

OCCASIONAL PAPERS

Museum of Texas Tech University

NUMBER 181

20 October 1998

ANNOTATED CHECKLIST OF RECENT LAND MAMMALS OF OKLAHOMA

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Changes to taxonomic classification and range distributions for mammals continually occur, and this checklist is our attempt to incorporate all published changes affecting mammals from Oklahoma. Additionally, updates to Mammals of Oklahoma (Caire et al., 1990), and Stangl et al. (1992) are incorporated.

Taxa are arranged in phylogenetic sequence through genera, with species names listed alphabetically. We follow Jones et al. (1997) for this sequence and for vernacular names. Feral or introduced species names are

indicated by an asterisk. Abbreviated synonymy was taken from Hall (1981) unless updated information was available. Distributional information is based on Hall (1981), Caire et al. (1990), Dalquest et al. (1990), and Stangl et al. (1992), additional references for selected species, and personal experience. The accounts of most taxa listed include a brief statement regarding habitat.

It is intended that this checklist be used by students and as a quick reference for professional biologists.

ORDER DIDELPHIMORPHIA—OPOSSUMS

Family Didelphidae (opossums)

Didelphis virginiana virginiana (Hall, 1981),
Virginia opossum.— The only marsupial in North

America north of Mexico, the Virginia opossum occurs statewide, albeit mostly associated with mesic habitats.

ORDER INSECTIVORA—INSECTIVORES

Family Soricidae (shrews)

Sorex longirostris longirostris Bachman, 1837,
southeastern shrew.— This species is recorded in the state by a single record from LeFlore County in south-

eastern Oklahoma (Taylor and Wilkinson, 1988). Elsewhere, this species typically occurs in dense herbaceous vegetation.

Blarina carolinensis carolinensis (Sealander, 1979), southern short-tailed shrew.— Known only from

McCurtain County in the southeastern corner of the state, this small insectivore is reported elsewhere (Davis and Schmidly, 1994) to be somewhat catholic in its habitat preferences.

Blarina hylophaga hylophaga Elliot, 1899, Elliot's short-tailed shrew.— Occurs widely in grassy, weedy habitat in the southeastern two-thirds of the state; possibly excluding McCurtain County.

Cryptotis parva parva (Say, 1823), least shrew.— This grasslands shrew is found statewide, possibly excepting the westernmost part of the Panhandle.

Notiosorex crawfordi crawfordi (Coues, 1877), desert shrew.— This southwestern species has been reported from xeric grasslands in the western portion of the state, including the Panhandle; although there is one record of occurrence from a mesic ravine in the Kiamichi Mountains, Pushmataha County (Clark, 1953).

Family Talpidae (moles)

Scalopus aquaticus aereus (Bangs, 1896), eastern mole.— Occurs statewide in friable soils, excluding the westernmost Panhandle.

ORDER CHIROPTERA—BATS

Family Vespertilionidae (vespertilionid bats)

Myotis austroriparius (Rhoads, 1897) southeastern myotis.— This monotypic bat occurs only in the southeastern corner of the state.

Myotis ciliolabrum ciliolabrum (Merriam, 1886), western small-footed myotis.— Formerly considered to be *M. subulatus melanorhinus*, its systematics were revised by van Zyll de Jong, 1984. This bat is known only from the southwestern part of the state.

Myotis grisescens A.H. Howell, 1909, gray myotis.— This saxicolous species reaches its western range limit in northeastern Oklahoma. The gray myotis is monotypic.

Myotis leibii (Audubon and Bachman, 1842), eastern small-footed myotis.— Reported from McCurtain County in extreme southeastern Oklahoma. Formerly referred to as *Myotis subulatus leibii* by Hall (1981), this taxon was revised to its current form by van Zyll de Jong (1984) when he split the eastern and western small-footed myotis from *subulatus* into *leibii* and *ciliolabrum*, respectively.

Myotis lucifugus, little brown myotis.— Although recorded only in extreme eastern and southeastern Oklahoma as *M. l. lucifugus* (Le Conte, 1831), this widespread species could occur throughout the eastern half

of the state. It is known from the southern Rocky Mountains in Colorado and New Mexico (Hall, 1981) and could occur eastward to the Black Mesa in the extreme western Panhandle. This western subspecies would be *M. l. carissima* Thomas, 1904.

Myotis septentrionalis (Trouessart, 1897), northern myotis.— Formerly considered a subspecies of Keen's myotis until separated from that species by van Zyll de Jong (1985). The northern myotis is a monotypic species that occurs in the eastern quarter of the state.

