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RECORDS OF MAMMALS FROM NORTHEAST AND SOUTH TEXAS

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In July, 1999, 17 species of mammals representing new county records for Anderson, Cass, Dimmit, Lamar, Leon, Morris, and Titus counties (Fig. 1) were recorded from six Texas Parks and Wildlife Management Areas (Big Lake Bottom, Chaparral, Gus Engeling, Keechi Creek, Pat Mayse, and White Oak Creek). Below, we have discussed the distributions of these taxa and have provided brief comments concerning habitats in which they were collected. All voucher materials (skins, skulls, and tissues) were deposited in the Collection of Recent Mammals in the Natural Science Research Laboratory, Museum of Texas Tech University.

Eastern Pipistrelle (*Pipistrellus subflavus*)

The eastern pipistrelle, *Pipistrellus subflavus*, commonly occurs in eastern Texas, including the Rolling Plains west to Armstrong Co. and central Texas west to Val Verde Co., with extralimital records in Lubbock, Tom Green, and Presidio counties, (Davis and Schmidly, 1994; Yancey et al., 1995). This species typically forages early in the evening near open woodlands or woodland borders and usually near water (Jones et al., 1985; Choate et al., 1994; Davis and Schmidly, 1994). It can often be distinguished by its erratic, moth-like flight (Davis and Schmidly, 1994). Despite the widespread distribution of this species, few specimens have been reported in the upper eastern portions of Texas. Two individuals were obtained at the Pat Mayse Wildlife

Management Area, Lamar Co. One individual was shot over an open field surrounded by woodlands. The second individual was shot over a small pond surrounded by dense tree cover. Specimens of *Lasiurus borealis* also were collected at both of these localities. Twelve individuals were collected from White Oak Creek Wildlife Management Area, Cass Co. These individuals were shot over a flooded timber area formed by a series of levees and dikes designed to enhance waterfowl management practices. Much of the water had been drained leaving small, isolated ponds. Specimens of *L. borealis* and *Nycticeius humeralis* also were collected at this locality. Additionally, nine individuals were collected at White Oak Creek Wildlife Management Area, Morris Co. These individuals, along with one specimen each of *N. humeralis* and *L. borealis*, were shot over an open field bordered by a stream.

Specimens examined (23).—Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 251523E 3744521N), 1 female (TTU 80642), 8 July 1999; Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 250595E 3744843N), 1 unknown sex (TTU 80653), 9 July 1999; Cass Co., White Oak Creek Wildlife Management Area (UTM 15 350905E 3678142N), 7 males, 3 females, and 2 unknown sex (TTU 80676-80678, 80683-80684, 80698, 80700-80703, 80705, 80706), 11-12 July 1999; Morris Co., White Oak Creek Wildlife Management Area (UTM 15 338873E 3679039N), 5 males and 4 females (TTU 80662-80663, 80707-80710, 80712-80714), 10-13 July 1999.

