

CURRICULUM VITAE

Monte LeRoy Thies

EDUCATIONAL BACKGROUND

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.

TEACHING AND RESEARCH EXPERIENCES

Professor, Department of Biological Sciences, Sam Houston State University, September 1992 to present.

Teaching Responsibilities - current teaching assignments:

Wildlife Biology (BIO3469, Spring): The history and basic principles, philosophy and concepts of wildlife management as they relate to habitats, people, and the problems associated with their interactions.

Comparative Vertebrate Anatomy (BIO3420, Fall): The study of representative vertebrates, their anatomy, ontogeny, and phylogeny.

Vertebrate Natural History (BIO4430, Spring): An introduction to the taxonomy, natural history, and ecology of vertebrates, with a special emphasis on Texas vertebrates and field techniques used in their study.

Mammalogy (BIO5850, Even Year Fall): An introduction to characteristics, evolution, and special adaptations of mammals, with a taxonomic survey of extant orders. The course includes laboratory procedures, field methods, and care and use of mammal collections.

Advanced Ecology – Biogeography (BIO5380, Odd year Fall): Study of the patterns of the past, present, and future distribution of organisms (and their attributes) in nature and the processes that regulate these distributions. It's the scientific analysis of the spatial and temporal patterns of biodiversity.

Museum Methods (BIO595 Special Topics): Methods for proper curation, accessioning, and maintenance of specimens in natural history collections, including preservation and pest control methods, archival processes, and ethical use and treatment of material.

Teaching Responsibilities - previous teaching assignments and courses taught:

Introductory Environmental Science (BIO137): An introduction to environmental science, current global concerns, and a brief history of environmental ethics, resource use, and conservation. Discussions include principles of physical sciences, ecology, and population biology, biological and physical resources, interactions between society and our environment.

Honors Seminar (HON1331, Spring): A three-hour Honors seminar course co-taught with faculty from Geography, History and Biology, with the focus on global climate change.

- General Ecology (BIO340): A study of the physical and biotic environment, responses of organisms to the environment, population interactions, community ecology, natural ecosystems, and man's interaction with ecosystems.
- Hazardous Waste Management (ESC430): A discussion of the technical and regulatory aspects of handling and disposal of toxic and hazardous wastes based on recently mandated legislation procedures.
- Biology and Environmental Science Seminars (BIO/ESC410, 411): Student discussions of current scientific literature in environmental science.
- Environmental Toxicity (BIO/ESC432): Introduction to theory of Ecological Risk Assessment and practical application of currently accepted ecological toxicity assessment field and laboratory techniques and methodologies.
- Biostatistics (BIO474): An introduction to basic statistical methods and their application to real biological problems or questions.
- Evolution (BIO571): An introduction to the major principles of evolutionary ecology, from the history of evolutionary thought to current theoretical concepts in evolution. Emphasis is placed on the mechanisms and theories of population ecology and adaptation to the environment.
- Advanced Ecology – Statistical Ecology (BIO580): Goals of this course are to provide both a theoretical and practical background in statistical ecology. Focus of this course includes an exposure to standard methods for collection of ecological data under natural conditions and techniques developed for analyses of these data.
- Ecological Computer Modeling (BIO581): An introduction to the development and application of computer models in ecology and population biology. Principles of modeling, programming concepts, specific model dynamics, and prepackaged computer models will be explored.

Departmental Responsibilities – Current Assignments:

- Director of the SHSU Natural History Collections (2013-) and Curator of Mammals (1992-):** manage and maintain SHSU's primarily regional collections of flora and fauna, oversee general data management and pest control.
- Graduate committee (member):** review of new applicants, student progress, and policies and procedures for the Masters degree programs in Biology.
- Scholarship committee (member):** oversees selection and awarding of departmental undergraduate scholarships.

Departmental Responsibilities – Past Assignments (abbreviated listing):

- Director, SHSU Center for Biological Field Studies (2000-2010):** Management and operation of 247 acre field station, including acquisition of funding, managing teaching and research use, and facilities development.
- Health Professions Advisor (September 2003-August 2008):** Compiled and completed support packets for students applying to medical and dental schools, including solicitation of letters of recommendation from faculty and professional employers.
- Assistant Chair (September 2005-August 2007):** Duties including general advising, class scheduling, graduation checks and degree plans, and general advisory assistance to new chair.
- Department Chair (September 2001-August 2005):** Chair duties including general administration; departmental budgetary needs; oversee maintenance and repairs to facilities; faculty and staff hiring, personnel management, etc.; class scheduling and workloads; committee assignments; program development; general advisement, graduation checks and degree plans.
- Academic advisor for Pre-professional Studies (pre-medical, pre-dental, pre-veterinary, pre-pharmacy, pre-physical therapy), Composite Science, Forensic Science degree tracks,**

undergraduate Biology, and Environmental Science majors.