Myotis sodalis Miller and G.M. Allen, 1928, Indiana or social myotis.— This eastern monotypic species is known from few records in extreme eastern Oklahoma.

Myotis velifer magnamolaris Choate and Hall, 1967, cave myotis.— A saxicolous species, the cave myotis occurs in the western half of the state, where it sometimes uses "gyp-sinks" as hibernacula.

Myotis yumanensis yumanensis (H. Allen, 1864), Yuma myotis.— This bat has been recorded only from the Black Mesa of the western Panhandle.

Lasiurus borealis (Muller, 1776), eastern red bat.— A monotypic species (Baker et al., 1988), this arboreal bat migrates through the state and females with young spend their summers there. It is to be looked for in wooded, including residential, habitats statewide.

Lasiurus cinereus cinereus (Palisot de Beauvois, 1796), hoary bat.— A migratory, tree roosting bat, the hoary bat occurs statewide.

Lasiurus seminolus (Rhoads, 1895), Seminole bat.— A tree-roosting bat of the southeastern United States, this bat has been recorded twice in Oklahoma, once each from Murray and McCurtain counties. Elsewhere, this monotypic species often utilizes Spanish moss as day roosts.

Lasionycteris noctivagans (Le Conte, 1831), silver-haired bat.— This widespread migrant is represented by few specimens from Oklahoma, but should be looked for statewide. The silver-haired bat is a monotypic species that seldom occurs in large numbers.

Pipistrellus hesperus maximus Hatfield, 1936, western pipistrelle.— A small bat of xeric habitats, the western pipistrelle is known only from southwestern counties, although it likely occurs in the Black Mesa region.

Pipistrellus subflavus subflavus (F. Cuvier, 1832), eastern pipistrelle.— This small bat occurs statewide, excluding the Panhandle.

Eptesicus fuscus fuscus (Palisot de Beauvois, 1796), big brown bat.— A large bat that occurs statewide, almost exclusively utilizing man-made structures for hibernacula. The subspecies from the Panhandle region likely is *E. f. pallidus* Young, 1908.

Nycticeius humeralis humeralis (Rafinesque, 1818), evening bat.— A species of the eastern woodlands, this bat occurs in the eastern two-thirds of the state

with a few records in southwestern counties likely from riparian habitats.

Plecotus rafinesquii macrotis Le Conte, 1831, Rafinesque's big-eared bat.— This cave-dwelling bat occurs in the woodlands of the southeastern counties.

Plecotus townsendii, Townsend's big-eared bat.— Also a cave dwelling species, this bat is known from the western third of the state as *P. t. pallescens* (Miller, 1897). *Plecotus t. ingens* (Handley, 1959) is the subspecies that occurs in extreme northeastern Oklahoma, possibly discontinuously from the western form.

Antrozous pallidus bunkeri Hibbard, 1934, pallid bat.— The pallid bat is a western ground-foraging bat of arid habitats. It occurs in the western one-third of the state.

Family Molossidae (molossid bats)

Tadarida brasiliensis, Brazilian free-tailed bat.— This normally migratory species occurs throughout much of Oklahoma as *T. b. mexicana* (Saussure, 1860); however, the subspecies in the extreme southeastern part of the state is reported by Caire et al. (1990) to be *T. b. cynocephala* (Le Conte, 1831). Often occurring in large numbers, the Brazilian free-tailed bat readily occupies structures constructed by humans.

Nyctinomops macrotis Gray, 1839, big free-tailed bat.— This southwestern monotypic species is known to be wide ranging, and although there are few records from Oklahoma, it should be looked for wherever free-tailed bats are taken.

ORDER XENARTHRA—XENARTHTRANS

Family Dasypodidae (armadillos)

Dasypus novemcinctus mexicanus Peters, 1864, nine-banded armadillo.— A Neotropical species, the ar-

madillo is common statewide excluding the northwestern counties and the Panhandle where the arid habitats and cold winters likely impede its insectivorous foraging.

ORDER LAGOMORPHA—LAGOMORPHS

Family Leporidae
(hares and rabbits)

Sylvilagus aquaticus aquaticus (Bachman, 1837), swamp rabbit.— A resident of mesic lowlands, the swamp rabbit has been reported from the eastern half of Oklahoma and some southern counties to the west. Caire et al. (1990) opined that this species' range in the state is withdrawing southeastwardly due to loss of habitat.

Sylvilagus audubonii neomexicanus Nelson, 1907, desert cottontail.— This arid land cottontail occurs in the western half of the state.

