

CURRICULUM VITA KENNETH T. WILKINS

Personal

Faculty office: Department of Biology, Baylor University, Waco, Texas 76798-7388
(254) 710-2911, FAX: (254) 710-2969

Administrative office: Graduate School, Baylor University, Waco, Texas 76798-7264
(254) 710-3588, FAX: (254) 710-3870

e-mail: Ken_Wilkins@Baylor.edu

Education

B.S., Biology, University of Texas at Arlington, 1974

M.S., Wildlife & Fisheries Sciences, Texas A&M University, 1977

Ph.D., Zoology, University of Florida, 1982

Professional Experience

Associate Dean of Graduate Studies and Research, Baylor Graduate School; Professor (tenured), Depts. of Biology and Geology, and in Institute of Biomedical Studies, Baylor University, June 2006-present. Courses taught: Mammalogy, Comparative Chordate Anatomy, Vertebrate Biology, Vertebrate Paleontology, Graduate Seminars in Biology, Graduate Proseminars in Interdisciplinary Scholarship.

Associate Dean of Graduate Studies and Research, Baylor Graduate School; Professor (tenured) and Interim Graduate Program Director (Biology), Depts. of Biology and Geology, and in Institute of Biomedical Studies, Baylor University, September 2003-May 2006. Courses taught: Mammalogy, Comparative Chordate Anatomy, Vertebrate Natural History, Vertebrate Paleontology, Graduate Seminars in Biology, Graduate Proseminars in Interdisciplinary Teaching and Interdisciplinary Scholarship.

Associate Dean of Graduate Studies and Research, Baylor Graduate School; Professor (tenured), Depts. of Biology and Geology, and in Institute of Biomedical Studies, Baylor University, September 2000-2003. Courses taught: Mammalogy (taught in Waco and at Chapala Ecology Station in Mexico), Comparative Chordate Anatomy, Vertebrate Natural History, Vertebrate Paleontology, Graduate Seminars in Biology, Graduate Proseminars in Interdisciplinary Teaching and Interdisciplinary Scholarship.

Associate Dean of the Graduate School; Professor (tenured), Depts. of Biology and Geology, and in Institute of Biomedical Studies, Baylor University, June 1998-2000. Courses taught: Mammalogy (taught in Waco and at Chapala Ecology Station in Mexico), Comparative Chordate Anatomy, Vertebrate Natural History, Functional Vertebrate Morphology, Vertebrate Paleontology, Biogeography, Graduate Seminars in Biology.

Professor (tenured) and Director of Graduate Studies (Biology), Depts. of Biology and Geology, and in Institute of Biomedical Studies, Baylor University, 1995-1998. Courses taught: Mammalogy (taught in Waco and at Chapala Ecology Station in Mexico), Vertebrate Natural History, Comparative Chordate Anatomy, Functional Vertebrate Morphology, Vertebrate Paleontology, Biogeography, Seminars in Biology, Introductory Biology.

Associate Professor (tenured) and Director of Graduate Studies (Biology), Depts. of Biology and Geology, and in Institute of Biomedical Studies, Baylor University, 1992-1995. Courses taught: Mammalogy (taught in Waco and at Chapala Ecology Station in Mexico), Vertebrate Natural History, Comparative Chordate Anatomy, Functional Vertebrate Morphology, Vertebrate Paleontology, Biogeography.

Associate Professor (tenured), Depts. of Biology and Geology and in Museum Studies Program, Baylor University, 1990-1992. Courses taught: Mammalogy, Vertebrate Natural History, Comparative Chordate Anatomy, Functional Vertebrate Morphology, Vertebrate Paleontology, Biogeography.

Assistant Professor, Depts. of Biology and Geology and in Museum Studies Program, Baylor University, 1983-1990. Courses taught: Mammalogy, Vertebrate Natural History, Comparative Chordate Anatomy, Functional Morphology, Biogeography, Vertebrate Paleontology, Introductory Biology, Human Anatomy.

Postdoctoral Research Associate, Florida State Museum, May 1982-July 1983.

Graduate Lecturer, Dept. of Zoology, Univ. of Florida, 1979.

Graduate Research Assistant, Florida State Museum, Univ. of Florida, 1981-1982.

Graduate Research & Teaching Assistant, Dept. of Zoology, Univ. of Florida, 1977-81.

Member of Board of Consultants, Breedlove, Inc., environmental consultants, Gainesville, FL, 1981-1982.

Graduate Research Assistant, Wildlife & Fisheries Sciences, Texas A&M Univ., 1975-1977.

Biological Field Worker, Texas Parks & Wildlife Dept., Austin, TX, Summer 1975.

