

# OCCASIONAL PAPERS

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## CHECKLIST OF THE RECENT VERTEBRATE FAUNA OF THE LUBBOCK LAKE LANDMARK STATE HISTORICAL PARK: 1995-1997

*ROBERT D. BRADLEY, TED W. JOLLEY, LOTTIE L. PEPPERS,  
HEATHER R. ROBERTS, EILEEN JOHNSON, LYNN PACE, SAM ANGULO,  
DAVID RISKIND, AND ROBERT J. BAKER*

The Museum of Texas Tech University in cooperation with Texas Parks and Wildlife Department (TPWD) is conducting a faunal survey of state properties administered by TPWD. The goal of these surveys is to document the species that are present and to archive voucher specimens and vital tissues (samples of heart, liver, kidney, spleen, muscle, blood) for mammals, reptiles, and amphibians as baseline data for reference in future studies. These archived samples are viewed as resources in addressing questions critical to understanding the vertebrate fauna of Texas.

The Lubbock Lake Landmark State Historical Park is an archaeological preserve located in Yellowhouse Draw in northern Lubbock, Texas. The Park encompasses 136 ha of land, of which approximately 45 ha is represented by upland vegetation. The remaining 91 ha is a mesquite savannah that includes an Interpretative Center, active archaeological excavation area, nature trails, and a seasonal water source in the form of a small impoundment. The Park is surrounded by agricultural land, a golf course, and city recreational land, resulting in the Park being an oasis and refuge for many wildlife species that no longer occur in the urban setting of the city of Lubbock.

A survey was conducted over a two year period (1995-1997) to identify the vertebrate fauna present on Park lands. As a result of this survey, a checklist was developed as a service to the many people who utilize and enjoy the wildlife species occurring at the Lubbock Lake Landmark State Historical Park. This checklist is by no means complete, and we anticipate additional species being added as more surveys are conducted. In addition, we expect the efforts by Park personnel to return the habitat to a more native condition will have a positive impact on the vertebrate fauna and associated species composition. The mammals, birds, and reptiles contained in the checklist were identified using Davis and Schmidly (1994), National Geographic Society (1987), American Ornithologists' Union (1998), and Dixon (1987). These guides would serve as excellent field guides for the interested visitor. Additional information concerning the natural history of the Lubbock Lake Landmark State Historical Site may be found in the following publications: Choate (1998); Launchbaugh et al. (1996); and Johnson (1987).

This checklist will be available and updated on the Natural Science Research Laboratory homepage (<http://www.nsrll.ttu.edu>), and we would welcome information on the presence of any additional taxa.

### MAMMALS

The checklist for mammals follows that of Davis and Schmidly (1994). Voucher specimens are deposited in the Natural Science Research Laboratory, the Museum of Texas Tech University.

#### Didelphimorphia

*Didelphis virginiana* ..... Virginia Opossum

#### Lagomorpha

*Sylvilagus audubonii* ..... Desert Cottontail

*Sylvilagus floridanus* ..... Eastern Cottontail

*Lepus californicus* ..... Black-tailed Jackrabbit

#### Rodentia

*Cynomys ludovicianus* ..... Black-tailed Prairie Dog

*Cratogeomys castanops* ..... Yellow-faced Pocket Gopher

*Chaetodipus hispidus* ..... Hispid Pocket Mouse

*Reithrodontomys megalotis* ..... Western Harvest Mouse

*Reithrodontomys montanus* ..... Plains Harvest Mouse

*Peromyscus maniculatus* ..... Deer Mouse

*Baiomys taylori* ..... Northern Pygmy Mouse

*Onychomys leucogaster* ..... Northern Grasshopper Mouse

*Sigmodon hispidus* ..... Hispid Cotton Rat

*Mus musculus* ..... House Mouse

#### Carnivora

*Canis latrans* ..... Coyote

*Urocyon cinereoargenteus* ..... Common Gray Fox

*Mephitis mephitis* ..... Striped Skunk

### REPTILES

The checklist for reptiles follows that of Dixon (1987). Voucher specimens are deposited in the Natural Science Research Laboratory, the Museum, Texas Tech University.

