locality data have been formatted for consistency. Scientific voucher specimens herein reported are deposited in the following institutions: American Museum of Natural History, New York, New York (AMNH); California Academy of Sciences, San Francisco, California (CAS); Sternberg Museum of Natural History, Fort Hays State University, Hays, Kansas (FHSM); Illinois State Museum, Springfield, Illinois (ISM); Schmidt Museum of Natural History, Emporia State University, Emporia, Kansas (KSTC); Biodiversity Institute and Natural History Museum, University of Kansas, Lawrence, Kansas (KU); Moore Laboratory of Zoology, Occidental College, Los Angeles, California (MLZ); Museum of Southwestern Biology, University of New Mexico (MSB); Museum of Vertebrate Zoology, University of California, Berkeley, California (MVZ); New Mexico Museum of Natural History and Science, Albuquerque, New Mexico (NMMNH); Sam Noble Oklahoma Museum of Natural History, Norman, Oklahoma (OMNH); Museum of Texas Tech University, Texas Tech University, Lubbock, Texas (TTU); University of Arkansas Collections Facility, Fayetteville, Arkansas (UAFMC); University of British Columbia Beaty Biodiversity Museum; Vancouver, Canada (UBCBBM); University of Colorado Museum of Natural History, University of Colorado, Boulder, Colorado (UCM); University of Central Oklahoma, Collection of Vertebrates, Edmond, Oklahoma (UCOCV); National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM); University of Washington Burke Museum, Seattle, Washington (UWBM); Yale Peabody Museum, Yale University, New Haven, Connecticut (YPM).

RESULTS AND DISCUSSION

New county records are reported for 61 species of mammals represented by 498 specimens from 66 of Oklahoma's 77 counties. These include one marsupial, one armadillo, two rabbits, two shrews, one mole, nine bats, 13 carnivores, one deer, and 31 rodents.

ORDER DIDELPHIMORPHIA
Family Didelphidae *Didelphis virginiana* Kerr, 1792

Virginia Opossum

The distribution of *D. virginiana* includes all of Oklahoma, although no specimens are known for 14

counties, and four counties are represented by observational records only (Caire et al. 1989; Stangl et al. 1992; Braun and Revelez 2005; Roehrs et al. 2008; Caire et al. 2010). New county records are reported for the counties of Canadian, Kiowa, Logan, Mayes, and Nowata.

Specimen records (11).—Canadian County (4): 9204 NW 100th St, Yukon, 1 (OMNH 65384); 0.8 km W Czech Hall Rd on Reno Ave, Yukon, 1 (UCOCV-MAM 3379); Clear Springs Rd and SW 89th St, Mustang, 1 (UCOCV-MAM 3672); Morgan Rd, 0.8 km N of Edmond Rd, 1 (UCOCV-MAM 4166). Kiowa County (1): 1.6 km N, 5.6 km W Mountain Park, 423 m, 34°42'30.0600"N, -099°00'33.0840"W, 1 (OMNH 65848). Logan County (4): 9.7 km N Edmond, 2.8 km E of Boulevard St, 1 (UCOCV-MAM 2792); 9.7 km N, 3.2 km W Edmond, 1 (UCOCV-MAM 2793); 10774 Coyote Cir, Arcadia, 1 (UCOCV-MAM 4390); Santa Fe Ave, N of Simmons Rd, S of Charter Oak Rd, 35°44'51.5100"N, -097°30'53.1900"W, 1 (UCOCV-MAM 7029). Mayes County (1): group camp site, Lake Eufaula State Park, 35°23'57.93"N, 95°36'51.50"W, 191.4 m, 1 (UCOCV-MAM 7165). Nowata County (1): 8 km W Lenapah, 1 (UCOCV-MAM 4520).

ORDER CINGULATA Family Dasypodidae Dasypus novemcinctus Linnaeus, 1758 Nine-banded Armadillo

Dasypus novemcinctus has been reported in a variety of habitats throughout much of Oklahoma, but few specimen records exist for most parts of the state. Caire et al. (1989) reported records for 19 counties. Since then, this species has been reported for Greer, Jackson, Jefferson, and Roger Mills counties by Stangl et al. (1992), for Harper County by Tyler and Donelson (1996), for Osage County by Payne et al. (2001), for Beckham, McClain, Rogers, and Seminole counties by Braun and Revelez (2005), and for Ellis and Kiowa counties by Roehrs et al. (2008). The first observations of this species were reported for Washita County by Clark and Tumlison (1992) and for Beaver and Woods counties by Tyler and Donelson (1996). New records are reported for Atoka, Delaware, Garvin, Muskogee, Oklahoma, Okmulgee, and Woodward counties, which expand the understanding of the distribution of D. novemcinctus in Oklahoma. This species now is known from 37 counties and by observation from an additional six counties.

Specimen records (12).—Atoka County (1): Boehler Seeps, 1 (UCOCV-MAM 7349). Delaware County (1): near Colcord, 1 (UAFMC 0093-0083-0007). Garvin County (6): 4.8 km NW Pernell, 5 (FHSM 8187, 8913-8916); 4.8 km S Maysville, 1 (KSTC M0452). Muskogee County (1): 29.8 km S, 11.3 km E Muskogee, 1 (MLZ 2161). Oklahoma County (1): 723 Sunnybrook Dr, Edmond, 1 (UCOCV-MAM 3347). Okmulgee County (1): 4.2 km W jct Hwys 62 and 75 on I-40, 1 (OMNH 40172). Woodward (1): Cooper Wildlife Management Area, 621 m, 36°34'28.4520"N, -099°29'59.3520"W, 1 (OMNH 39471).

ORDER LAGOMORPHA Family Leporidae Lepus californicus Gray, 1837 Black-tailed Jackrabbit

Lepus californicus is characteristic of western Oklahoma but has been reported from northeastern and southeastern counties. Since Caire et al. (1989), a new specimen record was reported for McCurtain County (Braun and Revelez 2005). Additionally, observational records have been reported for Washita (Clark and Tumlison 1992) and Ellis (Caire et al. 2010) counties. New specimen records are reported for Murray, Pawnee, and Seminole counties.

Specimen records (3).—Murray County (1): 2.1 km S, 3.2 km W Davis, 1 (FHSM-M 18900). Pawnee County (1): 3.2 km E Teriton, 1 (CAS 7450). Seminole County (1): 4.8 km E Seminole, 1 (ISM 689069).

Sylvilagus floridanus (J. A. Allen, 1890) Eastern Cottontail

Sylvilagus floridanus is distributed widely across the state and is known from most Oklahoma counties. New specimen records are reported for Cherokee, Greer, Pawnee, Roger Mills, and Seminole counties. This species now is known from 65 of the 77 counties.

Specimen records (5).—Cherokee County (1): Cookson Hills Wildlife Management Area, 270.7 m, 35°41'22.0560"N, -094°50'44.9160"W, 1 (OMNH 37961). Greer County (1): 14.5 km N, 1.6 km W

Granite, 1 (OMNH 65888). Pawnee County (1): 3.2 km E Terlton, 1 (CAS 7451). Roger Mills County (1): 3.2 km N, 5.6 km W jct Hwys 283 and 6, 1 (KSTC M0582). Seminole County (1): no specific locality, 1 (UCOCV-MAM 4532).

ORDER SORICOMORPHA Family Soricidae Blarina hylophaga Elliot, 1899 Elliot's Short-tailed Shrew

Blarina hylophaga is distributed in the central and eastern portions of the state and is absent from western Oklahoma and the Panhandle. Some clarification of the distribution of B. hylophaga and verification of the presence of B. brevicauda in Oklahoma was presented by Pfau and Braun (2013). Caire et al. (1989) reported records for 26 counties. Since then, this species has been reported for an additional 14 counties. The observation from Caddo County noted by Caire et al. (1989) is a specimen in the National Museum of Natural History. Stangl et al. (1992) and Stangl and Carr (1997) reported records for the counties of Grady and Okmulgee, respectively. Braun and Revelez (2005) reported records for Craig, Major, Mayes, and Seminole counties. McDonald et al. (2006) reported specimens from Alfalfa, Custer, Dewey, Garfield, Jefferson, Nowata, and Ottawa counties, and Pfau and Braun (2013) reported a record for Cotton County. Two counties (Le Flore and Pushmataha) are represented by observational records (Caire et al. 1989). New county records are reported for Canadian, Cherokee, and Pawnee counties. The specimen from Pawnee County was originally recorded as being from Noble County; however, the locality is in Pawnee County.