Graduate Teaching Assistant, Dept. of Zoology, Univ. of Florida, 1977-1981.

Microbiology Laboratory Assistant, Arbrook, Inc., Arlington, TX, Fall 1974.

Academic Awards and Honors

Phi Beta Kappa, Univ. of Florida, 1982.

Oliver Austin Award for outstanding research in natural history. Florida State Museum, Univ. of Florida, 1982.

Sigma Xi, The Scientific Research Society, Univ. of Florida, 1981.

The Honor Society of Phi Kappa Phi, Texas A&M Univ., 1977.

Phi Sigma, Texas A&M Univ., 1977.

Alpha Chi National Honor Society, Univ. of Texas at Arlington, 1974.

Elected as Fellow of the Texas Academy of Science, 1992.

Editorial Experience

1996-1998. Chair, Editorial Committee, American Society of Mammalogists.

1997-2001. Editor for Reviews, *Journal of Mammalogy*.

1988-1992. Associate Editor, *Journal of Mammalogy*.

Regular reviewer of manuscripts for numerous journals, including *Journal of Mammalogy*, *Southwestern Naturalist*, *Texas Journal of Science*, *Occasional Papers* (The Museum, Texas Tech University), *Mammalian Species*, *Geobios*, *Ecology*, etc.

Grant and Contract Support

1979. Systematics and zoogeography of fossil and Recent pocket gophers in Florida. *National Geographic Society*, Award No. 2121, \$4,010.

1979. Support for travel for use of facilities not locally available (karyology and electrophoretic laboratories at the University of Vermont). *Southern Regional Education Board*, \$411.

1979. Support for study of systematics and zoogeography of fossil and Recent pocket gophers in Florida. *Sigma Xi Grant-in-Aid*, \$150.

1983-84. Interaction of skull shape and dental characters in determining style of chewing in rodents. Two grants from *Baylor Univ. Research Committee*, \$3,000.

1985. *Mammalian Species* account for *Tadarida brasiliensis*, the Mexican free-tailed bat. *Baylor Univ. Research Committee*, \$459.

1986. Functional morphology of chewing in pocket gophers: Final Segment. *Baylor Univ. Research Committee*, \$935.

1987. Regional inter-roost movements of Mexican free-tailed bats in Central Texas. Two grants from *Baylor Univ. Research Committee*, \$1,500. and \$2,905.

- 1989. Survey of small mammals at Clymer Meadow and Countyline Prairie, Hunt Co., Texas. *Texas Nature Conservancy*, \$858.
- 1990. Effects of fire on small mammals at Clymer Meadow, and continued inventory of small mammals at Clymer and Countyline Preserves. *Texas Nature Conservancy*, \$950.
- 1990. Anatomy of the inner ear of pocket gophers. *Baylor Univ. Research Committee*, \$1360. (KTW, J.E. Hawkins & A.E. Rushing).
- 1990. Comparative ear anatomy in above and below ground mammals. *National Institutes of Health, Academic Research Enhancement Award*, \$73,972; approved, but not funded. (KTW, J.E. Hawkins & A.E. Rushing).
- 1991. Further studies on the functional morphology of ears of pocket gophers. *Baylor Univ. Research Committee*, \$2,991. (KTW & J. E. Hawkins).
- 1991. Effects of prescribed burning on small mammals at Clymer Meadow, and continued inventory of small mammals at Clymer and Countyline Preserves. *Texas Nature Conservancy*, \$850.
- 1992-95. Comparative ear anatomy in below and above ground rodents. *National Institutes of Health, Academic Research Enhancement Award*, \$74,655; funded (KTW & J. E. Hawkins).
- 1994-96. Natural Resource Management Plan, Fairfield Lake State Park. *Texas Parks & Wildlife Dept.*, \$20,000 (W. C. Holmes & KTW).
- 1994-96. Natural Resource Management Plan, Fort Parker State Park. *Texas Parks & Wildlife Dept.*, \$12,000.
- 1995-96. Inventory of small-mammal community on Klondike Ranch, Johnson Co., Texas. *Frederick and Mildred Mayer Foundation*, \$600.
- 1995-96. Comparative population ecology of small mammals in Jalisco, Mexico, and Waco, Texas. *Baylor Univ. Research Committee*, \$1,500.
- 1996-97. Diurnal roosting behavior of mexican free-tailed bats in relation to photointensity. *Baylor Univ. Research Committee*, \$2,000.
- 1998. Page charges for article reporting on "Inventory of small-mammal community on Klondike Ranch, Johnson Co., Texas." *Frederick and Mildred Mayer Foundation*, \$600.
- 1999-2000. Inventory of terrestrial vertebrates at Hill Country State Natural Area and Pedernales Falls State Park. *Texas Parks & Wildlife Dept.*, c. \$17,000.
- 2001-2002. Baseline survey and inventory of faunas (mammalian, reptilian and amphibian) of Colorado Bend State Park. *Texas Parks & Wildlife Dept.*, \$20,085.
- 2002. Effects of red imported fire ants (*Solenopsis invicta*) on recruitment of juvenile cotton rats in a native tallgrass prairie. *Texas Nature Conservancy, Conservation by Design Research Program*, \$954. (C. Early, PI; KTW, co-PI).
- 2002-2003. Survey of vertebrates at Cobb Creek Preserve, Hill County, Texas. *Cobb Creek Preserve Foundation*, \$3,000.