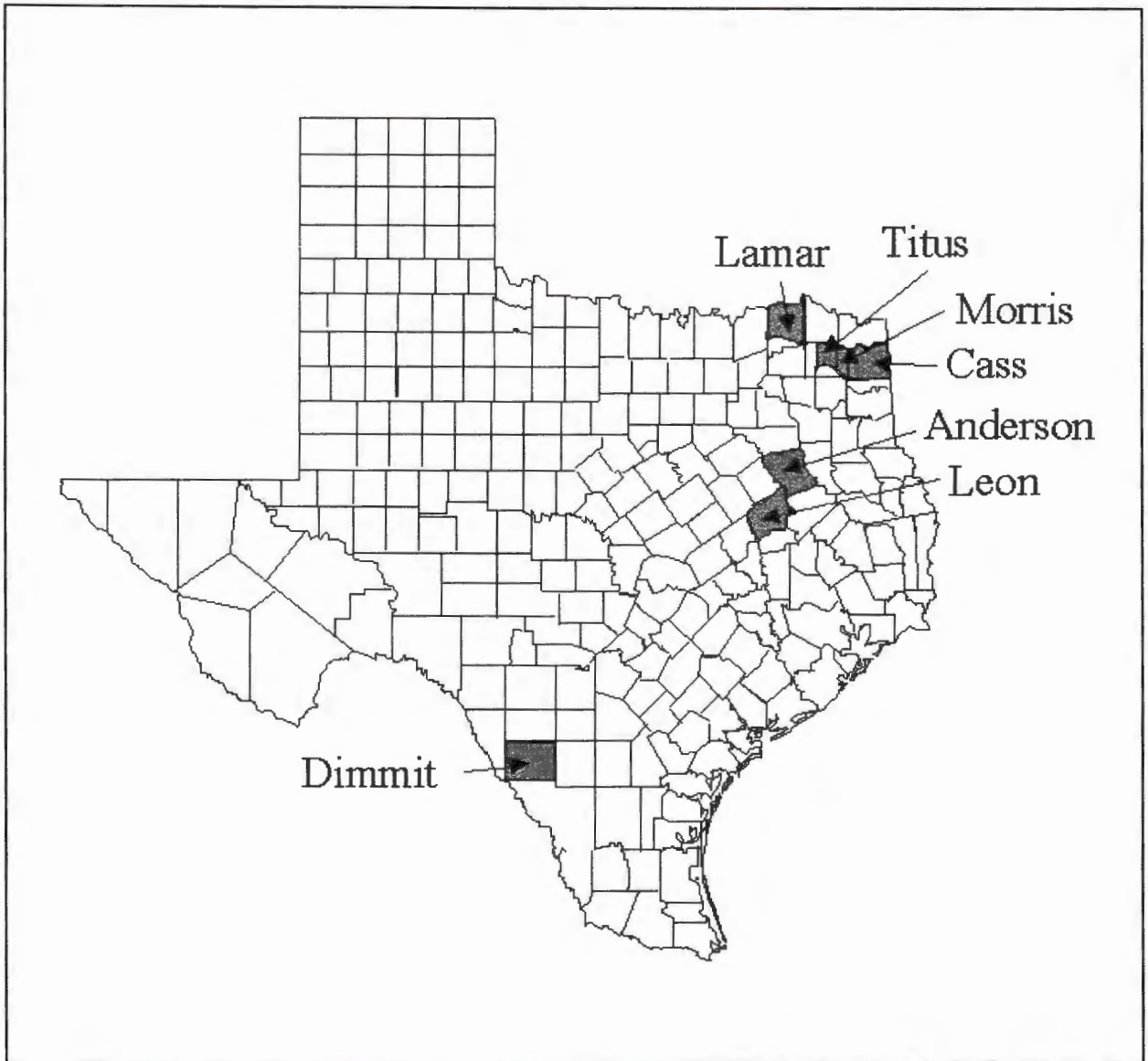


Figure 1. Location of Wildlife Management Areas (WMA) and counties sampled in this study. Pat Mayse WMA is located in Lamar Co.; White Oak Creek WMA in Cass, Morris, and Titus counties; Gus Engeling and Big Lake Bottom WMAs in Anderson Co.; Keechi Creek WMA in Leon Co.; and Chaparral WMA in Dimmit Co.

Eastern Red Bat
(*Lasiurus borealis*)

The eastern red bat occurs throughout Texas, but is most common in forested areas of the East Texas region, eastern edges of the Edwards Plateau and Cross Timbers and Prairies regions, and the northeastern edge of the Rio Grande Plains region (Davis and Schmidly, 1994). The occurrence of *L. borealis* in the East Texas region has been well documented, having been recorded

from 62 of 91 counties (Davis and Schmidly, 1994). One eastern red bat was collected at the White Oak Creek Wildlife Management Area, Morris Co. The specimen was shot at a maintained recreational campsite. We collected five eastern red bats over a small pond at the Keechi Creek Wildlife Management Area, Leon Co. Other species collected at the same time in both Leon and Morris counties were *N. humeralis* and *P. subflavus*.