Specimen records (20).—Canadian County (3): 27.4 km SW El Reno, 1 (UCOCV-MAM 3572); 27.4 km SE El Reno, 1 (UCOCV-MAM 3908); 0.8 km N of Edmond Rd on Morgan Rd, 1 (UCOCV-MAM 3947). Cherokee County (16): E-facing slope above Bolin Hollow off rd down to Hatcher Pass, Cookson Hills Wildlife Management Area, 323, 35°41'55.6080"N, -094°49'46.0200"W, 12 (OMNH 37963-37965, 37967-37973, 37975-37976); Frank Lee Spring, Cookson Hills Wildlife Management Area, 289 m, 35°41'20.2560"N, -094°50'49.3800"W, 4 (OMNH 37962, 37966, 37974, 37977). Pawnee County (1): 3.7 km N, 4 km E jct Hwy 177 and Hwy 15E, 1 (OMNH 13344).

Cryptotis parva (Say, 1823) Least Shrew

Information published since Caire et al. (1989) has expanded the known distribution of this shrew to include nearly the entire state. Records for 33 counties were reported by Caire et al. (1989). Since that time, this species has been reported for an additional 22 counties. Dalquest et al. (1990) reported records for Beaver and Texas counties. Stangl et al. (1992) reported records for Cotton, Greer, Stephens, and Tillman counties. Smith (1993) reported a record for Caddo County. Braun and Revelez (2005) reported records for Hughes, McClain, Murray, and Roger Mills counties. McDonald et al. (2006) reported records for Alfalfa, Beckham, Blaine, Ellis, Garfield, Major, Mayes, Nowata, Washington, and Washita counties. Connior et al. (2015) reported a specimen from Delaware County and Dreier et al. (2015) reported a specimen from Cimarron County. New records are reported for Atoka, Latimer, Lincoln, and Pushmataha counties.

Specimen records (9).—Atoka County (2): public hunting area along D3917 Rd, Atoka Wildlife Management Area, 264 m, 34°32'32.7840"N, -095°56'28.1760"W, 2 (OMNH 37955, 37958). Latimer County (4): 1.6 km NW Wilburton, 3 (UCOCV-MAM 3275, 3276, 3579); 1.6 km N Wilburton, 1 (UCOCV-MAM 3646). Lincoln County (1): 0.4 km N boat ramp at Chandler Lake, Chandler, 1 (OMNH 64986). Pushmataha County (2): 10.6 km S, 1.6 km W Talihina, 1 (UCOCV-MAM 5902); 6.4 km N, 9.7 km W Honobia, 1 (UCOCV-MAM 5903).

Family Talpidae Scalopus aquaticus (Linnaeus, 1758) Eastern Mole

Scalopus aquaticus is distributed throughout the state in loamy and moist sandy soils (Caire et al. 1989). Since Caire et al. (1989), reports have mostly expanded our knowledge of the distribution to include the Panhandle and counties in western and southwestern Oklahoma. Records have been reported from 11 additional counties, including Cimarron County (Dalquest et al. 1990), Cotton and Jefferson counties (Stangl et al. 1992), Washita County (Clark and Tumlison 1992), Delaware, Kiowa, and Roger Mills counties (Braun and Revelez 2005), Alfalfa and Tillman counties (McDon-

ald et al. 2006), Texas County (Roehrs et al. 2008), and Latimer County (McAllister and Loucks 2014). New records are reported of this species from the counties of Beaver, Ellis, and McIntosh.

Specimen records (4).—Beaver County (1): 1.6 km S, 20.1 km E Turpin, 1 (UCOCV-MAM 3541). Ellis County (2): Four Canyon Preserve, Nature Conservancy, 2 (UCOCV-MAM 4154, 6591). McIntosh County (1): 17.7 km W Eufaula on Hwy 9, 1 (UCOCV-MAM 1560).

ORDER CHIROPTERA Family Molossidae Tadarida brasiliensis (I. Geoffroy, 1824) Brazilian Free-tailed Bat

This species has a wide range in North and South America and is distributed throughout the state. The scattered distribution records, however, reflect the preference of this species to roost in caves. *Tadarida brasiliensis* is listed as a Tier II species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported records from 19 counties. Roehrs et al. (2008) reported a single record from Tillman County. New records are reported from Blaine, Caddo, Kiowa, Oklahoma, and Pottawatomie counties.

Specimen records (26).—Blaine County (13): Roman Nose State Park, 12 (UCOCV-MAM 5808-5816, 5899-5901); 1020 N Noble Ave (middle school gym), Watonga, 1 (OMNH 36937). Caddo County (1): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 595.6 m, 34°52'16.36"N, -98°36'35.06"W, 1 (OMNH 59768). Kiowa County (9): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°53'04.07"N, -98°37'42.09"W, 1 (OMNH 59776); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 595.6 m, 34°53'04.07"N, -98°37'42.09"W, 1 (OMNH 59780); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 602.2 m, 34°53'31.18"N, -98°37'46.14"W, 1 (OMNH 59773); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 616.6 m, 34°52'21.16"N, -98°39'14.79"W, 1 (OMNH 59775); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 629.4 m, 34°52'10.05"N, -98°38'46.89"W, 1 (OMNH 59770); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 630.3 m, 34°51'45.86"N, -98°38'09.93"W, 3 (OMNH 59771-59772, 59774); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 645.6 m, 34°52'44.63"N, -98°40'19.39"W, 1 (OMNH 59769). Oklahoma County (2): Edmond Memorial Hospital, Edmond, 1 (UCOCV-MAM 1681); CSU Library, Edmond, 1 (UCOCV-MAM 1912). Pottawatomie County (1): Shawnee, 1 (UCOCV-MAM 4642).

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

Although *E. fuscus* is found throughout the United States and Canada southward to northern South America, its distribution in Oklahoma remains spotty. Caire et al. (1989) reported records from 16 Oklahoma counties, with most being from the northern and far eastern portions of the state. New records were reported by Braun and Revelez (2005) from Caddo, Cleveland, and Payne counties. New records are reported for Creek, Greer, Haskell, and Noble counties, providing new distributional information for southwest, central, and northcentral Oklahoma.

Specimen records (4).—Creek County (1): no specific locality, 1 (UCOCV-MAM 5511). Greer County (1): 1.6 km S, 3.2 km W Reed, 1 (MSB 98231). Haskell County (1): ca 12.9 km N Stigler, 1 (OMNH 38551). Noble County (1): no specific locality, 1 (UCOCV-MAM 4406).

Lasionycteris noctivagans (Le Conte, 1831) Silver-haired Bat

The distribution of *L. noctivagans*, although occurring throughout most of the United States and southern Canada, is not well known in the southern portion of its range (Bee et al. 1981; Caire et al. 1989; Davis and Schmidly 1994). Caire et al. (1989) reported only four specimens from four counties. Since then, records were reported for Cimarron County (Dalquest et al. 1990), McCurtain County (Sheffield and Chapman 1992), and Beaver and Oklahoma counties (Braun and Revelez 2005). New records are reported for Caddo and Le Flore counties.

Specimen records (3).—Caddo County (2): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 623.9 m, 34°51'45.74"N, -98°36'28.62"W (OMNH 59658); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 600.1 m, 34°52'19.64"N, -98°36'47.76"W, 1 (OMNH 59659). Le Flore County (1): 6.1 km W Cedar Lake Recreation Area, Ouachita Wildlife Management Area, 1 (UCOCV-MAM 2124).

Lasiurus borealis (Müller, 1776) Eastern Red Bat

Lasiurus borealis is associated with eastern deciduous forests throughout North America. Caire et al. (1989) reported records of this species in 39 counties located statewide and records based on observation for three additional counties. Subsequent records were reported for Cimarron County (Dalquest et al. 1990), Caddo and Ellis counties (Roehrs et al. 2008), and Nowata and Rogers counties (Eguren and McBee 2013). New records are reported in central Oklahoma for Canadian, Creek, Garvin, McClain, Pottawatomie, and Stephens counties.

Specimen records (15).—Canadian County (5): no specific locality, 5 (UCOCV-MAM 5489-5493). Creek County (1): no specific locality, 1 (UCOCV-MAM 7330). Garvin County (2): no specific locality, 2 (UCOCV-MAM 4423, 4428). McClain County (1): no specific locality, 1 (UCOCV-MAM 5504). Pottawato-mie County (5): no specific locality, 3 (UCOCV-MAM 4635-4636, 4641); Shawnee, 1 (UCOCV-MAM 4637); 13.7 km NW Shawnee, 1 (UCOCV-MAM 4640). Stephens County (1): no specific locality, 1 (UCOCV-MAM 5499).

Lasiurus cinereus (Palisot de Beauvois, 1796) Hoary Bat

Although *L. cinereus* has the most widespread distribution of American bats, ranging from Canada to southern South America, few records have been reported for Oklahoma. Caire et al. (1989) reported records from only 10 counties and records based on observation for three additional counties. Braun and Revelez (2005) reported an additional record from Woodward County and Eguren and McBee (2013) reported a new record

from the northeastern county of Ottawa. New records are reported from Caddo, Garfield, Greer, Kiowa, Le Flore, and Logan counties.