Professional Society Memberships and Subscriptions

American Society of Mammalogists (Life Member)
 Sigma Xi, The Scientific Research Society
 Council of Graduate Schools
 Southwestern Association of Naturalists
 Biological Society of Washington
 American Association for the Advancement of Science
 Texas Academy of Sciences
 Texas Society of Mammalogists
Great Basin Naturalist/Western North American Naturalist

Publications--Articles and Book Chapters

D.J. Schmidly & K.T. Wilkins. 1977. Composition of small mammal populations on highway rights-of-way in east Texas. *Federal Highway Administration Project Report TX 77 197-IF*, 96 pp.

- G.D. Baumgardner, K.T. Wilkins & D.J. Schmidly. 1977. Noteworthy additions to the bat fauna of the Mexican states of Tamaulipas (San Carlos Mountains) and Queretaro. *Mammalia* 41:237-238.
- D.J. Schmidly, K.T. Wilkins, R.L. Honeycutt & B.C. Weynand. 1977. The bats of east Texas. *Texas Journal of Science* 28:127-143.
- K.T. Wilkins, W.J. Boeer, D.S. Rogers & W.S. Modi. 1979. Records for eight Texas mammals. *Florida Scientist* 42:59-60.
- K.T. Wilkins & D.J. Schmidly. 1979. Identification and distribution of three species of pocket mice (genus *Perognathus*) in Trans-Pecos Texas. *Southwestern Naturalist* 24:17-31.
- K.T. Wilkins & D.J. Schmidly. 1980. Highway mortality of vertebrates in southeastern Texas. *Texas Journal of Science* 32:343-350.
- K.T. Wilkins & D.J. Schmidly. 1981. The effects of mowing of highway rights-of-way on small mammals. *Proc. Second Natl. Symposium of Environmental Concerns in Rights-of-Way Management*, Cary Arboretum, New York Botanical Garden, p. 55-1--55-13.
- K.T. Wilkins. 1982. *Checklist of Mammals of the World*. Association of Systematic Collections. Information contributed concerns pocket gophers of the genera *Geomys*, *Orthogeomys*, and *Pappogeomys*. (pp. 378-381).
- K.T. Wilkins. 1982. Review of *Proc. of Second Natl. Symposium of Environmental Concerns in Rights-of-Way Management*, Cary Arboretum. *Restoration and Management Notes* 1:30.
- K.T. Wilkins. 1982. Highways as barriers to rodent dispersal. *Southwestern Naturalist* 27:459-460
- K.T. Wilkins & C.A. Woods. 1983. Modes of mastication in pocket gophers. *Journal of Mammalogy* 64: 636-641.
- K.T. Wilkins. 1984. Evolutionary trends in Florida Pleistocene pocket gophers (genus *Geomys*) with description of a new species. *Journal of Vertebrate Paleontology* 3:166-181.
- S.D. Webb & K.T. Wilkins. 1984. Historical biogeography of Florida Pleistocene mammals, pp. 370-383 in H.H. Genoways & M.R. Dawson (eds.), *Contributions in Quaternary Vertebrate Paleontology: A Volume in Memorial to John E. Guilday*. Special Publication No. 8, Carnegie Museum of Natural History.
- K.T. Wilkins. 1984. Pleistocene mammals from the Rock Springs local fauna, central Florida. *Brimleyana*, No. 9:69-82.
- K.T. Wilkins. 1985. Variation in the southeastern pocket gopher, *Geomys pinetis*, along the St. Johns River in Florida. *American Midland Naturalist*, 114:125-134.
- K.T. Wilkins & S.D. Webb. 1985. Zoogeography of Recent and fossil pocket gophers. *National Geographic Society Research Reports*, 1979:853-869.
- K.T. Wilkins. 1985. Pocket gophers of the genus *Thomomys* (Rodentia: Geomyidae) from the Pleistocene of Florida. *Proceedings of the Biological Society of Washington*, 98:761-767.
- K.T. Wilkins. 1986. *Reithrodontomys montanus*. *Mammalian Species*, account no. 257:1-5
- J.W. Hermanson & K.T. Wilkins. 1986. Pre-weaning mortality in a Florida maternity roost of *Myotis austroriparius* and *Tadarida brasiliensis*. *Journal of Mammalogy*, 67:751-754.
- K.T. Wilkins. 1987. *Lasiurus seminolus*. *Mammalian Species*, 280:1-5.
- K.T. Wilkins. 1987. A zoogeographic analysis of variation in Recent pocket gophers (Geomyidae) in Florida. *Bulletin of the Florida State Museum*, 30:1-28.
- K.T. Wilkins. 1988. Prediction of direction of chewing from cranial and dental characters in *Thomomys* pocket gophers. *Journal of Mammalogy*, 69:46-56.
- L.A. Pfrimmer Hensley & K.T. Wilkins. 1988. *Leptonycteris nivalis*. *Mammalian Species*, 307:1-4.
- K.T. Wilkins. 1989. Burrowing vertebrates and their role in archeological site decay. Pp. 195-217 in *Interdisciplinary Workshop on the Physical-Chemical-Biological Processes Affecting Archeological Sites* (C. Mathewson, ed.), Contract Report EL-89-1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, Mississippi.
- K.T. Wilkins. 1989. *Tadarida brasiliensis*. *Mammalian Species*, 331:1-10.
- K.T. Wilkins. 1990. Range extension and county records for two species of rodents in Texas. *Texas Journal of Science*, 42:199-200.