#### Testudinata

*Terrapene ornata* ..... Ornate Box Turtle

#### Squamata

*Lampropeltis getula* ..... Desert Kingsnake

*Phrynosoma cornutum* ..... Texas Horned Lizard

## BIRDS

The checklist for birds follows the “The A.O.U. Check-list of North American Birds” (American Ornithologists’ Union, 1998). No voucher specimens were collected.

## Bitterns and Herons

*Ardea herodias* ..... Great Blue Heron

## Swans, Geese, and Ducks

*Branta canadensis* ..... Canada Goose

*Anas strepera* ..... Gadwall

*Anas platyrhynchos* ..... Mallard

*Anas crecca* ..... Green-winged Teal

## Kites, Hawks, Eagles, and Allies

*Circus cyaneus* ..... Northern Harrier

*Accipiter gentilis* ..... Northern Goshawk†

*Buteo swainsoni* ..... Swainson’s Hawk

*Buteo jamaicensis* ..... Red-tailed Hawk

*Buteo regalis* ..... Ferruginous Hawk

*Aquila chrysaetos* ..... Golden Eagle

## Caracaras and Falcons

*Falco sparverius* ..... American Kestrel

*Falco mexicanus* ..... Prairie Falcon

## Grouse and Turkeys

*Phasianus colchicus* ..... Ring-necked Pheasant

## New World Quail

*Colinus virginianus* ..... Northern Bobwhite\*

## Plovers

*Charadrius vociferus* ..... Killdeer

## Pigeons and Doves

*Columba livia* ..... Rock Dove

*Zenaida macroura* ..... Mourning Dove\*

## Cuckoos, Roadrunners, and Anis

*Coccyzus americanus* ..... Yellow-billed Cuckoo\*

## Barn Owls

*Speotyto cunicularia* ..... Burrowing Owl\*

## Woodpeckers and Allies

*Colaptes auratus* ..... Northern Flicker

## Tyrant Flycatchers

*Sayornis phoebe* ..... Eastern Phoebe

<i>Sayornis saya</i> .....	Say's Phoebe
<i>Tyrannus verticalis</i> .....	Western Kingbird
<i>Tyrannus forficatus</i> .....	Scissor-tailed Flycatcher

## Shrikes

<i>Lanius ludovicianus</i> .....	Loggerhead Shrike
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## Jays, Magpies, and Crows

<i>Cyanocitta cristata</i> .....	Blue Jay
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## Swallows

<i>Petrochelidon pyrrhonota</i> .....	Cliff Swallow*
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## Thrushes and Allies

<i>Catharus guttatus</i> .....	Hermit Thrush
<i>Turdus migratorius</i> .....	American Robin*

## Thrashers and Allies

<i>Mimus polyglottos</i> .....	Northern Mockingbird
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## Starlings

<i>Sturnus vulgaris</i> .....	European Starling
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## Pipits

<i>Anthus spragueii</i> .....	Sprague's Pipit†
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## Wood-Warblers

<i>Dendroica coronata</i> .....	Yellow-rumped Warbler*†
<i>Oporornis tolmiei</i> .....	MacGillivray's Warbler

## Sparrows, Buntings, and Allies

<i>Aimophila ruficeps</i> .....	Rufous-crowned Sparrow
<i>Spizella arborea</i> .....	American Tree Sparrow
<i>Spizella pusilla</i> .....	Field Sparrow
<i>Pooecetes gramineus</i> .....	Vesper Sparrow
<i>Chondestes grammacus</i> .....	Lark Sparrow*
<i>Melospiza melodia</i> .....	Song Sparrow
<i>Zonotrichia leucophrys</i> .....	White-crowned Sparrow
<i>Junco hyemalis</i> .....	Dark-eyed Junco

## Grosbeaks and Allies

<i>Cardinalis cardinalis</i> .....	Northern Cardinal
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## Blackbirds and Orioles

