

Monte L. Thies
Professor of Biology
Department of Biological Sciences
College of Arts & Sciences

Degrees Earned

Ph.D. in Zoology, May 1993, from Oklahoma State University, Stillwater. Dissertation title: "Chromosomal aberrancy and organochlorine pesticide bioaccumulation in the Mexican free-tailed bat: A comparison between Oklahoma and New Mexico populations". Research included body burden and cytogenetic effects of organochlorine pesticide contamination in the Mexican free-tailed bat, *Tadarida brasiliensis*, and demographic and genetic biomonitoring of small mammal populations exposed to environmental contaminants.

Masters of Science in Biology, December 1987, from the University of Central Oklahoma, Edmond. Thesis title: "Spatial distribution of *Neotoma micropus* in southwestern Oklahoma". Research focused on ecology, activity patterns and habitat preferences of a population of the southern plains woodrat.

Bachelor of Science in Biology, December 1985, from the University of Central Oklahoma, Edmond, with specialization in field biology.

Professional Licensure and Certifications

None

Peer-Review Publications and Artistic Performances/Exhibitions

Articles

Kraig, S. E., S. M. Roels, and M. L. Thies. In review. Effectiveness of chemical repellents in deterring red imported fire ants (*Solenopsis invicta*) from Sherman live traps. *Southwestern Naturalist*.

Bennett, B. S., and M. L. Thies. 2007. Organochlorine Pesticide Residues in Guano of Brazilian Free-tailed Bats, *Tadarida brasiliensis* Saint-Hilaire, from East Texas. *Bull. Environ. Contam. Toxicol.* 78:191-194.

Thies, M. L. 2003. Use of bat carcasses as nesting material by Rock Dove. *Bull. Texas Ornith. Soc.* 36(2):12-13.

McHugh, C. P., M. L. Thies, P. C. Melby, L. D. Yantis Jr., R. P. Raymond, M. D. Villegas, and S. F. Kerr. 2003. Short report: a disseminated infection of *Leishmania mexicana* in an eastern woodrat, *Neotoma floridana*, collected in Texas. *Am. J. Trop. Med. Hyg.* 69:470-472.

Dunlap, B. G., and M. L. Thies. 2002. *Giardia* in beaver (*Castor canadensis*) and nutria (*Myocastor coypus*) from east Texas. *J. Parasit.* 88:1254-1258.

Lutterschmidt, W. I., and M. L. Thies. 1999. Geographic distribution of *Syrrophus cystignathoides* (Rio Grande chirping frog). *Herpetol. Rev.* 30:51.

Thies, M. L., and K. M. Thies. 1997. Organochlorine residues in bats from Eckert James River Cave, Texas. *Bull. Environ. Contam. Toxicol.* 58:673-680.

Ostrand, K. G., M. L. Thies, D. D. Hall, and M. Carpenter. 1996. Gar ichthyotoxin: Its effects on natural predators and the toxin's evolutionary function. *Southwestern Nat.* 41:375-377.

- Thies, K., M. L. Thies, and W. Caire. 1996. House construction by the southern plains woodrat (*Neotoma micropus*) in southwestern Oklahoma. *Southwestern Nat.* 41:116-122.
- Thies, M. L., K. Thies, and K. McBee. 1996. Organochlorine pesticide accumulation and genotoxicity in Mexican free-tailed bats from Oklahoma and New Mexico. *Arch. Environ. Contam. Toxicol.* 30:178-187.
- Thies, M. L., K. Thies, and K. McBee. 1994. Cross-placental transfer of organochlorine pesticides in the Mexican free-tailed bat. *Arch. Environ. Contam. Toxicol.* 27:239-242.
- Thies, M. L. 1994. A new record for *Plecotus rafinesquii* (Chiroptera: Vespertilionidae) in east Texas. *Texas J. Sci.* 46:368-369.
- Thies, M. L., and D. Gregory. 1994. Residues of lead, cadmium, and arsenic in livers of Mexican free-tailed bats. *Bull. Environ. Contam. Toxicol.* 52:641-648.
- Thies, M. L., T. L. Payne, and W. Caire. 1993. The eastern harvest mouse, *Reithrodontomys humulis*, in northcentral Oklahoma. *Proc. Okla. Acad. Sci.* 73:79-80.
- Caire, W., T. H. Harrison, S. Stevens, R. Grantham, M. L. Thies, and K. Thies. 1993. Notes of the prairie mole cricket, *Gryllotalpa major*, in northeastern Oklahoma. *Proc. Okla. Acad. Sci.* 73:73-75.
- Thies, M. L., and W. Caire. 1991. Nearest-neighbor analysis of the spatial distribution of houses of *Neotoma micropus* in southwestern Oklahoma. *Southwestern Nat.*, 36:233-237.
- Thies, M. L., and W. Caire. 1990. Association of *Neotoma micropus* houses with various plant species in southwestern Oklahoma. *Southwestern Nat.*, 35:80-82.
- Caire, W., and M. L. Thies. 1988. Notes on the occurrence of morphological and color aberrations in bats from Oklahoma, Missouri, and Mexico. *Proc. Okla. Acad. Sci.*, 68:75-76.
- Caire, W., and M. L. Thies. 1987. The Seminole bat, *Lasiurus seminolus* (Chiroptera: Vespertilionidae), from central Oklahoma. *Southwestern Nat.*, 32:387.