- K. T. Wilkins & C. D. Swearingen. 1990. Factors affecting historical distribution and modern geographic variation in the south Texas pocket gopher, *Geomys personatus*. *American Midland Naturalist*, 124:57-72.
- R. K. Frazee & K.T. Wilkins. 1990. Patterns of use of man-made roosts by *Tadarida brasiliensis mexicana* in Texas. *Southwestern Naturalist*, 35:261-267.
- K.T. Wilkins. 1991. Distributional records and ecological notes for two species of rodents in Texas. *Texas Journal of Science*, 43:337-339.
- K.T. Wilkins. 1992. Mammalian paleofaunas of Central Texas from the late Wisconsinan glacial period to the latest Holocene. *Texas Journal of Science*, 44:263-281.
- K.T. Wilkins & L.L. Cunningham. 1993. Relationship of cranial and dental features to direction of mastication in tuco-tucos (Rodentia: *Ctenomys*). *Journal of Mammalogy*, 74:383-390.
- D.J. Schmidly, K.T. Wilkins & J. N. Derr. 1993. Biogeography. Pp. 319-356 in *Biology of the Heteromyidae* (H. H. Genoways and J. H. Brown, eds.). American Society of Mammalogists, Special Publ. 10:1-719.
- K.T. Wilkins. 1995. The rodent community and associated vegetation in a tallgrass blackland prairie in Texas. *Texas Journal of Science*, 47(4):243-262.
- H.R. Roberts, K.T. Wilkins, J. Flores & A. Thompson-Goroze. 1997. Burrowing ecology of pocket gophers (Rodentia: Geomyidae) in Jalisco, Mexico. *The Southwestern Naturalist*, 42(3):323-327.
- M.F. Hanchey & K.T. Wilkins. 1998. Habitat associations of the small-mammal community in the Grand Prairie of north-central Texas. *Texas Journal of Science*, 50(2):107-122.
- K.T. Wilkins, J.C. Roberts, C.S. Roorda & J.E. Hawkins, Jr. 1999. Morphometrics and functional morphology of the middle ears of extant pocket gophers (Rodentia: Geomyidae). *Journal of Mammalogy*, 80(1):180-198.
- K.T. Wilkins. 2000. Book review: *The Smithsonian Book of North American Mammals*, by D.E. Wilson and S. Ruff (eds.). *Journal of Mammalogy*, 81(2):621-622.
- K.T. Wilkins & D.R. Broussard. 2000. Small mammals of the Post Oak Savannah in east-central Texas. *Texas Journal of Science*, 52(3):201-212.
- K.T. Wilkins. 2003. Book review: *Texas Natural History: A Century of Change*, by D.J. Schmidly. Texas Tech University Press. *Journal of Mammalogy* 84(1):329-331.
- M.P. Sgro & K.T. Wilkins. 2003. Roosting behavior of the Mexican free-tailed bat (*Tadarida brasiliensis*) in a highway overpass. *Western North American Naturalist*, 63(3):366-373.
- J.A. Scales & K.T. Wilkins. 2003. Habitat associations and diversity of the rodent community in the Edwards Plateau of Central Texas. *Texas Journal of Science*, 55(3):201-214.
- J.G. Sammon & K.T. Wilkins. 2005. Effects of an invasive grass (*Bothriochloa ischaemum*) on a grassland rodent community. *Texas Journal of Science*, 57(4):371-382.