Specimens examined (6).—Morris Co., White Oak Creek Wildlife Management Area (UTM 15 338873E 3679039N), 1 female (TTU 80665), 10 July 1999; Leon Co., Keechi Creek Wildlife Management Area (UTM 15 230923E 3482825N), 3 males and 2 females (TTU 80749-80753), 15 July 1999.

Northern Yellow Bat
(*Lasiurus intermedius*)

Lasiurus intermedius is uncommon in Texas and is found only in the eastern and southern parts of the state (Davis and Schmidly, 1994), the western-most limit of its range in the United States (Choate et al., 1994). Northern yellow bats typically are solitary, inhabiting forested areas near permanent water (Choate et al., 1994) where they forage over open, grassy areas (Davis and Schmidly, 1994). A single specimen was collected at the Pat Mayse Wildlife Management Area, Lamar Co. This specimen represents the northern-most record for Texas. One specimen of *P. subflavus* was collected at this locality. Additionally, we collected a single female at the Big Lake Bottom Wildlife Management Area, Anderson Co. This bat, along with nine individuals of *L. borealis*, was captured over a small, permanent pond located in the middle of a large clearing surrounded by dense bottomland forest.

Specimens examined (2).—Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 250595E 3744843N) 1 female (TTU 80654), 9 July 1999; Anderson Co., Big Lake Bottom Wildlife Management Area (UTM 15 232726E 3512777N), 1 female (TTU 80739), 10 July 1999.

Evening Bat
(*Nycticeius humeralis*)

The evening bat, *Nycticeius humeralis*, generally frequents forested areas and waterways in the eastern and southern portions of Texas (Davis and Schmidly, 1994). Additionally, recent records from Val Verde and Presidio counties indicate a presence in western Texas (Dowler et al., 1999). A single specimen was collected at the Keechi Creek Wildlife Management Area, Leon Co. This individual was shot over a medium-sized pond. Although this bat is known to

occur in nearby Anderson, Brazos, and Madison counties (Davis and Schmidly, 1994), this is the first individual of this species to be recorded in Leon County. Other species collected at this time included *L. borealis* and *P. subflavus*.

Specimens examined (1).—Leon Co., Keechi Creek Wildlife Management Area (UTM 15 230923E 3482825N), 1 male (TTU 80755), 16 July 1999.

Nine-banded Armadillo
(*Dasyopus novemcinctus*)

The nine-banded armadillo, *Dasyopus novemcinctus*, occurs throughout much of Texas (Davis and Schmidly, 1994). This species occurs in habitats ranging from wet to relatively dry, but it is found in greatest numbers in areas of dense cover where the food supply is more abundant (Schmidly, 1983). One individual was obtained from White Oak Creek Wildlife Management Area, Cass Co. This specimen was collected in a grassy ditch within a hardwood bottomland that is seasonally flooded by the Texas Parks and Wildlife Department for waterfowl management practices.

Specimens examined (1).—Cass Co., White Oak Creek Wildlife Management Area (UTM 15 350471E 3677937N), 1 male (TTU 80673), 11 July 1999.

Eastern Cottontail
(*Sylvilagus floridanus*)

The eastern cottontail, *Sylvilagus floridanus*, is found throughout the eastern three-fourths of the state and in some areas of the Trans-Pecos region of Texas. Cottontails live in brushland and other habitats that provide dense cover (Davis and Schmidly, 1994). We collected one specimen at the White Oak Creek Wildlife Management Area, Cass Co. This specimen was collected in an overgrown grass field adjacent to densely forested area.

Specimens examined (1).—Cass Co., White Oak Creek Wildlife Management Area (UTM 15 350030E 3678790N), 1 female (TTU 80686), 11 July 1999.

Black-tailed Jackrabbit*(Lepus californicus)*

The black-tailed jackrabbit, *Lepus californicus*, occurs throughout much of Texas (Davis and Schmidly, 1994). It occurs primarily in grassy scrublands and is often abundant in overgrazed grasslands (Davis and Schmidly, 1994). One individual was collected at the Chaparral Wildlife Management Area, Dimmit Co. The specimen was obtained in desert scrubland.