Books

- Glass, B., and M. L. Thies. 1997. A key to the skulls of North American mammals, 3rd edition. Self published by the author (M. L. Thies), Sam Houston State University, 99pp.

Research Monographs and Technical Reports

- Mammals of Fort Wolters, Parker and Palo Pinto Counties, Texas. Texas Army National Guard, 11 August 2004.
- Mammals of Camp Swift, Bastrop County, Texas. Texas Army National Guard, 10 August 2004.
- Internal audit of the Center for Biological Field Studies. SHSU Office of Internal Audit, 12 November 2002.
- 1995 Land Condition-Trend Analysis data: Camp Navajo, Arizona. Arizona Army National Guard, 1 June 1996.
- Threatened and Endangered species of Camp Navajo, Arizona. US Department of Fish and Wildlife, Albuquerque, 1 February 1996.
- Floral and Faunal inventories of Camp Navajo, Arizona. Arizona Army National Guard, 1 February 1996.
- Threatened and Endangered species of Camp Navajo, Arizona. Arizona Army National Guard, 1 February 1996.
- Vertebrate inventory and collections from Camp Navajo, Arizona. Arizona Game and Fish Department, Phoenix, 1 February 1996.
- Floral collections from Camp Navajo, Arizona. Arizona Department of Agriculture, Phoenix, 1 February 1996.

Terrestrial vertebrate surveys of the Lake Livingston State Park, Polk Co., Texas. Texas Parks and Wildlife Department, 1 December 1995.

Funded External Grants

- Thies, M. L. 2004-. Continuation of the Joint Admissions Medical Program for Sam Houston State University. Texas State Legislature, \$15,000 annually through August 2008.
- Thies, M. L. with Co-PIs J. Cook, T. Cook, D. Neudorf, W. Lutterschmidt, J. Williams, T. Brummel, and A. Gaillard. 2004. Disease vector studies along the US-Mexico border and their potential threat to Homeland Security. Federal Appropriation from the Department of Homeland Security to the Texas State University System, \$1,000,000 - \$252,863 to SHSU for one year.
- Thies, M. L. 2004. Continuation of the Joint Admissions Medical Program for Sam Houston State University. Texas State Legislature, \$15,000.
- Thies, M. L. 2002. Development of the Joint Admissions Medical Program for Sam Houston State University. Texas State Legislature, \$64,800.
- Thies, M. L. 2002. Mammal surveys of Camp Swift for the Texas Army National Guard. Texas Army National Guard, \$16,800.
- Thies, M. L. 2002. Mammal surveys of Fort Wolters for the Texas Army National Guard. Texas Army National Guard, \$14,400.
- Thies, M. L. 2002. Supplemental equipment grant: Mammal surveys of Camp Swift for the Texas Army National Guard. Texas Army National Guard, \$2,010.
- Thies, M. L. 2001. Acquired permanent transfer of the Center for Biological Field Studies the SHSU Department of Biological Sciences from Texas Parks and Wildlife. Estimated property value is in excess of \$1,000,000.
- Williams, J. K., M. L. Thies, and C. Hallum. 2001. Environmental survey and risk assessment on the introduction of California Condor and Aplomado Falcon near Holloman Air Force Base, New Mexico. U.S. Army Corp of Engineers, \$266,800.
- Thies, M. L., and W. I. Lutterschmidt. 2000. Renovation and completion of the SHSU Vertebrate Museum (LDB Room 113). SHSU HEAF Allocation Funds, \$5,600.
- Thies, M. L. 2000. Characterization of microhabitat and roost site preferences of Mexican free-tailed bats in East Texas. Faculty Research Enhancement Program, Sam Houston State University, \$5,000.
- Thies, M. L. 1999. Reservoir hosts for hantavirus: a sero- and eco-epidemiological survey of Texas rodents. Faculty Research Enhancement Program, Sam Houston State University, \$5000 (award declined).
- Thies, M. L. 1999. Taxonomic, pesticide exposure and genetic studies of Mexican free-tailed bats (*Tadarida brasiliensis*) in Texas. Faculty Research Enhancement Program, Sam Houston State University, \$5,000 (award accepted).
- Thies, M. 1997. Reassigned time for work on TRIES projects, Texas Regional Institute for Environmental Studies, Sam Houston State University, Huntsville, Texas, January-May 1997, \$10,200.
- Thies, M. L. 1996. A key to the skulls of North American mammals: 3rd edition. Faculty Enhancement Program, Sam Houston State University, \$5000.
- Thies, M. L. 1996. Reassigned time for work on TRIES projects, Texas Regional Institute for Environmental Studies, Sam Houston State University, Huntsville, Texas, January-December 1996, \$24,400.