Sylvilagus floridanus, eastern cottontail.— This leporid occurs in a wide variety of grassy, brushy habitats in the western half of Oklahoma as *S. f. llanensis* Blair, 1938, whereas, *S. f. alacer* (Bangs, 1896) ranges in the eastern half of the state.

Lepus californicus melanotis Mearns, 1890, black-tailed jackrabbit.— Although Hall (1981) reported the range for this grasslands species as statewide, it appears to be absent from the densely forested southeastern counties (Caire et al., 1990).

ORDER RODENTIA—RODENTS

Family Sciuridae
(squirrels)

Tamias quadrivittatus quadrivittatus (Say, 1823), Colorado chipmunk.— A saxicolous taxon that has been recorded in Oklahoma only from the canyon lands of the Black Mesa in the extreme western Panhandle.

Tamias striatus venustus Bangs, 1896, eastern chipmunk.— This woodland species occurs primarily in the eastern one-third of the state.

Marmota monax monax (Linnaeus, 1758), woodchuck.— This largest ground squirrel in Oklahoma occurs only in the northeastern counties.

Spermophilus pilosoma marginatus V. Bailey, 1890, spotted ground squirrel.— A more solitary (than other small ground squirrels from the region) denizen of arid grasslands with sandy soils, the spotted ground squirrel occurs in the western one-half of the state, including the Panhandle.

Spermophilus tridecemlineatus, thirteen-lined ground squirrel.— *Spermophilus t. texensis* Merriam, 1898, is the subspecies of this somewhat colonial thirteen-lined ground squirrel that occurs statewide, excluding the northwestern counties, Panhandle, and southeastern quarter. However, its numbers are more sparse in

the forested eastern part of the state. *Spermophilus t. arenicola* (A.H. Howell, 1928) is the race from the northwestern counties and the Panhandle.

Spermophilus variegatus grammurus (Say, 1823), rock squirrel.— This large saxicolous ground squirrel likely occurs only in the Black Mesa region of the Panhandle (Caire et al., 1990); although Hall (1981) cited a specimen from Beaver County, the easternmost of the three Panhandle counties.

Cynomys ludovicianus ludovicianus (Ord, 1815), black-tailed prairie dog.— A robust, colonial, ground squirrel of grasslands, this species occurs in the western half of the state, including the Panhandle.

Sciurus carolinensis carolinensis Gmelin, 1788, eastern gray squirrel.— A species of the eastern deciduous forest, this squirrel occurs in woodlands of the eastern one-half of the state.

Sciurus niger rufiventer E. Geoffroy St.-Hilaire, 1803, eastern fox squirrel.— This tree squirrel occurs statewide excepting the westernmost Panhandle.

Glaucomys volans saturatus A.H. Howell, 1915, southern flying squirrel.— A nocturnal glider, that is known from the eastern one-half of the state. Although Glass and Halloran (1961) reported a pair taken from a

building in the Wichita Mountains in southwestern Oklahoma, this species past popularity in the pet trade may account for some extralimital distributions.

Family Geomyidae
(pocket gophers)

Geomys breviceps sagittalis Merriam, 1895, Baird's pocket gopher.— This fossorial species occurs in the eastern one-half of the state, excluding the north-eastern most counties (Sulentich et al., 1991).

Geomys bursarius major, Davis, 1940, plains pocket gopher.— Found in the western one-half of Oklahoma, including the Panhandle. Because of the nonvagile natural history of these fossorial herbivores, considerable morphometric, biochemical, and genetic variation occurs within the plains pocket gopher species group. Several workers have assigned investigated differences within and among populations of Baird's and plains pocket gophers (see Honeycutt and Schmidly, 1979; Bohlin and Zimmerman, 1982; and Block and Zimmerman, 1991, for example).

Cratogeomys castanops perplanus, Nelson and Goldman, 1934, yellow-faced pocket gopher.— The range of the yellow-faced pocket gopher in Oklahoma consists of only the Panhandle counties where it is limited to alluvium and other friable soils.

Family Heteromyidae
(heteromyids)

Perognathus flavescens, plains pocket mouse.— This heteromyid occurs on sandy or sand-loam soils of grasslands in the western one-half of the state. Three races (Monk and Jones, 1996) are reported there: *P. f. cockrumi* Hall, 1954, occurs in the west-central portion of the main body of the state; *P. f. copei* Rhoads, 1894, occurs in most of the Panhandle and most of the western tier of counties; and *P. f. flavescens* Merriam, 1889, is found in the northwestern portion of the main body of the state in the vicinity of Harper County. Caire et al. (1990) opined that Oklahoma may be a zone of intergradation for these races.