Specimen records (78).—Caddo County (19): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 1 (OMNH 59697); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°52'16.36"N, -98°36'35.06"W, 2 (OMNH 59688, 59689); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°53'04.85"N, -98°37'09.30"W, 2 (OMNH 59687, 59690); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 596.2 m, 34°52'18.81"N, -98°35'54.24"W, 1 (OMNH 59694); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 600.2 m, 34°52'19.64"N, -98°36'47.76"W, 1 (OMNH 59692); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 602 m, 34°53'04.85"N, -98°37'09.30"W, 1 (OMNH 59691); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 608.4 m, 34°52'14.71"N, -98°36'41.25"W, 1 (OMNH 59698); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 609 m, 34°52'21.44"N, -98°36'10.21"W, 3 (OMNH 59695, 59699, 59704); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 610.8 m, 34°52'19.64"N, -98°36'53.16"W, 3 (OMNH 59693, 59701, 59705); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 629.7 m, 34°51'52.72"N, -98°36'57.57"W, 1 (OMNH 59702); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 635.5 m, 34°51'48.73"N, -98°36'50.47"W, 1 (OMNH 59703); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 641.3 m, 34°51'43.59"N, -98°36'06.50"W, 1 (OMNH 59696); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 641.6 m, 34°51'54.48"N, -98°37'04.27"W, 1 (OMNH 59700). Garfield County (2): no specific locality, 2 (UCOCV-MAM 7389-7390). Greer County (1): Oklahoma State Reformatory, 1 (UCOCV-MAM 3125). Kiowa County (54): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 575.2 m, 34°53'13.04"N, -98°41'20.58"W, 1 (OMNH 59747); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 586.7 m, 34°52'29.86"N, -98°38'14.92"W, 1 (OMNH 59745); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 589.5 m, 34°53'00.27"N, -98°38'07.31"W, 1 (OMNH 59731); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 592.8 m, 34°53'02.58"N, -98°38'33.46"W, 2 (OMNH 59739-59740); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 593.1 m, 34°53'01.40"N, -98°39'08.58"W, 1 (OMNH 59721); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 593.4 m, 34°52'53.95"N, -98°39'42.68"W, 1 (OMNH 59718); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 596.5 m, 34°52'58.85"N, -98°40'56.72"W, 1 (OMNH 59736); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 598.9 m, 34°53'04.07"N, -98°37'42.09"W, 3 (OMNH 59728, 59749-59750); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 600.2 m, 34°52'27.00"N, -98°38'07.31"W, 1 (OMNH 59730); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 605 m, 34°53'01.21"N, -98°38'20.62"W, 2 (OMNH 59724-59725); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 615.1 m, 34°52'26.31"N, -98°37'53.09"W, 2 (OMNH 59743, 59748); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 616.6 m, 34°52'21.16"N, -98°39'14.79"W, 2 (OMNH 59729, 59751); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 618.4 m, 34°51'56.24"N, -98°38'21.14"W, 1 (OMNH 59734); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 620.9 m, 34°51'56.74"N, -98°38'28.26"W, 1 (OMNH 59716); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 620.9 m, 34°51'56.77"N, -98°38'28.26"W, 1 (OMNH 59746); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 623.3 m, 34°52'01.36"N, -98°37'43.71"W, 1 (OMNH 59737); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 623.3 m, 34°52'23.90"N, -98°39'21.23"W, 1 (OMNH 59738); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 623.6 m, 34°51'59.65"N, -98°37'36.79"W, 3 (OMNH 59732-59733, 59757); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 623.6 m, 34°51'69.65"N, -98°37'36.79"W, 1 (OMNH 59714); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 623.6 m, 34°52'33.68"N, -98°39'51.30"W, 1 (OMNH 59744); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 625.1 m, 34°52'46.69"N, -98°40'12.68"W, 1 (OMNH 59753); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 626.7 m, 34°52'26.69"N, -98°37'38.82"W, 1 (OMNH 59727); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 627.3 m, 34°52'31.65"N, -98°37'36.79"W, 1 (OMNH 59713); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 629.4 m, 34°52'10.05"N, -98°38'46.89"W, 1 (OMNH 59720); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 629.4 m, 34°51'57.80"N 98°37'29.97"W, 1 (OMNH 59752); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 629.7 m, 34°52'13.73"N, -98°39'05.29"W, 1 (OMNH 59735); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 630.3 m, 34°51'45.86"N, -98°38'09.93"W, 1 (OMNH 59719); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 635.2 m, 34°51'43.66"N, -98°38'02.49"W, 1 (OMNH 59715); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 635.5 m, 34°51'44.86"N, -98°37'55.30"W, 3 (OMNH 59722-59723, 59754); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 641.3 m, 34°52'09.11"N, -98°38'56.10"W, 2 (OMNH 59717, 59742); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 642.2 m, 34°52'29.24"N, -98°39'29.38"W, 1 (OMNH 59712); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 642.5 m, 34°52'02.98"N, -98°37'21.21"W, 2 (OMNH 59726, 59756); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 644.7 m, 34°52'01.67"N, -98°37'14.15"W, 5 (OMNH 59706, 59741, 59755, 59778-59779); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°52'09.11"N, -98°38'56.10"W, 1 (OMNH 59709); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°52'26.31"N, -98°37'53.09"W, 1 (OMNH 59710); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°52'46.69"N, -98°40'12.68"W, 1 (OMNH 59707); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°53'00.27"N, -98°39'01.59"W, 1 (OMNH 59708); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°53'31.18"N, -98°37'46.14"W, 1 (OMNH 59711). Le Flore County (1): 0.8 km N, 12.9 km W Cedar Lake, Ouachita Wildlife Management Area, 1 (UCOCV-MAM 2122). Logan County (1): 0.6 km N of Waterloo Rd, 1.2 km E of I-35, 1 (UCOCV-MAM 2455).

Myotis leibii (Audubon and Bachman, 1842) Eastern Small-footed Myotis

Information about *M. leibii* in Oklahoma is very limited. *Myotis leibii* is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported records of 14 individuals from five counties located in southeastern and southwestern Oklahoma and the Panhandle. Research has indicated that these represent two separate species, *M. ciliolabrum* (western) and *M. leibii* (southeastern), but the distributional limits in the state remain unclear (Van Zyll de Jong 1984; Herd 1987; Ammerman et al. 2016). New records are reported for Le Flore County in southeastern Oklahoma.

Specimen records (3).—Le Flore County (3): Bear Den Cave, Talihina, Ouachita National Forest, 3 (UCOCV-MAM 2130-2132).

Myotis septentrionalis (Trouessart, 1897) Northern Long-eared Myotis

Myotis septentrionalis was listed as Threatened in 2015 by the U.S. Fish and Wildlife Service and is listed as a Tier II species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported records (as M. keenii) from five counties in eastern Oklahoma. Clark and Clark (1997) subsequently

reported an observation from Choctaw County. A new record is reported for Pushmataha County.

Specimen records (1).—Pushmataha County (1): Caney Creek, 1.6 km W Maple Trail, Pushmataha Wildlife Management Area, 1 (UCOCV-MAM 2110).

Nycticeius humeralis (Rafinesque, 1818) Evening Bat

Nycticeius humeralis, found most commonly in the eastern United States, probably reaches its westernmost limits in Oklahoma. However, some evidence from records in Texas suggest that this species is expanding its range westward (Revelez and Dowler 2001). The distribution of this species in the state of Oklahoma is represented by less than 70 specimens from 25 counties. Caire et al. (1989) reported records from 17 counties. New records have since been reported for Osage County (Payne et al. 2001), Caddo and Cleveland counties (French and Bunyard 2002; Braun and Revelez 2005). New records are reported for Garvin, Johnston, Kiowa, and Major counties; the latter is the northwestern-most record for the state.

Specimen records (6).—Garvin County (1): 0.8 km S, 4 km E Purdy on E1590 Rd, 34°42'36.5868"N, -097°32'34.8396"W, 1 (OMNH 66578). Johnston County (2): 3.6 km S, 3.2 km E Tishomingo, Tishomingo National Wildlife Refuge, 34°11'45.1680"N, -96°38'34.0800"W, 1 (OMNH 66579); 11.3 km N, 9.7 km E Tishomingo, Blue River Wildlife Management Area, Desperado Spring, 34°20'01.1040"N, -96°35'44.4480"W, 1 (OMNH 66580). Kiowa County (2): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 34°52'32.10"N, -98°38'51.00"W, 1 (OMNH 59760); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 593.1 m, 34°53'01.40"N, -98°39'08.58"W, 1 (OMNH 59761). Major County (1): Vickery Cave, 1 (UWBM 73520).

Perimyotis subflavus (F. Cuvier, 1832) American Perimyotis

Perimyotis subflavus is distributed statewide, except for the Panhandle. However, like many species of bats in the state, records are few and far between.

Perimyotis subflavus is listed as a Tier II species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016 as the Tri-colored Bat). Caire et al. (1989) reported records from 25 counties and an observation record from one additional county. Most of these records are from the easternmost counties in the state. Roehrs et al. (2008) reported a record from Dewey County. New records are reported for Caddo, Cleveland, and Mayes counties.