In Press and Submitted

- K.T. Wilkins & Heather Welty Roberts. *In press*. Comparative analysis of burrow systems of seven species of pocket gophers (Rodentia: Geomyidae). *The Southwestern Naturalist*, Spring 2007.
- J.A. Scales & K.T. Wilkins. Urban roost usage by the Mexican free-tailed bat, *Tadarida brasiliensis*. Submitted to *Western North American Naturalist*, September 2005.
- J.C. Roberts & K.T. Wilkins. Implications of fossorial living: a description of sound regimes associated with pocket-gopher burrow systems. Submitted to *The Southwestern Naturalist*, February 1999.

Publications--Books

- K.T. Wilkins. 1991. *Study Guide* to accompany *Life: An Introduction to Biology*, 3rd ed., by Beck, Liem, and Simpson, HarperCollins Publishers, 559 pp.
- J. Templin & K.T. Wilkins. 1991. *Instructor's Manual* for introductory biology textbook *Life: The Science of Biology*, 3rd ed., by Beck, Liem and Simpson, HarperCollins Publishers, 263 pp.
- K. T. Wilkins (co-editor with J.W. Fox and C.B. Smith). 1992. *Proboscidean and Paleoindian Interactions*. Baylor University Press, Waco, Texas, 233 pp.

Research Interests and Studies in Progress

Roosting ecology of Mexican free-tailed bats in urban settings.

Effects of invasive species (King Ranch bluestem, red imported fire ants) on demographics of small mammals

Ecology of small mammals in native habitats in Texas.

Morphological adaptations for hearing in above- and below-ground small mammals.

Direction of Undergraduate Student Thesis Research (Honors Program)

Larry Cunningham. Relationship of Cranial and Dental Features to Mastication in *Ctenomys*, a Genus of Subterranean Rodent. 1990-1991.

Matt Hanchey. Habitat relations of the small-mammal community in the Texas Hill Country (Klondike Ranch, Johnson County). 1995-97.

Sushruti Boorla. The effects of two bone morphogenetic proteins on the developing skeleton. 1998-99.

David Brandon. The relationship between the population density of the plains pocket gopher, *Geomys bursarius*, and plant biomass. 1998-2000.

Direction of Graduate Student Thesis/Dissertation Research

Chris Swearingen. Effects of coastal processes and sealevel changes on historical distribution and variation of pocket gophers (*Geomys personatus*) on the Gulf Coastal Plain. M.S.-Biology, 1988.

Russ Frazee. Inter-roost movement of the Mexican free-tailed bat in Central Texas. M.S.-Biology, 1989.

Craig Roorda. Morphology of middle- and inner-ear structures in subterranean rodents. M.S.-Biology, December 1991.

Jeff Roberts. The ecological morphology of hearing in pocket gophers (Rodentia: Geomyidae). M.S.-Biology, May 1995.

Heather Welty. Burrow system analysis of pocket gophers (Rodentia: Geomyidae) in Texas and Jalisco, Mexico. M.S.-Biology, May 1995.

David Broussard. The relationships between population demographics of *Geomys bursarius* and the variability of its food base. M.S.-Biology, May 1996.

Mario Sgro. Roosting patterns of the Mexican free-tailed bat (*Tadarida brasiliensis*) in a man-made roost. M.S.-Environmental Biology, May 1997.

Jeff Sammon. The effects of exotic King Ranch bluestem (*Bothriochloa ischaemum*) on the rodent community of the Edwards Plateau. M.S.-Biology, December 2000.

Jeff Scales. Roost fidelity of the Mexican free-tailed bat (*Tadarida brasiliensis*) in an urban setting. M.S.-Biology, M.S.-Biology, December 2002.

Amy Wilhelm. Elephant enrichment: an analysis of foraging behavior in captive African elephants. M.S.-Biology, May 2004.

Cathy Early. Response of small mammals in native tallgrass prairie to an invasive species, red imported fire ants (*Solenopsis invicta*). Ph.D.-Biology, May 2005.

Anne Merchant. To be arranged. Began master's program, Fall 2005.

Jeff Mink. To be arranged. Began Ph.D. program, Fall 2005.

Tommy Pettit. To be arranged. Began Ph.D. program, Fall 2005.