<i>Agelaius phoeniceus</i> .....	Red-winged Blackbird
<i>Sturnella neglecta</i> .....	Western Meadowlark*
<i>Euphagus cyanocephalus</i> .....	Brewer's Blackbird
<i>Quiscalus mexicanus</i> .....	Great-tailed Grackle
<i>Molothrus ater</i> .....	Brown-headed Cowbird
<i>Icterus bullockii</i> .....	Bullock's Oriole*

## Finches and Allies

<i>Carpodacus purpureus</i> .....	Purple Finch†
<i>Carpodacus mexicanus</i> .....	House Finch*
<i>Carduelis tristis</i> .....	American Goldfinch

## Old World Sparrows

<i>Passer domesticus</i> .....	House Sparrow*
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\* = sighting of active nest

† = very rare in the Lubbock area, additional verification is needed

## DISCUSSION

The results of this survey included 17 species of mammals, three species of reptiles, and 54 species of birds. Although the diversity of mammals and birds is substantial and reflects the previously documented diversity for the Llano Estacado, there is a serious paucity of reptilian and amphibian fauna. For example, given the seasonal water source, we expected to find spadefoot toads (*Scaphiopus bombifrons*, *S. couchii*, and *S. hammondi*), leopard frogs (*Rana blairi*), and garter snakes (*Thamnophis proximus*, and *T. marciatus*). Also missing from the terrestrial habitat were numerous species of snakes including: prairie and western diamondback rattlesnakes (*Crotalus viridis* and *C. atrox*), bull snakes (*Pituophis melanoleucus*), hog-nosed snakes (*Heterodon nasicus*) and coachwhip snakes (*Masticophis flagellum*). Several species of lizards also were absent from our survey; some of the more common species we expected to encounter included: lesser earless (*Holbrookia maculata*), greater earless

(*Cophosaurus texanus*), collared (*Crotaphytus collaris*), eastern fence lizard (*Sceloporus undulatus*), and six-lined racerunner (*Cnemidophorus sexlineatus*). No doubt several other species of amphibians and reptiles potentially should occur at the Lubbock Lake Landmark but were not encountered during our survey. It is not clear if the absence of the herptile fauna was the result of the dry period that affected the site from 1995-1997, the result of extirpation of fauna from this area, or if this is the result of the overall decline of amphibians and reptiles on a global basis. Alternatively, our low representation of amphibians and reptiles could be the result of our collecting efforts or techniques. What is clear is that these species, at present, occur in low numbers within the boundaries of the Lubbock Lake Landmark State Historical Park and attention should be given over the next few years to monitor the possibility that these species are still viable within the Park.

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*Addresses of Authors:*

**ROBERT D. BRADLEY**

*Department of Biological Sciences and  
Museum of Texas Tech University  
Lubbock, TX 79409  
e-mail: izrdb@ttacs.ttu.edu*

**TED W. JOLLEY**

*Department of Biological Sciences  
Texas Tech University  
Lubbock, TX 79409*

**LOTTIE L. PEPPERS**

*Department of Biological Sciences  
Texas Tech University  
Lubbock, TX 79409  
e-mail: z7b27@ttacs.ttu.edu*

**HEATHER R. ROBERTS**

*Department of Biological Sciences  
Texas Tech University  
Lubbock, TX 79409  
e-mail: izhrw@ttacs.ttu.edu*

**EILEEN JOHNSON**

*Museum of Texas Tech University  
Lubbock, TX 79409  
e-mail: mxegj@ttacs.ttu.edu*

**LYNN PACE**

*Texas Parks and Wildlife Department  
Rt. 2, Box 2436  
Haskell, TX 79521*

**SAM ANGULO**

*Lubbock Lake Landmark State Historical Park  
2200 N Landmark Dr.  
Lubbock, TX 79403*

**DAVID RISKIND**

*Texas Parks and Wildlife Department  
4200 Smith School  
Austin, TX 78744  
e-mail: david.riskind@access.texas.gov*

**ROBERT J. BAKER**

*Department of Biological Sciences and  
Museum of Texas Tech University  
Lubbock, TX 79409  
e-mail: bjrjb@ttacs.ttu.edu*

## **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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