Specimens examined (1).—Dimmit Co., Chaparral Wildlife Management Area. (UTM 15 350030E 3678790N), 1 male (TTU 80872), 18 July 1999.

Baird's Pocket Gopher*(Geomys breviceps)*

Baird's pocket gopher, *Geomys breviceps*, occurs in the eastern portion of Texas (Davis and Schmidly, 1994). This species is fossorial, constructs conspicuous mounds, and typically is associated with sandy soils (Davis and Schmidly, 1994). Four individuals were obtained in Morris Co. at the White Oak Creek Wildlife Management Area. These individuals were collected in a grassy field near a maintained recreational campsite.

Specimens examined (4).—Morris Co., White Oak Creek Wildlife Management Area (UTM 15 338873E 3679093N), 1 male and 1 female (TTU 80672 and 80675), 11 July 1999; (UTM 15 338873E 3679093N), 1 female (TTU 80687), 12 July 1999; (UTM 15 338395E 3679008N), 1 male (TTU 80711), 14 July 1999.

American Beaver*(Castor canadensis)*

The American beaver, *Castor canadensis*, is known to inhabit most of the northeastern portion of Texas (Davis and Schmidly, 1994). We collected a single specimen from a creek on the White Oak Creek Wildlife Management Area, Morris Co. This is the only specimen reported for Morris Co.; however, records confirm the presence of this species in every surrounding county (Davis and Schmidly, 1994).

Specimens examined (1).—Morris Co., White Oak Creek Wildlife Management Area (UTM 15 338873E 3679093N), 1 female (TTU 80729), 14 July 1999.

Fulvous Harvest Mouse*(Reithrodontomys fulvescens)*

The fulvous harvest mouse, *Reithrodontomys fulvescens*, is distributed in the eastern and the southern portion of Texas. Its preferred habitats are grassy areas intermixed with shrubs or creek bottoms with tangled vines and brush (Davis and Schmidly, 1994). We obtained one *R. fulvescens* from White Oak Creek Wildlife Management Area, Cass Co. An additional specimen was collected in Morris Co. from the White Oak Creek Wildlife Management Area. Five individuals were obtained in Lamar Co., at the Pat Mayse Wildlife Management Area. All of these individuals were collected in grassy areas surrounded by woodlands. Other species collected at these localities were *Peromyscus leucopus* (Pat Mayse Wildlife Management Area), *Peromyscus gossypinus* and *Sigmodon hispidus* (White Oak Creek Wildlife Management Area).

Specimens examined (7).—Cass Co., White Oak Creek Wildlife Management Area (UTM 15 350905E 3678142N), 1 male (TTU 80674), 12 July 1999; Morris Co., White Oak Creek Wildlife Management Area (UTM 15 338395E 3679008N), 1 male (TTU 80720), 14 July 1999; Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 251958E 3744837N), 1 male (TTU 80651), 8 July 1999; (UTM 15 252105E 3744975N), 2 females (TTU 80625, 80627), 8 July 1999; (15 251428E 3745381N), 1 male (TTU 80646), 9 July 1999; (15 248772E 3744702N), 1 male (TTU 80660), 10 July 1999.

Cotton Mouse*(Peromyscus gossypinus)*

The cotton mouse, *Peromyscus gossypinus*, occurs primarily in woodlands within the eastern one-fourth of Texas (Davis and Schmidly, 1994). Individuals of this species commonly are found along water courses where stumps and fallen logs provide cover, or within woodland habitats (Davis and Schmidly, 1994). Five individuals were obtained from the White

Oak Creek Wildlife Management Area. One individual was captured in Morris Co., two individuals were collected from Cass Co., and two individuals were obtained from Titus Co. All captures occurred in hardwood bottomland habitats. *Reithrodontomys fulvescens* and *S. hispidus* also were collected at these localities.