Specimen records (7).—Caddo County (3): 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 610.8 m, 34°52'19.64"N, -98°36'53.16"W, 1 (OMNH 59762); 6 km N Wichita Mountains National Wildlife Refuge, Blue Canyon II Windfarm, Slick Hills, 602 m, 34°53'04.85"N,- 98°37'09.30"W, 2 (OMNH 59763-59764). Cleveland County (3): 416 Terrace Place, Norman, 1 (OMNH 33481); Sam Noble Oklahoma Museum of Natural History, Norman, 2 (OMNH 36700, 66024). Mayes County (1): 1.6 km N Spavinaw Dam, 1 (UCM 11427).

ORDER CARNIVORA Family Canidae Canis latrans Say, 1823 Coyote

Canis latrans is distributed statewide. Caire et al. (1989) reported records for most Oklahoma counties. Braun and Revelez (2005) reported a new record for Caddo County. New records are reported for Atoka, Blaine, Carter, Grant, Greer, Stephens, and Washington counties. Specimen records of this species are only lacking for the following counties: Alfalfa, Coal, Garvin, Haskell, Kay, Okfuskee, Ottawa, Seminole, and Sequoyah.

Specimen records (9).—Atoka County (1): no specific locality, 1 (UCOCV-MAM 7385). Blaine County (2): 33.2 km NW Watonga on US Hwy 281, by North Canadian River, 2 (OMNH 29062-29063). Carter County (1): 1.6 km N Ardmore on Hwy 14, 1 (UCOCV-MAM 129). Grant County (1): no specific locality, 1 (OMNH 39190). Greer County (1): 16.9 km W Willow, 568 m, 1 (OMNH 66042). Stephens County (1): 4.8 km W Velma, 1 (ISM 687209). Washington County (2): no specific locality, 2 (ISM 692935-692936).

Urocyon cinereoargenteus (Schreber, 1775) Gray Fox

Urocyon cinereoargenteus is distributed in wooded areas across the state. Caire et al. (1989) reported records from 21 counties and an observational record from one additional county. Stangl et al. (1992) reported a record from Cotton County, and Payne et al. (2001) reported an observation from Osage County. New records are reported for the counties of Atoka, Cherokee, Garvin, McClain, and Washington.

Specimen records (5).—Atoka County (1): no specific locality, 1 (UCOCV-MAM 7386). Cherokee County (1): no specific locality, 1 (UCOCV-MAM 132). Garvin County (1): 3.2 km W Maysville, Washita River, 1 (UCOCV-MAM 5166). McClain County (1): jct Main Ave and Center Rd, Goldsby, 1 (OMNH 65992). Washington County (1): no specific locality, 1 (ISM 692974).

Vulpes velox (Say, 1823) Swift Fox

In Oklahoma, the distribution of *V. velox* is restricted to the northwestern part of the state. *Vulpes velox* is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported records from two counties and observational records from two additional counties. The observational record from Cimarron County is reported as a specimen record.

Specimen records (1).—Cimarron County (1): no specific locality, 1 (USNM 289140).

Vulpes vulpes (Linnaeus, 1758) Red Fox

Vulpes vulpes is distributed statewide. However, many of the records given by Caire et al. (1989) are observations. Specimen records have since been reported for Beaver, Cimarron, and Texas counties (Dalquest et al. 1990) and Grady County (Tyler and Donelson 1996). Observational records have since been reported for Jefferson and Harmon counties (Tyler and Donelson 1996) and Ellis County (Caire et al. 2010). New county records are reported for Cleveland, Lincoln, and Mayes counties.

Specimen records (8).—Cleveland County (6): Hwy 9, Norman, 1 (OMNH 31843); jct Hwy 9 and Chautauqua Ave, Norman, 1 (OMNH 33393); jct Hwy 9 and Marshall Rd, Norman, 1 (OMNH 36771); Norman, T8N, R2W, Sec 8, N1/2, 1 (OMNH 36874); Hwy 9 between Imhoff Rd and McGee Dr, Norman, 1 (OMNH 50084); Sam Noble Oklahoma Museum of Natural History back lot, Norman, 1 (OMNH 64988). Lincoln County (1): 1.6 km S Wellston, Hwy 66, 1 (UCOCV-MAM 7309). Mayes County (1): no specific locality, 1 (OMNH 66002).

Family Felidae Lynx rufus (Schreber, 1777) Bobcat

Lynx rufus is distributed throughout the state. Caire et al. (1989) reported records from 42 counties and observational records from two additional counties. Stangl et al. (1992) reported new records from Harmon and Jefferson counties and Clark and Tumlison (1992) reported an observation of this species in Washita County. New county records are reported from Custer and McIntosh counties.

Specimen records (2).—Custer County (1): 3.2 km N, 8 km W Clinton, 1 (UCOCV-MAM 5165). Mc-Intosh County (1): Stidham, 1 (UCOCV-MAM 6565).

Family Mephitidae Mephitis mephitis (Schreber, 1776) Striped Skunk

Mephitis mephitis is distributed throughout the state. Caire et al. (1989) reported specimen records from 35 counties and observational records from an additional nine counties. Stangl et al. (1992) reported a new record for Jefferson County, Braun and Revelez (2005) reported a specimen record from Garvin County, and Roehrs et al. (2008) reported a specimen record from Kiowa County. New specimen records are reported for the counties of Beaver, Canadian, Delaware, Harmon, Jackson, Kingfisher, Pottawatomie, and Woodward.

Specimen records (23).—Beaver County (11): Beaver River, 5 (AMNH 3025-3029), Beaver River, Indian Territory, 6 (AMNH 3962-3967). Caddo County (2): Fort Cobb, 2 (USNM 9285, 10749). Ca-

nadian County (2): 0.3 km S Hwy 3 on County Line Rd, Yukon, 1 (OMNH 54501); 9204 NW 100th St, Yukon, 1 (OMNH 65383). Delaware County (1): 8 km W of OK-AR line on Hwy 33, 1 (UAFMC 0075-0754-0001). Harmon County (1): 14.9 km S, 2.4 km W Gould, 470 m, 1 (OMNH 66070). Jackson County (1): 3.2 km N Headrick, 1 (OMNH 14920). Kingfisher County (1): 12.6 km E of Broadway Ave, OK Hwy 33, Kingfisher, 35°51'08"N, -97°46'56"W, 1 (UCOCV-MAM 4376). Pottawatomie County (3): no specific locality, 1 (UCOCV-MAM 4523); Shawnee area, 1 (UCOCV-MAM 4382); Shawnee, 1 (ISM 687221). Woodward County (1): Selman Living Lab, 544.7 m, 36°42'46.50"N, -99°15'32.89"W, 1 (UCOCV-MAM 5526).

Spilogale putorius (Linnaeus, 1758) Eastern Spotted Skunk

The distribution of *S. putorius* includes all but the Panhandle and some of the westernmost counties. *Spilogale putorius* is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported specimens from 28 counties and observations from an additional five counties. Tyler (1994) reported new records from Stephens and Osage counties and Braun and Revelez (2005) reported a record for Rogers County. A new specimen record is reported for Major County.

Specimen records (1).—Major County (1): 19.3 km S, 9.7 km E Waynoka, 1 (KSTC M0656).

Family Mustelidae Lontra canadensis (Schreber, 1777) Northern River Otter

The known distribution of *L. canadensis* was quite limited for the state. Caire et al. (1989) reported only five specimens from three counties and observations records for an additional 12 counties. Since then, specimen records were reported for Adair, Bryan, Coal, Haskell, Johnston, McCurtain, McIntosh, Muskogee, Okfuskee, Tulsa, and Wagoner counties (Barrett and Leslie 2010) and Logan County (Caire et al. 2016). Additionally, observational records were reported for Pushmataha County (Shackelford and Whitaker 1997; White and Hoagland 1997) and Carter, Cherokee,

Choctaw, Cleveland, Cotton, Craig, Creek, Hughes, Kay, Kingfisher, Lincoln, McClain, Murray, Nowata, Okmulgee, Osage, Ottawa, Pawnee, Payne, Pontotoc, Pottawatomie, Seminole, and Rogers counties (Barrett and Leslie 2010). New specimen records are reported for the counties of Caddo, Cherokee, Cleveland, and Pushmataha, which were previously known only as observational records.

Specimen records (6).—Caddo County (1): Fort Cobb, 1 (USNM A8097). Cherokee County (1): entrance of Sequoyah State Park, Hulbert, 1 (OMNH 36247). Cleveland County (3): N of Tecumseh Rd on E shoulder, I-35N, Norman, 1 (OMNH 31849); South Canadian River, near Purcell, 1 (OMNH 36245-36246). Pushmataha County (1): off SH 144, 34°30'12"N, -95°07'41"W, 1 (UCOCV-MAM 6060).