Perognathus flavus, silky pocket mouse.— Similar to the plains pocket mouse, but more catholic in its habitat preference, this grassland species occurs in the western one-third of the state and most of the Panhandle

as *P. f. bunkerii*, Cockrum, 1951. *Perognathus f. flavus* Baird, 1855, is reported from the Black Mesa region (Best and Skupski, 1994a), and *P. f. gilvus* Osgood, 1900, is reported from the extreme western edge of the main body of the state (Hall, 1981). The *gilvus* subspecies is considered a race of *P. merriami* by some workers (Best and Skupski, 1994b; and Davis and Schmidly, 1994).

Chaetodipus hispidus, hispid pocket mouse.— The subspecies of this grasslands species that occurs throughout most of the main body of the state is *C. h. spilotus* Merriam, 1889. It does, however, appear to be uncommon or absent in wooded regions of the northeast and southeast. *Chaetodipus h. paradoxus* Merriam, 1889, is the race that is found in the western tier of Oklahoma counties and the Panhandle.

Dipodomys elator Merriam, 1894, Texas kangaroo rat.— This species has been recorded twice in Oklahoma, once in Comanche County at the turn of the century (Bailey, 1905) and once in Cotton County (Baumgardner, 1987). Although locally abundant in its restricted range in north-central Texas, it is likely that this species does not now exist in Oklahoma. The Texas kangaroo rat is a monotypic inhabitant of mesquite grasslands.

Dipodomys ordii, Ord's kangaroo rat.— Occurs on alluvium and other sandy substrates in the western one-half of the state and the Panhandle as *D. o. richardsoni* (J.A. Allen, 1981). An extremely localized subspecies, *D. o. oklahomae* Trowbridge and Whitaker, 1940, is restricted to flood plains of the Canadian River in Cleveland and Canadian counties (Caire et al., 1990).

Family Castoridae
(beavers)

Castor canadensis, American beaver.— This semi-aquatic mammal occurs statewide. Those specimens from the northern one-half of the state are assigned to *C. c. missouriensis*, V. Bailey, 1919, and those from the southern one-half of the state are regarded as *C. c. texensis*, V. Bailey, 1905, according to Hall (1981). Although each of these regions corresponds to a river drainage system, the Arkansas and the Red, respectively, Caire et al. (1990) report that subspecific designation of beavers in Oklahoma may be or become problematical due to widespread stocking.

Family Muridae

(mice, rats, and voles)

Oryzomys palustris texensis J.A. Allen, 1894, marsh rice rat.— A denizen of mesic habitats, the marsh rice rat occurs in southeastern Oklahoma.

Reithrodontomys fulvescens, fulvous harvest mouse.— Generally inhabiting mesic grasslands or savannas, the fulvous harvest mouse occurs throughout Oklahoma except the northwestern quarter and the Panhandle. The subspecies in the southwestern portion of the state is *R. f. laceyi*, J.A. Allen, 1896, whereas the rest of Oklahoma is inhabited by *R. f. aurantius*, J.A. Allen, 1895.

Reithrodontomys humulis merriami J.A. Allen, 1895, eastern harvest mouse.— This species inhabits mesic areas of grasses and forbs in the eastern one-half of the state. It is unclear at this time if it is expanding its range westward or if recent records to the west of its former range are artifacts caused by a paucity of small mammal collection in the region.

Reithrodontomys megalotis aztecus J.A. Allen, 1895, western harvest mouse.— Occurs in the more xeric grasslands of the counties from the Panhandle and those in the northwestern corner of the main body of the state.

Reithrodontomys montanus, plains harvest mouse.— This small grasslands species has been reported to occur statewide, excepting the southeastern corner; however, some of those specimens reported in the literature to be plains harvest mice have proven to be eastern harvest mice, *R. humulis*. The range of this species may not extend as far eastward as was thought previously. The subspecies occurring throughout most of the state is *R. m. griseus* V. Bailey, 1905; however, *R. m. albescens* Cary, 1903, is reported to occur along the extreme northern edge of the western one-half of the state, including the Panhandle (Wilkins, 1986).

Peromyscus attwateri J.A. Allen, 1895, Texas mouse.— This monotypic species occurs in rocky, brushy habitats in the eastern one-half and the southwestern quarter of the state.

Peromyscus boylii rowleyi (J.A. Allen, 1893), brush mouse.— Occurs in rocky habitats associated with woody vegetation in the Black Mesa region of Cimarron County.