- Thies, M. L. 1995. Reassigned time for work on TRIES projects, Texas Regional Institute for Environmental Studies, Sam Houston State University, Huntsville, Texas, January-December 1995, \$22,250.
- Thies, M. L. 1994. Support for comprehensive floral and vertebrate faunal surveys of Dixie Bomb Target and Escondido Ranch, Texas. Texas Regional Institute for Environmental Studies, Sam Houston State University, Huntsville, Texas, \$35,557.
- Thies, M. L. 1994. Support for comprehensive floral and faunal surveys of Camp Navajo, Arizona. Texas Regional Institute for Environmental Studies, Sam Houston State University, Huntsville, Texas, \$228,181.
- Thies, M. L. 1994. Terrestrial vertebrate surveys of Lake Livingston State Park, Polk Co., Texas. Texas Parks and Wildlife Department, \$10,000.
- Thies, M. L. 1994. Mammals of the Roy E. Larsen Sandyland Sanctuary, Hardin Co., Texas. The Nature Conservancy of Texas, \$1,500.
- Pinney, R., T. Chasteen, M. L. Thies, and J. C. Turner. 1994. Evaluation of the Microtox Toxicity Test System. Microbics Corporation, \$6,435.
- Thies, M. L. 1993. A survey of organochlorine pesticide contamination in the bats of Eckerd James River Cave, Texas. Faculty Research Enhancement Program, Sam Houston State University, \$7,499.
- Thies, M. L. 1992. Cross-placental transfer of organochlorine pesticides in Mexican free-tailed bats. American Museum of Natural History Theodore Roosevelt Memorial Fund, \$900.
- Thies, M. L. 1991. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations. Sigma Xi Grants-in-Aid of Research, \$400.
- Thies, M. L. 1990. Demographic and cytogenetic examination of rodents from a hazardous waste site. American Society of Mammalogists Grants-in-Aid of Research, \$500.

Peer-Review Presentations/Posters

- Cureton, J., P. Lewis, and M. L. Thies. A methodology for removing fossils from the Koanaka Hills deposit. Society of vertebrate Paleontologists Annual Meetings, Austin, Texas, 18 October 2007.
- Thies, M. L., and P. Lewis. A description of new Pleistocene bat specimens from southern Africa. Society of vertebrate Paleontologists Annual Meetings, Austin, Texas, 18 October 2007.
- Kennedy, A. M., P. J. Lewis, and M. L. Thies. The role of rodents in reconstructing the middle Pleistocene environment of Ngamiland, Botswana. Southwestern Association of Naturalists Annual Meetings, Tarleton State University, Stephenville, 21 April 2007.
- Sculley, J. A., A. M. Kennedy, P. J. Lewis, M. L. Thies, and B. Williams. A preliminary analysis of fossil shrews from northwestern, Botswana. Southwestern Association of Naturalists Annual Meetings, Tarleton State University, Stephenville, 21 April 2007.
- Kennedy, A. M., P. J. Lewis, and M. L. Thies. The role of rodents in reconstructing the middle Pleistocene environment of Ngamiland, Botswana. Southwestern Association of Naturalists Annual Meetings, Tarleton State University, Stephenville, 20 April 2007.
- Sculley, J. A., A. M. Kennedy, P. J. Lewis, M. L. Thies, and B. Williams. A preliminary analysis of fossil shrews from northwestern, Botswana. Texas Society of Mammalogists Annual Meetings, Junction, 16 February 2007.
- Nunez, B. L., M. L. Thies, and R. A. Faris. Application of three assessment tools for West Nile Virus detection and surveillance in east Texas. Southwestern Association of Naturalists Annual Meetings, Universidad de Colima, Colima, Mexico, 15 April 2006.
- Roels, S., and M. L. Thies. Repelling fire ants from Sherman trap bait and captures.