Specimens examined (5).—Morris Co., White Oak Creek Wildlife Management Area (UTM 15 337779E 3683426N), 1 male (TTU 80671), 10 July 1999; Cass Co., White Oak Creek Wildlife Management Area (UTM 15 350030E 3678790N), 1 male and 1 female (TTU 80681 and 80682), 12 July 1999; Titus Co., White Oak Creek Wildlife Management Area (UTM 15 350030E 3678790N), 1 male and 1 female (TTU 80727 and 80728), 14 July 1999.

White-footed Mouse (*Peromyscus leucopus*)

The white-footed mouse, *Peromyscus leucopus*, has a statewide distribution and is found in a variety of habitats. Along the western border of Texas, it is restricted to creek and river bottoms. In east-central Texas, *P. leucopus* is most abundant in bottomlands. These mice often are found in hollow trees, and therefore, are adept at climbing (Davis and Schmidly, 1994). We obtained 16 specimens from Pat Mayse Wildlife Management Area, Lamar Co. This species has been documented in all surrounding counties of Lamar Co. The vegetation at the site of capture was a riparian forest. *Reithrodontomys fulvescens* also was trapped at this site.

Specimens examined (16).—Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 251811N 3744694E), 1 female (TTU 80628), 8 July 1999; (UTM 15 252105E 3744975N), 4 males (TTU 80635-80638), 8 July 1999; (UTM 15 251523E 3744521N), 1 male and 5 females (TTU 80630-80634, 80639), 8 July 1999; (UTM 15 251904N 3743351E), 2 males and 1 female (TTU 80645, 80648, and 80649), 9 July 1999; (UTM 15 251523E 3744521N), 1 male (TTU 80647), 9 July 1999; (UTM 15 251523E 3744521E), 1 male (TTU 80658), 10 July 1999.

Deer Mouse

(*Peromyscus maniculatus*)

The deer mouse, *Peromyscus maniculatus*, occurs statewide but is uncommon in coastal, eastern, and southern portions of Texas (Davis and Schmidly, 1994). Deer mice inhabit a variety of areas from mixed forests to sparsely vegetated deserts. This species typically occupies grasslands and open areas of brush that provide cover and a source of food (Davis and Schmidly, 1994). We obtained one *P. maniculatus* at the Pat Mayse Wildlife Management Area, Lamar Co. This individual was trapped in an overgrown field. The eastern woodrat (*Neotoma floridana*) also was collected at this trapping locality. This individual represents one of the eastern-most accounts of this species.

Specimens examined (1).—Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 250595E 3744843N), 1 male (TTU 80643), 9 July 1999.

Hispid Cotton Rat (*Sigmodon hispidus*)

The hispid cotton rat, *Sigmodon hispidus*, is distributed throughout Texas. The preferred habitats are grassy areas that are not subject to flooding, however in the western portions of the state it inhabits more sparsely vegetated areas occupying clumps of mesquite (Davis and Schmidly, 1994). Eighteen specimens were collected at the White Oak Creek Wildlife Management Area, Morris Co. Four specimens were obtained from the Pat Mayse Wildlife Management Area in Lamar Co. Additionally, *P. gossypinus*, *P. leucopus*, and *R. fulvescens* were collected at these localities.

Specimens examined (22).—Morris Co., White Oak Creek Wildlife Management Area (UTM 15 338395E 3679008N), 1 male and 6 females (TTU 80666-80670, 80679, 80680), 10 July 1999; 4 males and 7 females (TTU 80715-80719, 80721-80726), 14 July 1999; Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 252105E 3744975N), 1 male (TTU 80626), 8 July 1999; (UTM 15 251523E 3744521N), 2 males (TTU 80656 and 80657), 10 July 1999; (UTM 15 251523E 3744521N), 1 male (TTU 80661), 10 July 1999.