Peromyscus gossypinus megacephalus (Rhoads, 1894), cotton mouse.— Found in mesic woodlands or savannas of the southeastern corner of Oklahoma.

Peromyscus leucopus, white-footed mouse.— Occurs statewide in weedy, grassy, and brushy habitats. According to Hall (1981), three subspecies are found in Oklahoma, *P. l. tornillo* Mearns, 1896, in the western counties and the Panhandle, *P. l. leucopus* (Rafinesque, 1818) in the remainder of the state except the northeastern and north central parts, where *P. l. noveboracensis* (Fischer, 1829) occurs. Other workers (Baker et al., 1983; and Stangl, 1986) found two cytotypes in the state, a western form like *tornillo* and an eastern form similar to *leucopus* and *noveboracensis*, with a substantial zone of chromosomal integration between the two in the central part of the state.

Peromyscus maniculatus, deer mouse.— Occurs statewide, with the possible exception of extreme southeastern Oklahoma, in weedy, grassy habitats. Hall (1981) mapped the ranges of subspecies in Oklahoma as: *P. m. rufinus* (Merriam, 1890) in the Black Mesa region; *P. m. bairdii* (Hoy and Kennicott, 1857) in the extreme north-northeastern edge of the state; *P. m. pallescens* J.A. Allen, 1896, in Bryan County only; *P. m. ozarkarium* Black, 1935, generally in the eastern one-half of the state; and *P. m. luteus* generally in the western one-half of the state. Ranges of the first three of these subspecies just barely enter the state. See Caire et al. (1990) for discussion of intergradation between these races.

Peromyscus nasutus nasutus (J.A. Allen, 1891), northern rock mouse.— Referred to as *P. difficilis* by some workers, the rock mouse is found in rocky, brushy hillsides in the Black Mesa region. We follow Carleton (1989) by using the specific epithet, *nasutus*.

Peromyscus pectoralis laceianus V. Bailey, 1906, white-ankled mouse.— Known only from Love County in extreme south-central Oklahoma, the white-ankled mouse is to be looked for in grassy, brushy habitats associated with rocky outcroppings.

Peromyscus truei truei (Schufeldt, 1885), piñon mouse.— Found in the state only in the Black Mesa region, the piñon mouse is associated with rocky habitats of hillsides covered with piñon-juniper.

Ochrotomys nuttalli flammeus Goldman, 1941, golden mouse.— Occurring in mesic woodlands with dense understory brush, this semiarborescent species has been recorded in the extreme eastern and southeastern regions of the state.

Baiomys taylori taylori (Thomas, 1887), northern pygmy mouse.— This Neotropical grasslands species has substantially expanded its range to the north and west during historic times. Presently recorded in Oklahoma from Cotton (Stangl and Dalquest, 1986) and Harmon (Caire, 1991) counties, it is to be looked for in southern and western Oklahoma.

Onychomys leucogaster arcticeps Rhoads, 1898, northern grasshopper mouse.— A denizen of the Great Plains, this robust grasslands species is recorded from the western one-half of the state, including all of the Panhandle.

Sigmodon hispidus texianus (Audubon and Bachman, 1853), hispid cotton rat.— A species of dense, usually mesic, grasses and weeds, cotton rats occur statewide. We follow Dalquest et al. (1990) in assigning the above subspecific epithet to those cotton rats occurring in the western Panhandle.

Neotoma albigula warreni Merriam, 1908, white-throated woodrat.— This saxicolous species is found among sandstone ledges, talus, basalt flows, and boulders with piñon-juniper plant associations (Dalquest et al., 1990), and is recorded presently from the Black Mesa region in the state. Caire et al. (1990) suggest that it should be looked for in the southwestern corner of Oklahoma because of its presence in adjacent regions in Texas.

Neotoma floridana osagensis Blair, 1939, eastern woodrat.— This midden-building rodent occurs in a variety of habitats in the eastern three-quarters of the main body of the state.

Neotoma mexicana scopulorum Finley, 1953, Mexican woodrat.— This saxicolous species occurs in a

variety of rocky habitats of the Black Mesa, but to the immediate west in Union County, New Mexico, Dalquest et al. (1990) found it mostly in lava flows.

Neotoma micropus canescens J.A. Allen, 1891, southern plains woodrat.— Generally a species of grassy or brushy habitats, this woodrat will inhabit rocky outcroppings in the absence of more saxicolous congeners. It is found in the western one-fourth of the state and the Panhandle. We follow Birney (1973) in assigning all specimens from Oklahoma to *canescens*.