- Southwestern Association of Naturalists Annual Meetings, Universidad de Colima, Colima, Mexico, 15 April 2006.
- Roels, S., and M. L. Thies. Repelling fire ants from Sherman trap bait and captures. Sigma Xi Undergraduate Student Research Conference, Seattle, Washington, 2005.
- Roels, S., and M. L. Thies. Repelling fire ants from Sherman trap bait and captures. 2nd Annual REU Poster Session, Sam Houston State University, Huntsville, TX, 21 July 2005.
- Debelica, A., and M. L. Thies. A key to hair of Texas mammals. American Society of Mammalogists Annual Meetings, Springfield, Missouri, 15-17 June 2005.
- Kraig, S. E., and M. L. Thies. Effectiveness of various chemical repellents in deterring red imported fire ants (*Solenopsis invicta*) from Sherman live animal traps. American Society of Mammalogists Annual Meetings, Springfield, Missouri, 15-17 June 2005.
- Debelica, A., and M. L. Thies. A key to hair of Texas mammals. Southwestern Association of Naturalists Annual Meetings, Sam Houston State University, Huntsville, Texas, 14-16 April 2005.
- Kraig, S. E., and M. L. Thies. Effectiveness of various chemical repellents in deterring red imported fire ants (*Solenopsis invicta*) from Sherman live animal traps. Southwestern Association of Naturalists Annual Meetings, Sam Houston State University, Huntsville, Texas, 14-16 April 2005.
- Kraig, S., and M. L. Thies. Effectiveness of various chemical repellents in deterring Red Imported Fire Ants (*Solenopsis invicta*) from Sherman live animal traps. 1st Annual REU Poster Session, Sam Houston State University, Huntsville, TX, 22 July 2004.
- Thies, M. L. Mammals of Camp Swift and Fort Wolters. Texas Army National Guard Facilities. 2nd Annual Texas Army National Guard Research Conference, San Antonio, 15 May 2004.
- Thies, M. L. Mammals of Camp Swift and Fort Wolters. Texas Army National Guard Facilities. Southwestern Association of Naturalists Annual Meeting, San Antonio, 15-17 April 2004.
- Thies, M. L. Mammals of Camp Swift and Fort Wolters. Texas Army National Guard Facilities. 1st Annual Texas Army National Guard Research Conference, Austin, 15-16 August 2003.
- Wier, J., B. L. Sailer, and M. L. Thies. Seasonal changes in spermatogenesis in the Brazilian free-tailed bat. American Society of Mammalogists Annual Meetings, Texas Tech University, Lubbock, June 21-25, 2003.
- McHugh, C. P., M. L. Thies, P. C. Melby, L. D. Yantis Jr., R. P. Raymond, M. D. Villegas, and S. F. Kerr. A disseminated infection of *Leishmania mexicana* in an eastern woodrat, *Neotoma floridana*, collected in Texas. American Society of Mammalogists Annual Meetings, Texas Tech University, Lubbock, June 21-25, 2003.
- Wier, J., B. L. Sailer, and M. L. Thies. Seasonal changes in spermatogenesis in the Brazilian free-tailed bat. Southwestern Association of Naturalists Annual Meetings, University of Oklahoma, Norman, 17-19 April 2003.
- McHugh, C. P., M. L. Thies, P. C. Melby, L. D. Yantis Jr., R. P. Raymond, M. D. Villegas, and S. F. Kerr. A disseminated infection of *Leishmania mexicana* in an eastern woodrat, *Neotoma floridana*, collected in Texas. Southwestern Association of Naturalists Annual Meetings, University of Oklahoma, Norman, 17-19 April 2003.
- Wier, J., B. L. Sailer, and M. L. Thies. Seasonal changes in spermatogenesis in the Brazilian free-tailed bat. Texas Academy of Science, Stephen F. Austin State University, Nacogdoches, 1 March 2003.
- Wier, J., B. L. Sailer, and M. L. Thies. Seasonal changes in spermatogenesis in the Brazilian free-tailed bat. American Society of Mammalogists Annual Meetings, McNeese State University, Lake Charles, LA, June 15-19, 2002.
- Wier, J., B. L. Sailer, and M. L. Thies. Seasonal changes in spermatogenesis in the Brazilian free-