Mustela frenata Lichtenstein, 1831 Long-tailed Weasel

The distribution of *M. frenata* is little known in the state. *Mustela frenata* is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported only five specimens from three counties. White and Hoagland (1997) reported observational records for five counties in southeastern Oklahoma (Haskell, Latimer, Le Flore, McCurtain, and Pushmataha). Four new records are reported for the counties of Blaine, Cimarron, Garfield, and Pottawatomie.

Specimen records (4).—Blaine County (1): 9.7 km E Chinook, 1 (MVZ 77841). Cimarron County (1): 1.6 km N, 5.6 km E Boise City, 1 (MSB 294684). Garfield County (1): 1.6 km E US 81 of Southage Rd, Enid, 1 (UCOCV-MAM 7325). Pottawatomic County (1): Lake Shawnee, 1 (UBCBBM CTC M006229).

Neovison vison (Schreber, 1777) American Mink

The distribution of *N. vison* includes most of central and eastern Oklahoma (Caire et al. 1989). Caire et al. (1989) reported specimen records from 24 counties. Later, Stangl et al. (1992) reported a specimen from Jefferson County and Braun and Revelez (2005)

reported specimen records from Blaine and Cotton counties. New specimen records are reported for the counties of Craig, Rogers, and Tulsa.

Specimen records (3).—Craig County (1): 1.6 km SE Vinita on Hwy 60, 1 (UCOCV-MAM 3170). Rogers County (1): off State Hwy 66 in Verdigris, 1 (OMNH 36520). Tulsa County (1): 1700 block E 60th St, Tulsa, 1 (UCOCV-MAM 1729).

Taxidea taxus (Schreber, 1777) American Badger

Taxidea taxus is primarily distributed throughout western and central Oklahoma but also has been documented in eastern counties. Caire et al. (1989) reported specimen records from 32 counties and observations from three counties. Tumlison and Bastarache (2007) reported a new specimen record from McCurtain County and two observations of roadkill from Atoka and Le Flore counties. A new specimen record is reported for Okfuskee County.

Specimen records (1).—Okfuskee County (1): 8 km N Paden, E of N3620 Rd and Deer Creek Rd, 1 (UCOCV-MAM 7380).

Family Procyonidae Procyon lotor (Linnaeus, 1958) Northern Raccoon

Procyon lotor is distributed throughout the state. Caire et al. 1989 reported specimen records from 41 counties and observational records from four additional counties. Stangl et al. (1992) reported the first records for Jefferson County, Braun and Revelez (2005) reported records for Murray and Rogers counties, and Roehrs et al. (2008) reported the first record for Ellis County. New records are reported for the counties of Beaver, Greer, Kiowa, and Okmulgee.

Specimen records (4).—Beaver County (1): 4.2 km W Slapout, 703.5 m, 1 (OMNH 36242). Greer County (1): dining hall parking lot, Quartz Mountain State Park, 1 (OMNH 66032). Kiowa County (1): 4.8 km NW Snyder, 1 (TTU 44267). Okmulgee County (1): 3.2 km E Henryetta on I-40, 1 (OMNH 44442).

Family Ursidae Ursus americanus Pallas, 1780 American Black Bear

Historically, *U. americanus* likely occurred throughout the state. However, specimen records are uncommon. Caire et al. (1989) reported only four specimens from three counties. New county records are reported for the counties of Cherokee, Pontotoc, Sequoyah, and Woodward.

Specimen records (4).—Cherokee County (1): 4.8 km S, 10.5 km E Cookson, Cookson Wildlife Management Area, 1 (OMNH 65616). Pontotoc County (1): Byng, 1 (OMNH 65722). Sequoyah County (1): 1.4 km SE jct Hwy 59 and Stoney Point Cemetery Rd, 35.57873, -97.6761, 1 (OMNH 66577). Woodward County (1): no specific locality, 1 (UCOCV-MAM 3240).

ORDER ARTIODACTYLA Family Cervidae Odocoileus virginianus (Zimmermann, 1780) White-tailed Deer

Odocoileus virginianus has a widespread distribution in Oklahoma, although museum specimen records are limited. Since Caire et al. (1989), specimen records have been reported for Creek, McClain, and Roger Mills counties (Braun and Revelez 2005) and Beaver and Beckham counties (Roehrs et al. 2008). Payne et al. (2001) and Dreier et al. (2015) first reported observations of this species for Osage and Cimarron counties, respectively. New specimen records are reported for the counties of Alfalfa, Bryan, Cleveland, Dewey, Grant, Harper, Kay, Kiowa, Le Flore, Logan, Marshall, Oklahoma, and Wagoner.

Specimen records (30).—Alfalfa County (1): Salt Plains National Wildlife Refuge, 1 (UCOCV-MAM 2396). Bryan County (1): 0.8 km W jct Hwy 70 and Banty Rd, Bokchito, 1 (UCOCV-MAM 5817). Cleveland County (6): SE 37th St and Bryant, Moore, 1 (OMNH 66576); Hwy 9 between Chautauqua and Jenkins Aves, Norman, 1 (OMNH 38085); 1550 108th Ave SE, Norman, 3 (OMNH 64324–64325, 65381); 4.3 km S jct Stella Rd and 120th Ave, Norman, 1 (UCOCV-MAM 2397). Dewey County (1): 3.2 km W Oakwood on Hwy 33, 1.6 km from Canadian River, 1

(UCOCV-MAM 4235). Grant County (1): jct Clyde Rd and Wakita Rd, 1 (UCOCV-MAM 7076). Harper County (1): 26.4 km W Fort Supply, 1 (OMNH 38135). Kay County (4): Ponca City, 4 (OMNH 36876-36879). Kiowa County (1): 27.4 km Apache, Blue Canyon II Windmill Farm, 1 (OMNH 36696). Le Flore County (2): Lake Wister State Park, 1 (UCOCV-MAM 4780), Muse, 1 (MSB 294664). Logan County (1): 11.3 km N, 3.2 km W, Arcadia, 35°43'55.21"N, -97°17'20.29W, 1 (UCOCV-MAM 6058). Marshall County (1): 0.8 km W Willis, 2.4 km NW University of Oklahoma Biological Station, 1 (OMNH 36695). Oklahoma County (6): no specific locality, 1 (UCOCV-MAM 3382); Choctaw, 1 (UCOCV-MAM 2996); Wilshire and I-35, 35°33'04.7736"N, -097°27'33.0228"W, 1 (UCOCV-MAM 6273); Harrah Newalla Rd. and 29th St, junction on W side of rd, 1 (UCOCV-MAM 6465); Hefner Rd and I-35, 0.4 km W of I-35, 1 (UCOCV-MAM 6567); Harrah, 0.4 km N of 29th St, junction on W side of rd, 1 (UCOCV-MAM 6578). Wagoner County (4): Fort Gibson, 4 (OMNH 36880-36883).

ORDER RODENTIA Family Castoridae Castor canadensis Kuhl, 1820 American Beaver

Castor canadensis was once widespread across the state. Dramatic declines due to trapping resulted in Blair (1939) suggesting that the species was extirpated from the state. Since that time, populations have increased statewide. Roehrs et al. (2012) reported a new specimen county record for McCurtain County. New specimen county records are reported for nine counties, including Garfield, Muskogee, Nowata, Oklahoma, Osage, Rogers, Seminole, Tulsa, and Washington.

Specimen records (27).—Garfield County (1): Jim Powell's farm, N of Enid, 1 (UCOCV-MAM 2047). Muskogee County (1): ca 1.6 km SE Fort Gibson, T15N, R19E, Sec 13, NE 1/4, 1 (OMNH 14555). Nowata County (3): Verdigris River, 3 (ISM 693497, 693502, 693504). Oklahoma County (4): no specific locality, 1 (OMNH 66099); jct I-35 and I-240, Oklahoma City, 1 (OMNH 19568); Memorial Rd, ca 0.3 km W of Portland Ave, Oklahoma City, 1 (UCOCV-MAM 4182); on E Hefner Rd between N Douglas Blvd and N Canadian River, 1 (UCOCV-MAM 4395). Osage County (11): Pond Creek, 9 (ISM 693495–693496,

693499–693500, 693503, 693505–693507, 693509); Friend Ranch, 2 (ISM 693501, 693508). Rogers County (1): 5.6 km SW Inola, 1 (MSB 113402). Seminole County (2): 4 km NW Maud, 2 (OMNH 17769-17770). Tulsa County (1): Tulsa, 1 (NMMNH 3866). Washington County (3): no specific locality, 3 (ISM 692975, 692984, 693498).

Family Cricetidae Baiomys taylori (Thomas, 1887) Northern Pygmy Mouse

Baiomys taylori is distributed in southwestern Oklahoma. Caire et al. (1989) reported this species from only one county. Subsequently, specimen records have been reported from Harmon (Caire 1991), Greer (Tumlison et al. 1993), Jefferson and Tillman (McDonald et al. 2006), and Beckham (Roehrs et al. 2008) counties. A new record is reported for Jackson County.