**Rattus norvegicus* (Berkenhout, 1769), Norway rat.— An introduced commensal of humans, this Old World species is likely to occur in association any human structure or habitation statewide. Because of the provenance of introductions and the likely continued introduction from a variety of populations, subspecific designation is problematical.

**Rattus rattus* (Linnaeus, 1758), black rat.— Similar to the Norway rat in external appearance and origin, this Old World species also occurs in association with humans. Caire et al. (1990) reported records of occurrence in Oklahoma as being generally in the southern one-half of the state; however, it could occur anywhere due to continued introduction associated with storage, transportation, use, and processing of food grains. As with *R. rattus*, subspecies designation may be moot.

**Mus musculus* Linnaeus, 1758, house mouse.— Also an Old World introduction, this commensal species occurs statewide wherever human habitation occurs or has occurred in the past. See the accounts on *Rattus* for subspecies information.

Microtus ochrogaster haydenii (Baird, 1858), prairie vole.— A widely distributed microtine of the central Great Plains, the prairie vole occurs in the northern one-half of the state. Populations extend to Caddo (Smith, 1991) and Comanche (Choate, 1989) counties in the southwest and in Beaver and Texas counties (Dalquest et al., 1990) in the Panhandle. Although we follow Choate and Williams (1978) in considering all subspecies in Oklahoma to be *haydenii*, Dalquest et al. (1990) suggests that the Panhandle race should be attributed to *M. o. taylori* Hibbard and Rinker, 1843, based on the hy-

pothesis that these populations are relicts rather than the result of recent dispersal from populations to the east.

Microtus pinetorum nemoralis V. Bailey, 1898, woodland vole.— A semifossorial species of mesic hardwood forests, this vole occurs in the eastern one-half of the state, with westward range extensions into Comanche and Caddo counties.

Ondatra zibethicus, common muskrat.— The muskrat, a semiaquatic rodent, likely occurs statewide in suitable habitats. Although there are no reports of this species in the Panhandle, records of occurrence from Lipscomb County, Texas, just to the south of Beaver County, and Union County, New Mexico, just to the west of Cimarron County are reported by Dalquest et al. (1990). According to Hall (1981), the subspecies in the majority of the state is *O. z. cinnamominus* (Hollister, 1910), and the populations occurring in the extreme northeastern counties are *O. z. zibethicus* (Linnaeus, 1766).

Family Zapodidae
(jumping mice)

Zapus hudsonius pallidus Cockrum and Baker, 1950, meadow jumping mouse.— Known only from two

specimens taken in 1938 from Tulsa County (see Caire et al., 1990), this species may be extirpated from the state. Elsewhere, it is found in mesic habitats with dense grasses and brush, often associated with woodlands.

Family Erethizontidae
(New World porcupines)

Erethizon dorsatum bruneri Swenk, 1916, common porcupine.— This large rodent usually is found associated with riparian woodlands in the western one-third of the state; however, the species also is known from Garvin and Latimer counties (Caire et al., 1990). Porcupines seldom occur in high densities and are widely reported to occur some distance from forested habitats. It should be noted that Stangl et al. (1991) assigned Black Mesa specimens to *E. d. epixanthum* Brandt, 1835, based on cranial morphometrics.

Family Myocastoridae
(myocastorids)

**Myocastor coypus bonariensis* (E. Geoffroy St.-Hilaire), nutria.— Although few state records exist for this large aquatic rodent introduced from South America, the nutria is to be looked for in aquatic habitats in southern parts of Oklahoma.

ORDER CARNIVORA—CARNIVORES

Family Canidae
(canids)

**Canis familiaris*, Linnaeus, 1758, feral dog.— These animals occur statewide. It is problematical as to whether feral dogs could persist in the wild for many generations because humans continue to add to their numbers by abandonment of unwanted individuals.

Canis latrans, coyote.— This opportunistic canid occurs statewide. *Canis l. frustror* Woodhouse, 1851, occurs in the eastern two-thirds of the state, and *C. l. latrans* Say, 1823, occurs in the western portion of the state, including the Panhandle (Hall, 1981).

Canis lupus nubilus, Say, 1823, gray wolf.— Although extirpated from the state, the gray wolf formerly

was known from the northwestern one-half to two-thirds of Oklahoma (Caire et al., 1990).

Canis rufus, red wolf.— A species formerly occurring in southeastern North America, the red wolf likely is extinct throughout its former range. It is likely that the only populations that persist are captives maintained by the Federal Government in the Southeastern United States. Red wolves formerly were found in the eastern two-thirds of the state (see Caire et al., 1990, for records of occurrence and hybridization discussion). Subspecies in Oklahoma were *C. r. gregoryi* Goldman, 1937, in the extreme eastern part of the state, and *C. r. rufus* Audubon and Bachman, 1851, to the west thereof (Hall, 1981).