- tailed bat. Southwestern Association of Naturalists Annual Meetings, Universidad Autónoma del Estados de Morelos, Cuernavaca, Morelos, Mexico, April 25-27, 2002.
- Story, J., M. L. Thies, and J. K. Williams. Habitat surveys to determine nesting probability of Aplomado Falcons on Holloman Air Force Base. Southwestern Association of Naturalists Annual Meetings, Universidad Autónoma del Estados de Morelos, Cuernavaca, Morelos, Mexico, April 25-27, 2002.
- Coleman, O. C., and M. L. Thies. A genetic comparison between two subspecies of Brazilian free-tailed bats (*Tadarida brasiliensis*). Southwestern Association of Naturalists Annual meetings, Fort Hays State University, Hays, Kansas, 20 April 2001.
- Coleman, O. C., B. Bennett, and M. L. Thies. Morphological and mitochondrial variation between two subspecies of Mexican free-tailed bats (*Tadarida brasiliensis*). Southwestern Association of Naturalists Annual meetings, University of North Texas, Denton, 21 April 2000.
- Armstrong, W., B. Sailer, and M. L. Thies. Pesticide accumulation and its potential for genetic effects in Mexican free-tailed bats from central Texas. Southwestern Association of Naturalists Annual meetings, University of North Texas, Denton, 21 April 2000.
- Bennett, B., O. C. Coleman, and M. L. Thies. Pesticide content and DNA content variation in two subspecies of Mexican free-tailed bats. Tri-Beta Regional meetings, University of Oklahoma Field Station, 9-10 April 1999.
- Coleman, O. C., B. Bennett, and M. L. Thies. Mitochondrial DNA variation between two subspecies of Mexican free-tailed bats. Tri-Beta Regional meetings, University of Oklahoma Field Station, 9-10 April 1999.
- Armstrong, W., and M. L. Thies. Observations of renal inclusion bodies resulting from lead exposure in Mexican free-tailed bats. Texas Academy of Science Annual meetings, Texas Lutheran University, Seguin, 6 March 1999.
- Bennett, B., O. C. Coleman, and M. L. Thies. Pesticide content and DNA content variation in two subspecies of Mexican free-tailed bats. Texas Academy of Science Annual meetings, Texas Lutheran University, Seguin, 6 March 1999.
- Coleman, O. C., B. Bennett, and M. L. Thies. Mitochondrial DNA variation between two subspecies of Mexican free-tailed bats. Texas Academy of Science Annual meetings, Texas Lutheran University, Seguin, 6 March 1999.
- Coke IV, J. G., and M. L. Thies. First record of *Hydra* sp. from an anchialine cave in Quintana Roo, Mexico. Texas Academy of Science Annual meetings, Texas Lutheran University, Seguin, 6 March 1999.
- Ruffino, D. M. and M. L. Thies. Species assemblages and habitat preferences of rodents on south Texas rangelands. Texas Academy of Sciences, University of Texas at Tyler, Tyler, March 6, 1998.
- Coke, J., M. L. Thies, and R. Moldenhauer. Avian population monitoring at the SHSU Center for Environmental Field Studies at Huntsville, Texas. Texas Academy of Sciences, University of Texas at Tyler, Tyler, March 6, 1998.
- Thies, M. L. Ecological studies of the southern plains woodrat. Sam Houston State University Department of Biology Graduate Seminar Series, 26 February 1998.
- Creacy, G., K. Ostrand, J. McHugh, and M. L. Thies. Bird and small mammal habitat associations at Camp Navajo Army Depot, Arizona: Implications for management. Texas Academy of Sciences, Sam Houston State University, Huntsville, March 7, 1997.
- McHugh, J., Creacy, G., K. Ostrand, and M. L. Thies. Using the US Army's Land Condition-Trend Analysis program to delineate floral communities and description of habitats. Texas Academy of Sciences, Texas A&M Galveston, March 1, 1996.