Eastern Woodrat
(*Neotoma floridana*)

The eastern woodrat, *Neotoma floridana*, is a common inhabitant of eastern and central Texas, where it is associated with a wide range of habitats. In east-central Texas, these rodents are known to occur in association with upland post oak. In central Texas they frequently live in rocky canyon walls (Davis and Schmidly, 1994). A small mammal survey conducted at the Pat Mayse Wildlife Management Area, Lamar Co., resulted in the capture of one specimen of *N. floridana*. *Peromyscus leucopus* and *P. maniculatus* were collected at this locality. One additional specimen of *N. floridana* was captured during a similar effort conducted at the Keechi Creek Wildlife Management Area, Leon Co. *Peromyscus gossypinus* also was collected at this locality.

Specimens examined (2).—Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 250595E 3743351N), 1 male (TTU 80644), 9 July 1999; Leon Co., Keechi Creek Wildlife Management Area (UTM 15 231511E 3482362N), 1 female (TTU 80744), 16 July 1999.

Woodland vole
(*Microtus pinetorum*)

The woodland vole, *Microtus pinetorum*, can be found in the eastern and central parts of Texas, although it has been recorded only in three counties (Montague, Grayson, and Bowie) along the Texas-Oklahoma border (Davis and Schmidly, 1994). This species is found in or near wooded areas where ground cover is abundant (Jones et al., 1985; Choate et al.,

1994; Davis and Schmidly, 1994). Despite the large range of distribution, this species previously has been recorded in only 16 of the approximate 100 counties in its possible range. One specimen was collected at the Pat Mayse Wildlife Management Area, Lamar Co. This specimen was collected in a dense grassy area bordering on woodlands, along with specimens of *P. leucopus* and *R. fulvescens*.

Specimens examined (1).—Lamar Co., Pat Mayse Wildlife Management Area (UTM 15 251958E 3744837N), 1 male (TTU 80652), 8 July 1999.

River Otter
(*Lontra canadensis*)

The river otter, *Lontra canadensis*, is an uncommon inhabitant of major watersheds in the eastern one-fourth of the state (Davis and Schmidly, 1994). Although the range of the river otter covers roughly half of the northern, central, and eastern portions of the state, it probably has been extirpated from the Panhandle, north-central, and southern Texas (Davis and Schmidly, 1994). One individual was obtained as a salvage specimen (road kill) from Cass Co. This specimen represents the northeastern-most record for a river otter in Texas. Additionally, this record is noteworthy due to the lack of documentation of these seldom seen mustelids. This individual of *L. canadensis* collected at the aforementioned locality was prepared as a voucher specimen.

Specimens examined (1).—Cass Co., 1 mi S, 3 mi W Marietta, 1 male (TTU 80694), 9 September 1998.

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LITERATURE CITED

- Choate, J. R., J. K. Jones, Jr., and C. Jones. 1994. Handbook of mammals of the south-central states. Louisiana State University Press, Baton Rouge. 304 pp.
- Davis, W. B., and D. J. Schmidly. 1994. The mammals of Texas. Texas Parks and Wildlife Department, Austin. 338 pp.
- Dowler, R. C., R. C. Dawkins, and T. C. Maxwell. 1999. Range extensions for the evening bat (*Nycticeius humeralis*) in west Texas. The Texas Journal of Science. 51:193-195
- Jones, J. K., Jr., D. M. Armstrong, and J. R. Choate. 1985. Guide to mammals of the plains states. University of Nebraska Press, Lincoln. 371 pp.
- Schmidly, D. J. 1983. Texas mammals east of the Balcones Fault Zone. Texas A&M University Press, College Station. 400 pp.
- Yancey, F. D., II, C. Jones, and R. Manning. 1995. The eastern pipistrelle, *Pipistrellus subflavus* (Chiroptera: Vespertilionidae), from the Big Bend region of Texas. The Texas Journal of Science 47:229-231.

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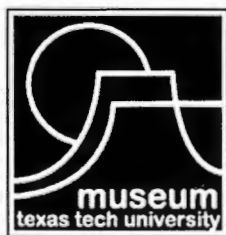
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PUBLICATIONS OF THE MUSEUM OF TEXAS TECH UNIVERSITY

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

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