Specimen records (1).—Jackson County (1): 0.8 km S, 13.7 km W Eldorado, 1 (OMNH 65818).

Microtus ochrogaster (Wagner, 1842) Prairie Vole

Microtus ochrogaster were reported from only 15 counties in central and northeastern Oklahoma by Caire et al. (1989). New specimen county records have been reported subsequently from an additional 23 counties: Texas County (Reed and Choate 1989); Comanche County (Choate 1989); Beaver County (Dalquest et al. 1990); Washita County (Clark and Tumlison 1992); Caddo County (Smith 1992); Kiowa County (Smith 1996); Cimarron County (McCaffrey et al. 2003); and Alfalfa, Blaine, Custer, Dewey, Ellis, Garfield, Grady, Greer, Harmon, Harper, Jackson, Jefferson, Kay, Major, Ottawa, and Tillman counties (McDonald et al. 2006). New county records are reported for Grant, Woods, and Woodward counties.

Specimen records (15).—Grant County (1): 3.7 km N, 12.9 km W Renfrow, 1 (MSB 291699). Woods County (13): Alva, 10 (FHSM 6819–6828); canyon, 4.8 km W Alva, 1 (FHSM 6816); prairie, 4.8 km W Alva, 2 (FHSM 6817–6818). Woodward County (1): 11.3 km S, 11.3 km W Freedom, Selman Living Laboratory, 1 (UCOCV-MAM 7240).

Microtus pinetorum (Le Conte, 1830) Woodland Vole

Microtus pinetorum has a patchy distribution in eastern, central, and western Oklahoma (Caire et al. 1989). Since Caire et al. (1989), new specimen records have been reported for 17 counties: Love County (Stangl et al. 1992); Washita County (Clark and Tumlison 1992); Le Flore County (Lutterschmidt et al. 1996); Johnston, Kiowa, Major, McIntosh, Nowata, and Seminole counties (Braun and Revelez 2005); Alfalfa, Custer, Dewey, Garfield, Kay, Mayes, and Ottawa counties (McDonald et al. 2006); and Haskell County (McAllister and Loucks 2014). New county records are reported for Ellis and Okfuskee counties.

Specimen records (3).—Ellis County (1): 20.1 km S, 8 km E Arnett, Packsaddle Wildlife Management Area, 1 (OMNH 39417). Okfuskee County (2): near Weleetka, 2 (UCOCV-MAM 4802, 4805).

Neotoma floridana (Ord, 1818) Eastern Woodrat

Neotoma floridana was known to occur in all but the Panhandle and the westernmost counties of Oklahoma (Caire et al. 1989). More recent records include 10 additional counties and extend the western distribution to the border with Texas. These records include: Kiowa, Jefferson, and Love counties (Stangl et al. 1992), Washita County (Clark and Tumlison 1992), Craig, Garvin, and Seminole counties (Braun and Revelez 2005), Alfalfa County (McDonald et al. 2006), and Ellis and Roger Mills counties (Roehrs et al. 2008). New specimen county records are reported for Atoka, Harper, and Tillman counties.

Specimen records (6).—Atoka County (1): 3.2 km N Caney, 1 (UCOCV-MAM 5595). Harper County (1): Southern Plains Research Station, 1 (UCOCV-MAM 3466). Tillman County (4): 6.4 km S, 2.8 km E Grandfield, 21 (OMNH 66084–66085); 3.2 km E Loveland, 2 (OMNH 66088–66089).

Neotoma micropus (Baird, 1855) Southern Plains Woodrat

Neotoma micropus is distributed in the Panhandle and western counties of Oklahoma (Caire et al. 1989).

Since Caire et al. (1989), new records have been reported for four additional counties: Ellis County (Braun and Revelez 2005) and Caddo, Dewey, and Grady counties (McDonald et al. 2006). A new record is reported for Jefferson County. The records for Caddo, Grady, and Jefferson counties expand the distribution of the species eastward.

Specimen records (1).—Jefferson County (1): 11.3 km NE Byers, Texas, 1 (TTU 56256).

Ochrotomys nuttalli Harlan, 1832 Golden Mouse

The distribution of *O. nuttalli* in Oklahoma is limited to a few counties in the southeastern part of the state. *Ochrotomys nuttalli* is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Specimen records for two counties were reported by Caire et al. (1989), and Braun et al. (2011) reported specimens from Le Flore County. New records are reported for Sequoyah County.

Specimen records (2).—Sequoyah County (2): Redland, 2 (USNM 87452–87453).

Ondatra zibethicus (Linnaeus, 1766) Common Muskrat

Ondatra zibethicus is distributed across the state, although specimen records are not common. Caire et al. (1989) reported specimen records for only 23 counties and observational records for five additional counties. Braun and Revelez (2005) reported specimen records for Canadian and Rogers counties, and McDonald (2006a) reported records for Blaine County. Observational records have been reported for most Oklahoma counties (McDonald 2006b; Caire et al. 2010). New specimen records are reported for Cherokee, Grady, and McClain counties.

Specimen records (3).—Cherokee County (1): Tahlequah, 1 (UCOCV-MAM 3684). Grady County (1): Chickasha, 1 (UCOCV-MAM 2495). McClain County (1): I-35, S of Oklahoma City, Wayne, 1 (UCOCV-MAM 3685).

Oryzomys texensis J. A. Allen, 1894 Texas Marsh Rice Rat

Specimens of *O. texensis* were reported from four counties by Caire et al. (1989), and observational records were reported for two additional counties. *Oryzomys texensis* is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Since Caire et al. (1989), specimen records have been reported from Coal, Carter, and Mayes counties (Gettinger 1991), Choctaw and Okmulgee counties (Braun and Revelez 2005), Wagoner County (McDonald et al. 2006), and Le Flore County (Braun et al. 2011). New specimen records are reported for Muskogee and Stephens counties, the latter being the westernmost record of the species in the state.

Specimen records (2).—Muskogee County (1): LCTA plot 511, Camp Gruber Maneuver Training Center, 1 (OMNH 37854). Stephens County (1): near Loco, 1 (CAS 21924).

Peromyscus gossypinus (Le Conte, 1853) Cotton Deermouse

Peromyscus gossypinus was reported from six counties in southeastern Oklahoma by Caire et al. (1989). The record from Osage County (Payne and Caire 1992) extended the range to the north and west. A new county record is reported for Cherokee County.

Specimen records (1).—Cherokee County (1): 6.8 km E Cookson, T14N, R23E, Sec 2, SW1/4, 1 (UCOCV-MAM 6752).

Peromyscus leucopus (Rafinesque, 1818) White-footed Deermouse

Peromyscus leucopus is distributed statewide. Caire et al. (1989) reported specimen records from all but six counties. Since, specimens have been reported for Seminole County (Stangl 1986), Love and Greer counties (Stangl et al. 1992), and Grant County (Braun and Revelez 2005). New records are reported for Lincoln County. At present, specimen records are lacking only for Coal County.

Specimen records (2).—Lincoln County (2): 6.4 km S Wellston, 2 (UCOCV-MAM 3211, 3500).

Peromyscus maniculatus (Wagner, 1845) North American Deermouse

Peromyscus maniculatus is distributed statewide. Caire et al. (1989) reported specimen records from most Oklahoma counties. Specimens have also been reported for Dewey and Stephens counties (Stangl et al. 1992) and Grant, Marshall, and McCurtain counties (Braun and Revelez 2005). New county records are reported for Cherokee, Latimer, Love, and Pushmataha counties. At present, specimen records are lacking for Creek, Garfield, Lincoln, Okfuskee, and Sequoyah counties.

Specimen records (15).—Cherokee County (3): Frank Lee Spring, Cookson Hills Wildlife Management Area, 88.1 m, 35°41'20.2560", -94°50'49.3800", 1 (OMNH 37982); Tahlequah, 1 (UCOCV-MAM 2764); 6.8 km E Cookson, T14N, R23E, Sec 2, SE 1/4, 1 (UCOCV-MAM 6806). Latimer County (4): 14.5 km NW Red Oak, 1 (OMNH 66253); 1.6 km N Wilburton, 1 (UCOCV-MAM 3664); 1.6 km NW Wilburton, 1 (UCOCV-MAM 3310); 11.3 km N Wilburton, 1 (UCOCV-MAM 5558). Love County (1): 1.6 km N Red River, 24.1 km W I-35, 1 (UCOCV-MAM 2260). Pushmataha County (7): 8 km S Snow, 1 (UCOCV-MAM 5546); 8 km N Snow, 2 (UCOCV-MAM 5553, 5599); 10.5 km S, 1.6 km W Talihina T2N, R21E, Sec 11, S 1/4, 4 (UCOCV-MAM 6795, 6797, 6800–6801).