- Creacy, G., K. Ostrand, J. McHugh, and M. L. Thies. Effectiveness of using the US Army's Land Condition-Trend Analysis program in monitoring avian and mammalian fauna. Texas Academy of Sciences, Texas A&M Galveston, March 1, 1996.
- Ostrand, K. G., M. L. Thies, D. D. Hall, and M. Carpenter. Gar ichthyotoxin: It's effects on natural predators and the toxin's evolutionary function. Texas Academy of Sciences, Texas A&M Galveston, March 1, 1996.
- Dunlap, B., M. L. Thies, and E. Wilson. Incidence of *Giardia* in beaver (*Castor canadensis*) and nutria (*Myocastor coypus*) in southeast Texas. American Society of Mammalogists Annual Meetings, Washington D.C., 20 June 1994.
- Thies, M. L. Organochlorine pesticide contamination in the bats of Eckert James River Bat Cave, Mason Co., Texas. American Society of Mammalogists Annual Meetings, Washington D.C., 21 June 1994.
- Thies, M. L., and K. Thies. Evaluation of zooplankton populations in the Trinity River, Texas, as a food resource for the paddlefish (*Polyodon spathula*). Southwestern Association of Naturalists, Emporia State University, Emporia, KS, 16 April 1994.
- Thies, M. L. Organochlorine pesticide contamination in the bats of Eckert James River Bat Cave, Mason Co., Texas. Southwestern Association of Naturalists, Emporia State University, Emporia, KS, 15 April 1994.
- Dunlap, B., M. L. Thies, and E. Wilson. Incidence of *Giardia* in beaver (*Castor canadensis*) and nutria (*Myocastor coypus*) in southeast Texas. Texas Academy of Science, Texas Southern University, Houston, 4 March 1994.
- Thies, M. L. Organochlorine pesticide contamination in the bats of Eckert James River Bat Cave, Mason Co., Texas. Texas Academy of Science, Texas Southern University, Houston, 4 March 1994.
- Thies, M. L., K. Thies, and K. McBee. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in the Mexican free-tailed bat: A comparison between Oklahoma and New Mexico populations. Texas Academy of Science, Texas Southern University, Houston, 4 March 1994.
- Bowers, B. C., M. L. Thies, and K. McBee. Radiation and chemical-induced chromosome damage in wild cotton rats. Society of Toxicology and Chemistry, Houston, TX, 12 November 1993.
- Thies, M. L., K. Thies, and K. McBee. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in the Mexican free-tailed bat: A comparison between Oklahoma and New Mexico populations. American Society of Mammalogists Annual Meetings, Western Washington University, Bellingham WA, 20 June 1993.
- Bowers, B. C., M. L. Thies, and K. McBee. Radiation and chemical-induced chromosome damage in wild cotton rats. American Society of Mammalogists Annual Meetings, Western Washington University, Bellingham WA, 20 June 1993.
- Bowers, B. C., M. L. Thies, and K. McBee. Radiation and chemical-induced chromosome damage in wild cotton rats. Southwestern Association of Naturalists Annual Meetings, Southwestern Missouri State, Springfield, Missouri, 17 April 1993.
- Thies, M. L. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations. Department of Zoology, Oklahoma State University, Stillwater, 9 April 1993.
- Thies, M. L. Environmental contamination studies of the Mexican freetailed bat. Sam Houston State University Department of Biology Graduate Seminar Series, Huntsville, Texas, 24 September 1992.
- Thies, M. L. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations. Sam Houston