Vulpes velox velox (Say, 1823), swift fox.— A denizen of the grasslands, this small fox is known only from northwestern Oklahoma, including the Panhandle.

Vulpes vulpes fulva (Desmarest, 1820), red fox.— This omnivorous furbearer occurs statewide, often in association with human habitation.

Urocyon cinereoargenteus ocythous, Bangs, 1899, gray fox.— The gray fox likely occurs throughout Oklahoma in wooded habitats and in rough, broken country.

Family Ursidae (bears)

Ursus americanus, black bear.— Largely extirpated from the state, black bears in the eastern and those formerly occurring in the southwestern parts of Oklahoma were *U. a. americanus* Pallas, 1780; whereas, those occurring in the northwest and Panhandle represent *U. a. amblyceps* Baird, 1859. Although quite uncommon, it is possible for the species to occur in dense woodlands, broken country, or along riparian corridors associated with west-to-east flowing rivers in the state (see Caire et al., 1990, for historical records of occurrence).

Ursus arctos horribilis, Baird, 1858, grizzly bear.— Although no records are known to us regarding the occurrence of grizzlies from Oklahoma, this extirpated species may have occurred in the grasslands of the western one-half of the state prior to settlement by Europeans.

Family Procyonidae (procyonids)

Bassariscus astutus flavus, Rhoads, 1894, ringtail.— Found mainly in rocky, brushy, and broken terrain, the ringtail is to be looked for in the southern and western halves of the state.

Procyon lotor hirtus, Nelson and Goldman, 1930, common raccoon.— Raccoons occur statewide, although they seldom are far from available surface water. Anecdotal evidence indicates the subspecific designation may become problematical in the future because of introductions from other regions by hunters.

Family Mustelidae (mustelids)

Mustela frenata, long-tailed weasel.— Although quite uncommon, the long-tailed weasel likely occurs throughout Oklahoma, especially in areas that have adequate surface water. According to Hall (1981), *M. f. primulina* Jackson, 1913, occurs in the eastern two thirds of the state, *M. f. texensis* Hall, 1936, is found in the southwestern corner, and *M. f. neomexicana* (Barber and Cockerell, 1898) is occurs in the western one-third of the state, including the Panhandle.

Mustela nigripes (Audubon and Bachman, 1851), black-footed ferret.— This predator on prairie dogs once occurred throughout the western one-half of the state, albeit in low numbers. An endangered, monotypic species, the black-footed ferret likely is extirpated from Oklahoma.

Mustela nivalis campestris, Jackson, 1913, least weasel.— Collected only in Cherokee County (Clark and Clark, 1988), this northern weasel is unlikely to occur in numbers within the state. Although catholic in its habitat preferences elsewhere, within its normal range it is reported to be least abundant in woodlands (Jones et al., 1983).

Mustela vison, American mink.— This large weasel occurs statewide near mesic habitats. *Mustela v. mink* Peale and Palisot de Beauvois, 1796, generally occurs in the eastern one-half of the state, and *M. v. letifera* Hollister, 1913, is found in the western one-half.

Taxidea taxus, American badger.— Generally found in the western two-thirds of Oklahoma, this grasslands species is widespread but occurs in low densities. *Taxidea t. berlandieri* Baird, 1858, is found throughout most of the range in the state, whereas *T. t. taxus* (Schreber, 1778) is reported from the northern tier of counties in Oklahoma.

Lontra canadensis lataxina, F. Cuvier, 1823, northern river otter.— This large mustelid has been mostly extirpated from the state; however, some populations persist in aquatic environments, especially in riverine systems primarily in the eastern part of the state. Subspecific designation may become problematical as reintroductions from other regions continue to occur.

Family Mephitidae
(mephitids)

Spilogale gracilis gracilis, Merriam, 1890, western spotted skunk.— Although widespread in the western United States, the western spotted skunk is known in Oklahoma only from the Black Mesa region of the Panhandle (Caire et al., 1990).

Spilogale putorius interrupta, (Rafinesque, 1820), eastern spotted skunk.— This small mustelid likely occurs statewide. The systematics and biology of this species is summarized by Kinlaw (1995).

Mephitis mephitis, striped skunk.— A ubiquitous omnivore, the striped skunk occurs statewide. The race from the eastern two-thirds of Oklahoma is *M. m. mesomelas* Lichtenstein, 1832, whereas the western parts of the state are inhabited by *M. m. varians* Gray, 1837.