Reithrodontomys fulvescens J. A. Allen, 1894 Fulvous Harvest Mouse

The distribution of *R. fulvescens* reported by Caire et al. (1989) included scattered counties in eastern and central Oklahoma. Since Caire et al. (1989), the known distribution of this species in the state also includes western Oklahoma and one county in the Panhandle. These records include: Cotton, Grady, Greer, Kiowa, and Love counties (Stangl et al. 1992); Washita County (Clark and Tumlison 1992); Osage County (Thies et al. 1993); Beckham, Carter, Cherokee, Custer, Hughes, McIntosh, Okmulgee, Pawnee, Rogers, and Seminole counties (Braun and Revelez 2005); Ottawa and Washington counties (McDonald et al. 2006); and Beaver, Dewey, Ellis, Harper, Roger

Mills, and Tillman counties (Roehrs et al. 2008). New county records are reported for Blaine, Bryan, Harmon, Jackson, Pushmataha, and Woods counties.

Specimen records (39).—Blaine County (2): 9.7 km W Watonga, 1 (UCOCV-MAM 2932); Roman Nose Stat Park, 1 (UCOCV-MAM 5889). Bryan County (7): 1.6 km N Durant, 2 (UCOCV-MAM 5213, 5484); 11.3 km E Durant, 2 (UCOCV-MAM 5331, 5487); 1.6 km S Durant, 1 (UCOCV-MAM 5485); Durant Holiday Inn, 1 (UCOCV-MAM 5488); 3.2 km S, 8 km W Durant, 1 (UCOCV-MAM 5622). Harmon County (16): Oklahoma banks of Red River, 1 (UCOCV-MAM 2334); 8 km S, 3.2 km W Hollis, 3 (UCOCV-MAM 3199-3200, 3416); 9.7 km S, 3.2 km W Hollis, 9 (UCOCV-MAM 3948-3952, 4198-4199, 4201, 4204); 11.3 km S, 3.2 km W Hollis, 2 (UCOCV-MAM 3291, 3565); 11.3 km S Hollis, 1 (UCOCV-MAM 3409). Jackson County (1): plot 3, Altus Air Force Base, Altus, 1 (OMNH 36325). Pushmataha County (8): 6.4 km N, 9.7 km W Honobia, 4 (UCOCV-MAM 5904-5907); 6.4 km N, 9.7 km W Honobia, T2N, R22E, Sec 31, W 1/4, 4 (UCOCV-MAM 6748-6751). Woods County (5): 27.4 km W Alva, 4 (UAM 63044, 63047, 63050, 63060); Merrihew Cave, 1 (FHSM 36736).

Reithrodontomys humulis (Audubon and Bachman, 1841)

Eastern Harvest Mouse

This distribution of *R. humulis* is not well known in the state, but the species appears to be restricted to central and eastern parts of the state. This species is listed as a Tier III species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). Caire et al. (1989) reported records from two counties. Subsequently, records have been reported from Pottawatomie County (Bradley et al. 1988), McCurtain County (Sheffield and Chapman 1992), Osage and Payne counties (Thies et al. 1993), Okmulgee and Rogers counties (Braun and Revelez 2005), and Le Flore County (Braun et al. 2011). A new specimen record is reported from Bryan County. Previously, this species was known only as an observation from Bryan County.

Specimen records (1).—Bryan County (1): 8 km E Colbert, 1 (OMNH 18027).

Reithrodontomys megalotis (Baird, 1857) Western Harvest Mouse

Reithrodontomys megalotis was known from specimens from northwestern Oklahoma, including the counties of Beaver, Cimarron, Texas, and Ellis; an observation was known from Woods County (Caire et al. 1989). Since Caire et al. (1989), few additional specimen records have been reported. Payne et al. (2001) reported the occurrence of this species from Osage County and Braun and Revelez (2005) reported records from Murray and Washita counties. Understanding the distribution of this species in Oklahoma requires additional information. A new record is reported for Roger Mills County in western Oklahoma.

Specimen records (1).—Roger Mills County (1): 11.3 km N Cheyenne, Black Kettle National Grassland, 609.6 m, 1 (OMNH 839).

Reithrodontomys montanus (Baird, 1855) Plains Harvest Mouse

Reithrodontomys montanus is distributed state-wide except for the southeastern part of the state and part of the northeast. Since Caire et al. (1989), records have been reported from Texas County (Dalquest et al. 1990), Caddo County (Stangl et al. 1992; Smith 1992), Greer County (Stangl et al. 1992), Grant, Kay, and Ottawa counties (Braun and Revelez 2005), and Beckham, Craig, Jefferson, Kiowa, and Washington counties (McDonald et al. 2006). New records are reported for Blaine, Delaware, Garvin, and Murray counties.

Specimen records (5).— Blaine County (1): Canton Reservoir, 1 (UCOCV-MAM 2931). Delaware County (1): 8 km SSE Jay, 1 (UCOCV-MAM 1405). Garvin County (1): 4.8 km N, 3.2 km W Davis by I-35, 1 (FHSM 18079). Murray County (2): 3.2 km S, 3.2 km E Davis, 1 (FHSM 17157); 9.2 km S, 3.5 km W Davis by road, 1 (FHSM 17747).

Sigmodon hispidus Say and Ord, 1825 Hispid Cotton Rat

Sigmodon hispidus is distributed statewide. Caire et al. (1989) reported specimen records from all but

eight counties. Since Caire et al. (1989), specimen records have been reported for Greer, Carter, and Jefferson counties (Stangl et al. 1992) and Washita County (Clark and Tumlison 1992). New county records are reported for Atoka and Lincoln counties. Presently, specimen records are lacking from only Love and Pushmataha counties.

Specimen records (8).—Atoka County (3): 8 km N Stringtown, 2 (UCOCV-MAM 5198, 5201); city limits of Caney, 1 (UCOCV-MAM 5254). Lincoln County (5): 0.8 km S Hwy 105 and Lincoln/Payne county line, 1 (UCOCV-MAM 3323); no specific locality, 4 (UBCBBM CTC M005983–M005986).

Family Erethizontidae Erethizon dorsatum (Linnaeus, 1758) North American Porcupine

Erethizon dorsatum was suggested to be uncommon and to occur only from the Wichita Mountains westward into the Black Mesa region of Oklahoma (Caire et al. 1989). Caire et al. (1989) reported specimens from 12 counties and observational records from three additional counties. Since then, specimens have been reported from Tillman (Stangl et al. 1992), Beaver, Carter, Cotton, Dewey, Kingfisher, McClain, Noble, Pottawatomie, and Woodward (Tyler and Joles 1997), Oklahoma (Braun and Revelez 2005), Grady, Harper, and Texas (Tyler and Haynie 2001), Blaine (Caire et al. 2008), and Tulsa (Curtis and Curtis 2014) counties. Additionally, observations have been reported from Caddo, Jefferson, Logan (Tyler and Joles 1997), Canadian, Cleveland, Murray, Stephens (Tyler and Haynie 2001), Creek, Washington, Nowata, Delaware, Cherokee, Haskell, Garfield, Payne, and Washita (Caire et al. 2008) counties. Specimen records and observations of this large rodent indicate that it has been expanding eastward across the state (Stangl et al. 1992; Tyler and Joles 1997; Tyler and Haynie 2001; Caire et al. 2008; Curtis and Curtis 2014). New specimen county records are reported for Caddo county.

Specimen records (3).—Caddo County (3): 2.4 km N, 12.1 km E Binger, Pugh Ranch, 1 (OMNH 37185); 0.8 km W Anadarko, city limit on Park Rd, 1 (OMNH 38582); 9.7 km S Hydro, 1 (OMNH 39848).

Family Heteromyidae Chaetodipus hispidus (Baird, 1858) Hispid Pocket Mouse

Chaetodipus hispidus is found throughout Oklahoma, except for some southeastern and northeastern counties (Caire et al. 1989). Since Caire et al. (1989), new specimen records have been reported for Beaver County (Dalquest et al. 1990), Greer and Stephens counties (Stangl et al. 1992), Washita County (Clark and Tumlison 1992), McIntosh County (Braun and Revelez 2005), and Garfield County (McDonald et al. 2006). A new county record is reported for Kingfisher County.

Specimen records (1).—Kingfisher County (1): T16N, R5W, Sec 11, 1 (UCOCV-MAM 253).

Dipodomys ordii Woodhouse, 1853 Ord's Kangaroo Rat

Dipodomys ordii is known from most counties in the western half of Oklahoma (Caire et al. 1989). Stangl et al. (1992) and Clark and Tumlison (1992) reported new specimen county records for the counties of Jefferson and Washita, respectively. A new record is reported for Pottawatomie County, which is the easternmost record of this species in the state.

Specimen records (1).—Pottawatomie County (1): 3.2 km N Shawnee, 1 (UCOCV-MAM 4872).

Perognathus flavescens Merriam, 1889 Plains Pocket Mouse

Perognathus flavescens is distributed in north-western Oklahoma, although there is a single record from Harmon County in southwestern Oklahoma (Martin and Preston 1969). Since Caire et al. 1989), new specimen county records have been reported for Cimarron (Dalquest et al. 1990) and Beaver and Ellis (Roehrs et al. 2008) counties. A new record is reported for Major County.