- State University Department of Biology, Huntsville, Texas, 15 June 1992.
- Thies, M. L. Tissue residue analysis techniques. Lecture presented to *In Situ* Toxicology class, Department of Zoology, Oklahoma State University, Stillwater, 14 April 1992.
- Thies, M. L., and D. Gregory. Accumulation of heavy metals in Mexican free-tail bats, Southwestern Association of Naturalists, Texas Tech University Field Station at Junction, 11 April 1992.
- Thies, K., R. Grantham, S. Clark, M. L. Thies, and K McBee. Development of mammalian *in situ* biomonitors, Third Annual Graduate Student Research Symposium, Oklahoma State University, Stillwater, 25 February 1992.
- Thies, M. L., and D. Gregory. Accumulation of heavy metals in Mexican free-tail bats, Third Annual Graduate Student Research Symposium, Oklahoma State University, Stillwater, 25 February 1992.
- Thies, M. L. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations., Oklahoma State University Department of Zoology Lunchtime Seminar Series, 19 November 1991.
- Thies, M. L., K. Thies, and K. McBee. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations., The American Society of Mammalogists 1991 Annual Meetings, Kansas State University, Manhattan, 19 June 1991.
- Thies, K., R. Grantham, S. Clark, M. L. Thies, and K McBee. Development of mammalian *in situ* biomonitors, Society of Environmental Toxicology and Chemistry, University of North Texas, Denton, 16 May 1991.
- Thies, M. L., K. Thies, and K. McBee. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations., Southwestern Association of Naturalists, University of Texas at El Paso, 19 April 1991.
- Thies, K., R. Grantham, S. Clark, M. L. Thies, and K McBee. Development of mammalian *in situ* biomonitors, Oklahoma Center for the Advancement of Science and Technology Health Research Conference, Oklahoma City, 28 March 1991.
- Thies, M. L. Chromosomal aberrancy and organochlorine pesticide bioaccumulation in *Tadarida brasiliensis*: A comparison between Oklahoma and New Mexico populations, Second Annual Graduate Student Research Symposium, Oklahoma State University, Stillwater, 26 February 1991.
- Thies, M. L., and K. McBee. Demographic and cytogenetic examination of rodents from a hazardous waste site, The American Society of Mammalogists 1990 Annual Meetings, Frostburg State University, Frostburg, Maryland, 13 June 1990.
- Thies, M. L., and K. McBee. Demographic and cytogenetic examination of rodents from a hazardous waste site, South Central and Ozark-Prairie Regional Meetings of the Society of Environmental Toxicology and Chemistry, Oklahoma State University, Stillwater, 19 May 1990.
- Thies, M. L., and K. McBee. Demographic and cytogenetic examination of rodents from a hazardous waste site, Southwestern Association of Naturalists, North Texas State University, Denton, 14 April 1990.
- Thies, M. L., and K. McBee. Demographic and cytogenetic examination of rodents from a hazardous waste site, Centennial Graduate Student Research Symposium, Oklahoma State University, Stillwater, 27 February 1990.
- Thies, M. L., and K. McBee. Demographic and cytogenetic examination of a hazardous waste dump, Oklahoma Academy of Science, Central State University, Edmond, 10 November

1989.

Thies, M. L., and W. Caire. Spatial distribution of *Neotoma micropus* houses in southwestern Oklahoma, Southwestern Association of Naturalists, Arkansas State University, State University, 29 April 1989.

Thies, M. L., and W. Caire. Association tests of *Neotoma micropus* houses with plant species utilized in house construction, Southwestern Association of Naturalists, Arkansas State University, State University, 29 April 1989.

Thies, M. L. *Neotoma* distribution in southern Oklahoma, Central State University Chapter of Sigma Xi, 5 May 1988.

Thies, M. L., and W. Caire. Spatial distribution of *Neotoma micropus* nests in southwestern Oklahoma, Oklahoma Academy of Science, Northwestern Oklahoma State University, Alva, 13 November 1987.