Conepatus mesoleucus figginsi, F.W. Miller, 1925, common hog-nosed skunk.— Found only in the western Panhandle, the common hog-nosed skunk inhabits xeric broken terrain.

Family Felidae
(cats)

**Felis cattus* Linnaeus, 1758, feral cat.— Continually abandoned by humans, these animals are found statewide.

Puma concolor, mountain lion.— Formerly occurring statewide, this large cat has been largely extirpated from the state. It is likely, however, that occasional vagrants will be found in the eastern and the western parts of Oklahoma, especially in those areas with large expanses of rough, sparsely settled terrain which are adjacent to natural corridors such as major rivers. Hall (1981) documented three subspecies as occurring in Oklahoma: *P. c. stanleyana* (Goldman, 1838) in most of the main body of the state, *P. c. hippolestes* (Merriam, 1897) in the Panhandle, and *P. c. schorgeri* (Jackson, 1955) in the northern tier of counties, excluding the Panhandle. We follow Wozencraft (1993) in using the genus *Puma* rather than *Felis* for this species.

Lynx rufus texensis, J.A. Allen, 1894, bobcat.— This widespread cat occurs throughout the state, especially in rough, brushy or heavily wooded terrain. We follow Schmidly and Read (1986) in considering a single subspecies in Oklahoma.

ORDER ARTIODACTYLA—EVEN-TOED UNGULATES

Family Suidae
(pigs)

**Sus scrofa*, Linnaeus, 1758, feral pig.— Populations of feral pigs occur in a variety of areas in Oklahoma, especially in the southern and eastern portions. Feral hogs are known to have an extremely deleterious effect on native flora and fauna. Anecdotal evidence indicates that these populations are currently expanding due to continued intentional releases of this species for sport hunting.

Family Tayassuidae
(peccaries)

Pecari tajacu, (Reichenbach, 1835), collared peccary.— It has been reported that small herds of these

mammals occur along the Red River bordering north-central Texas. These groups of animals may be the result of reintroductions of the species into the area (Dalquest and Horner, 1984),

Family Cervidae
(cervids)

Cervus elaphus, Linnaeus, 1758, wapiti or elk.— This largest cervid from the state was extirpated then reintroduced from populations in Wyoming. Although wildlife managers have attempted introductions into eastern Oklahoma, the current population occurs in and around the Wichita Mountains Wildlife Refuge in southwestern Oklahoma. However, some individuals may occasionally wander in to the Black Mesa region from the west. If this occurred, the subspecies there would be *C.*

e. canadensis Erxleben, 1777; however, we follow Stangl et al. (1992) in withholding the trinomen *nelsoni* V. Bailey, 1935, from the introduced population at the Wichita refuge due to the provenance of that taxon.

Odocoileus hemionus, mule or black-tailed deer.— Occurring in more open or broken country of the westernmost part of the state, most individuals there would be attributed to *O. h. crooki* (Mearns, 1898), in part because of widespread introductions of this subspecies in the Texas Panhandle (Ray and Bryant, 1988). However, the northwestern corner of Oklahoma and the Panhandle are mapped by Hall (1981) to be within the range of *O. h. hemionus* (Rafinesque, 1817).

Odocoileus virginianus, white-tailed deer.— A species requiring more cover than mule deer, the white-tailed deer occurs statewide. The subspecies in the western parts of the state is *O. v. texana* (Mearns, 1898); whereas, those from the eastern parts are *O. v. macroura* (Rafinesque, 1817).

Family Antilocapridae (pronghorn)

Antilocapra americana, pronghorn.— This grasslands artiodactyl once occurred throughout the eastern one-half of Oklahoma, but despite numerous attempts to reintroduce the species (Caire et al., 1990), it now is restricted to the western Panhandle. However, some individuals may range into the western tier of counties from the Texas Panhandle. The extirpated population was assignable to *A. a. americana* (Ord, 1815); however, due to introductions, those in the Panhandle population may be intergrades with *A. a. mexicana* Merriam, 1901.

Family Bovidae (bovids)

Bos bison bison, Linnaeus, 1758, American bison.— This large grazing ruminant once occurred statewide, but was extirpated at the end of the 1800s. It now is restricted to a reintroduced population maintained at the Wichita Mountains Wildlife Refuge in southwestern Oklahoma, and in small privately-held captive herds. In addition, a herd has been reintroduced to the Tall Grass Prairie Preserve in the north-central part of the state.

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

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ISSN 0149-175X

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