Specimen records (1).—Major County (1): 3 km W jct Hwys 281 and 15 on Hwy 15, Whitlaw Ranch, 1 (OMNH 36175).

Family Muridae Mus musculus Linnaeus, 1758 House Mouse

Specimen records of *M. musculus* are known from throughout the state (Caire et al. 1989). Since Caire et al. (1989), specimen records have been reported for Beaver, Ellis, and Greer counties (Roehrs et al. 2008). New records are reported for Blaine, Carter, Choctaw, Love, McCurtain, Pushmataha, Seminole, and Woodward counties.

Specimen records (13).—Blaine County (2): Fay, 2 (UCOCV-MAM 4466, 4471). Carter County (1): Healdton, 1 (UCOCV-MAM 5347). Choctaw County (2): 5.6 km N Hugo, 2 (UCOCV-MAM 5451, 5475). Love County (1): Overbrook, 1 (UCOCV-MAM 5478). McCurtain County (2): 3.2 km S Broken Bow, 1 (UCOCV-MAM 5610); 6.4 km S, 4.8 km W Broken Bow, Little River National Wildlife Refuge, 1 (OMNH 19856). Pushmataha County (1): 8 km N Snow, 1 (UCOCV-MAM 5349). Seminole County (3): Konawa, 3 (OMNH 16850–16852). Woodward County (1): 9.7 km S Freedom, Alabaster Caverns, 1 (UCOCV-MAM 2938).

Rattus norvegicus (Berkenhout, 1769) Norway (Brown) Rat

Specimen records of *R. norvegicus*, also referred to as the Brown Rat, are scattered throughout the state. Caire et al. (1989) reported specimen records from 23 counties. New records are reported from Caddo, Carter, Nowata, and Pottawatomie counties.

Specimen records (10).—Caddo County (1): 8 km NW Ft Cobb, 1 (UCOCV-MAM 4906). Carter County (1): 3.2 km W Gene Autry, 1 (UCOCV-MAM 5183). Nowata County (1): 0.8 km W Old Elm Bend School, 1 (YPM VZ YPM MAM 015703). Pottawatomic County (7): no specific locality, 3 (UCOCV-MAM 4572, 4905, 4912); Shawnee, 2 (UCOCV-MAM 4907, 4911); 4.8 km SE Earlsboro, 1 (UCOCV-MAM 4908); Shawnee, Oklahoma Baptist University, 1 (UCOCV-MAM 4909).

Rattus rattus (Linnaeus, 1758) Black Rat

The distribution of *R. rattus* is limited to southern Oklahoma (Caire et al. 1989). New records are reported for Choctaw County.

Specimen records (2).—Choctaw County (2): 8 km E Hugo, 1 (UCOCV-MAM 5577); 8 km E Hugo on US 70 and 4.8 km S, 1 (UCOCV-MAM 5831).

Family Sciuridae Cynomys ludovicianus (Ord, 1815) Black-tailed Prairie Dog

Cynomys ludovicianus were distributed throughout western Oklahoma but now have more localized distributions. Cynomys ludovicianus is listed as a Tier II species by the Oklahoma Department of Wildlife Conservation (Oklahoma Department of Wildlife Conservation 2016). A single new specimen county record is reported for Pottawatomie County.

Specimen records (1).—Pottawatomie County (1): no specific locality, 1 (UCOCV-MAM 5154).

Ictidomys tridecemlineatus (Mitchill, 1821) Thirteen-lined Ground Squirrel

Ictidomys tridecemlineatus is distributed in all but the easternmost counties of Oklahoma (Caire et al. 1989). Since Caire et al. (1989) the only new specimen county record was reported by Clark and Tumlison (1992) for Washita County. New county records are reported for Carter and Roger Mills counties.

Specimen records (3).—Carter County (1): 1.6 km S Wilson, 1 (OMNH 17937). Roger Mills County (2): 0.8 km S, 2.8 km W Cheyenne, Cheyenne Cemetery, 2 (TTU 115589–115590).

Marmota monax (Linnaeus, 1758) Woodchuck

Marmota monax is distributed in eastern and northeastern Oklahoma (Caire et al. 1989). Since Caire et al. (1989), Caire and Sloan (1996) reported a specimen county record from Oklahoma County and Payne

et al. (2001) reported an observational county record for Osage County. New specimen county records are reported for Lincoln and Muskogee counties.

Specimen records (3).—Lincoln County (2): Stroud, 1 (UCOCV-MAM 7333); T12N, R6E, Sec 11, 35°31'16.0536"N, -96°37'51.6000"W, 1 (UCOCV-MAM 7171). Muskogee County (1): Greenleaf State Park, 1 (UCOCV-MAM 3122).

Sciurus carolinensis Gmelin, 1788 Eastern Gray Squirrel

Sciurus carolinensis is found in the eastern onehalf of Oklahoma. Caire et al. (1989) reported specimen records in 26 counties and observational records for two additional counties. New county specimen records are reported for Bryan, Le Flore, and Marshall counties.

Specimen records (7).—Bryan County (3): 1.6 km N Armstrong, 1 (UCOCV-MAM 5568); below low water dam on Blue River, near Armstrong, 1 (UCOCV-MAM 5576); 16.1 km SE Bennington, 1 (TTU 90644). Le Flore County (3): 16.1 km SE Heavener, 1 (UCOCV-MAM 5569); 4.5 km W Hwy 259, Hwy 144, 1 (OMNH 38084); 4.8 km E Honobia, 1 (OMNH 38554). Marshall County (1): University of Oklahoma Biological Station, Willis, 1 (OMNH 46546).

Sciurus niger Linnaeus, 1758 Eastern Fox Squirrel

Sciurus niger is found statewide except in the Panhandle (Caire et al. 1989). Tyler (2014), however, recorded their presence in Cimarron and Texas counties but noted that this species had been introduced and provided information about the introductions. Since Caire et al. (1989), new specimen county records have been reported for McClain County (Braun and Revelez 2005) and an observational record reported for Ellis County (Caire et al. 2010). The localities of this species reported by Caire et al. (1989) for Kiowa County are actually in Caddo County. We report the observation of an individual of S. niger for Kiowa County, which is the first recorded observation of the species in this county. New specimen county records are reported for Canadian and Roger Mills counties.

Specimen records (4).—Canadian County (3): Hwy 152 and 59th St, 1 (UCOCV-MAM 3679); Mustang, 2 (OMNH 36521–36522). Roger Mills County (1): 16.1 km N, 4 km W Cheyenne, Black Kettle National Grassland, 1 (TTU 115941).

Tamias striatus (Linnaeus, 1758) Eastern Chipmunk

Caire et al. (1989) reported specimens of *T. striatus* from counties in eastern Oklahoma and observational records for several counties in central Oklahoma. Since Caire et al. (1989), Caire and Caddell (2006) reported a new specimen record for Logan County and an observational record for Oklahoma County. New specimen county records are reported for Marshall, Pottawatomie, and Seminole Counties.

Specimen records (7).—Marshall County (1): University of Oklahoma Biological Station, Willis, 1

(OMNH 17924). Pottawatomie County (3): 14.5 km E Tecumseh, 3 (UCOCV-MAM 4632, 4741, 5997). Seminole County (3): Earlsboro, 1 (UCOCV-MAM 4739); 3.2 km SE Earlsboro, 2 (UCOCV-MAM 4740, 5999).

Xerospermophilus spilosoma Bennett, 1833 Spotted Ground Squirrel

Xerospermophilus spilosoma is known from northwestern and southwestern Oklahoma. Caire et al. (1989) reported specimen records from 12 counties. Stangl et al. (1992) reported a specimen county record for Cotton County, and a new county record is reported for Greer County.

Specimen records (1).—Greer County (1): 10.5 km SW Mangum, 1 (MSB 294745).

DISCUSSION

Knowledge of mammal distributions in any state necessarily accrues over time. Certainly Oklahoma has lagged behind many other states that have completed a survey of their mammals. While there have been notable efforts in the past to delineate the occurrence of species in the state and their distribution across its 77 counties, collecting efforts have been more limited than in other states and fewer specimens have been preserved even though landlocked Oklahoma is one of the richer states for mammalian diversity. The evaluation of new specimen records and the updating of species distributions approximately every 5 to 10 years since Caire et al. (1989) continues to provide important background information for researchers and

state officials. An increased awareness of the importance of biodiversity and natural history information has increased the significance of specimen data and its use in understanding and predicting natural and anthropogenic impacts on the environment, including climate change. All indications are that climate change will be impacting mammal distributions significantly over the coming decades (Schloss et al. 2012). Given such rapid change, information on current species distribution is critical to make informed decisions about conservation measures and management strategies for mammal species in the state, including those listed as Tier I, II, III, or of Special Concern.

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