Work or Professional Experiences

- *A key to the skulls of North American mammals*, 4th ed.: This revision will incorporate updated taxonomy and an increased focus on dentition, with the updates expected to be completed in Fall 2008.
- Description and analysis of the vertebrate fauna from the Koanaka Hills and Gcwihaba Hills, Ngamiland, Botswana: emphasis is on a complete inventory of indigenous plants and animals with the express purpose of comparing modern species assemblages to that of Plio-Pleistocene deposits in Bone Cave (Koanaka Hills) and Gcwihaba Cave (Gcwihaba Hills).
- Description and analysis of the small mammal fauna from the Plovers Lake and the Coopers D sites, Gauteng, South Africa, and Drotsky's Caves, Botswana.
- Field studies of West Nile Virus, Dengue Fever, and Chagas' Disease at points along the Texas-Mexico border between McAllen and Brownsville; establishment of the Sam Houston Disease Vector Program with its associated BioSafety Level 2 (BSL2) Diagnostic Laboratory for handling material collected in field projects; and implementation of in-depth field sampling of vectors and reservoirs.
- Mammals of Camp Swift and Fort Wolters, Texas Army National Guard training sites: These projects incorporate comprehensive survey of the mammals present on the preserve, was funded in part by the Texas Nature Conservancy (TNC) and was completed in December 1995. This project provided the TNC with distribution and abundance data necessary for determination of the effectiveness of long-leaf pine restoration and management practices.
- Ecological studies of the Mexican free-tailed bat: In ongoing research in cooperation with the Texas Department of Criminal Justice and Texas Parks and Wildlife, three graduate student and I are studying the molecular systematics of subspecies, pesticide accumulations and their effects, roosting behavior, and microhabitat variables in colonies of free-tailed bats in a warehouse at the Walls Unit in Huntsville and the Old Tunnel Wildlife Management Area at Fredericksburg, Texas.
- Ecology and behavior of the Yellow-breasted Chat: Two graduate students monitored nesting and territoriality in Yellow-breasted Chats at the Center for Environmental Field Studies.
- *A key to the skulls of North American mammals*, 3rd ed. (1997): Developed in cooperation with Dr. Bryan P. Glass, Professor Emeritus, Oklahoma State University, the updated text with approximately 175 redrawn figures. Published by the author.
- Texas Research Institute for Environmental Studies (TRIES, SHSU): Half-time appointment to the institute beginning January 1994 through May 1997 has involved determination of military facilities' needs for floral and faunal inventories, threatened and endangered species surveys,

and impacts of current base activities on the environment. As Project Director, I wrote and was responsible for implementing formal scopes of work for comprehensive floral and faunal surveys (including threatened and endangered species) for the Arizona Army National Guard's Camp Navajo, Coconino County, Arizona, and the U.S. Navy's Dixie Bomb Target and Escondido Ranch, McMullen County, Texas. Field surveys at Camp Navajo began in April 1994 and the project was completed in June 1996. I supervised and coordinated the activities of five SHSU faculty members and supervised three graduate students who conducted vegetation surveys and analyses for floral and faunal (bird and mammal) comparisons with two Masters degrees completed. We also established Land Condition-Trend Analysis plots for long-term land use monitoring and developed geographic information system databases for future use by the military in monitoring the effects of their activities on the base. Activities at Dixie began in January 1995. The project, scheduled for completion in May 1997, includes developing an Integrated Natural Resource Management Plan and completing comprehensive floral and vertebrate faunal inventories. One graduate student completed her Masters research on habitat characteristics and associated rodent species on the facility and graduates in May 1997.

- Terrestrial vertebrate surveys of the Lake Livingston State Park, Polk Co., Texas: As Project Director, I coordinated and supervised six graduate students in completing a comprehensive inventory of terrestrial vertebrates found within the park. The project was completed in December 1995.
- Mammals of the Roy E. Larsen Sandyland Sanctuary, Hardin Co., Texas: This project, a comprehensive survey of the mammals present on the preserve, was funded in part by the Texas Nature Conservancy (TNC) and was completed in December 1995. This project provided the TNC with distribution and abundance data necessary for determination of the effectiveness of long-leaf pine restoration and management practices.
- The evaluation of zooplankton populations and water quality in the Trinity River System as related to environmental needs of paddlefish (*Polyodon spathula*): Half-time summer support for 1993 and 1994 included supervision of one graduate and two undergraduate students in zooplankton sampling and collection of water quality information from four localities along the Trinity River above Livingston Reservoir. The final report was submitted to the Texas Parks and Wildlife Department 1 September 1994
- A survey of organochlorine pesticide contamination in the bats of Eckert James River Cave, Texas: 1993 half-time summer research involved collection of Mexican free-tailed bats and cave myotis from a cave in central Texas owned by the Nature Conservancy of Texas to determine the occurrence of organochlorine insecticides. This study compared contamination levels in a year-round resident species and a species that migrates to Mexico and Central America during the fall where compounds such as DDT are still actively used.

Honors and Awards

1991 Oklahoma State University Zoology Department Outstanding PhD Student.

1990-1991 Paul and Ruth Jonas Distinguished Graduate Fellowship, \$2000. Renewed for 1991-1992.

Other Competencies