Faculty Search Committee (Fall 2005, chair): Committee charged with hiring developmental biologist and plant molecular biologist positions.

University Thesis Committee (committee member): Wrote the general university guidelines for the thesis that included the journal submission-ready format.

Forensic Science Development Committee (committee member): Participated in development of the interdisciplinary Masters degree in Forensic Science with Chemistry and Criminal Justice. Duties have included development of the coursework associated with approval of the program and selection of the first class of graduate students.

Member (1998) and Chair (1999), Distinguished Speaker Committee: Serve on committee to invite distinguished speaker to campus for lecture series "Science in the 21st Century"

Research Activities:

- *A key to the skulls of North American mammals*, 4th ed.: This revision incorporates updated taxonomy and an increased focus on dentition, with the updates expected to be completed in Fall 2011.
- 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.
- 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: examined nesting and territoriality in Yellow-breasted Chats at the Center for Environmental Field Studies.
- 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 resident species and a species that migrates to Mexico and Central America during the fall where compounds such as DDT are still used.

Graduate Student Research Advisement:

Kelsey Pearman (thesis advisor): “A survey of medium and large mammals in the Big Thicket National Preserve using hair snares and camera traps.” MS in Biology, December 2013.

Katy Estill (thesis advisor): “Morphological variation among domestic rabbit breeds (*Oryctolagus cuniculus*) with a comparison to wild stock.” MS in Biology, August 2012.

Anica Debelica (thesis advisor): “An atlas and key to the hair of terrestrial Texas mammals.” MS in Biology, August 2005.

O. Caprice Coleman (thesis advisor): “Morphological and mitochondrial variation between two subspecies of Mexican free-tailed bats”. MS in Biology, December 2004.

Jennifer Wier (thesis co-advisor): “Seasonal changes in spermatogenesis in the Brazilian free-tailed bat.” MS in Agriculture, May 2003.

Wendy Armstrong (thesis advisor): “Pesticide accumulation and its potential for genetic effects in Mexican free-tailed bats from central Texas.” MS in Biology, May 2000.

Brad Bennett (thesis advisor): “Pesticide content and DNA content variation in two subspecies of Mexican free-tailed bats in east Texas.” MS in Biology, May 2000.

James G. Coke, IV (thesis advisor): “First record of *Hydra* sp. from an anchialine cave in Quintana Roo, Mexico.” MS in Biology, December 1998.

Denise Ruffino (thesis advisor): “Species assemblages and habitat preferences of rodents on south Texas rangelands.” MA in Biology, May 1997.

John McHugh (thesis advisor): “An evaluation of the U.S. Army’s satellite imagery based site selection process.” MA in Biology, May 1996.

Gregory P. Creacy (thesis advisor): “Bird and small mammal habitat associations at Camp

Navajo Army Depot, Arizona: Implications for management.” MS in Biology, December 1996.

Kenneth Ostrand (thesis co-advisor): “Gar ichthyotoxin: Its effects on natural predators and the toxin’s evolutionary function.” MA in Biology, May 1995.

Brett Dunlap (thesis co-advisor): “Incidence of *Giardia* in beaver (*Castor canadensis*) and nutria (*Myocastor coypus*) in southeast Texas.” MA in Biology, August 1994.

Graduate Studies (PhD), Oklahoma State University:

Graduate teaching assistant in Comparative Vertebrate Morphology, January 1989 through December 1991. I was directly responsible for laboratory curriculum development and preparation of materials including demonstration dissections, study specimens, and informational and class handouts for two sections (60 students/semester). I also guest lectured in Comparative Vertebrate Morphology on topics including early amphibians and reptiles, digestive systems, development of the skull, terrestrial adaptations, the endocrine system, and sensory organs.

Research assistant to Dr. Karen McBee, January 1989 through August 1992: Activities included netting bats and trapping rodents from control and hazardous waste sites for demographic monitoring, cytogenetic examinations (bone marrow metaphase chromosome aberration, G-banding, NOR banding, C-banding), flow cytometric analysis of nuclear DNA content variation, gas chromatographic analyses for organochlorine pesticide contamination, preparation of skin and skeletal material as research and museum specimens, supervision of undergraduate and graduate students in research projects involving live trapping of wild rodents for cytogenetic and demographic studies, which required training in recognition of native small mammal species and proper data and animal collection and handling techniques.

Undergraduate and Graduate Studies (MS), University of Central Oklahoma:

Field research assistant to Dr. William Caire and Dr. William Radke, University of Central Oklahoma Department of Biology, 1983 through 1987: Activities included trapping small rodents and mist netting birds and bats for ongoing faculty research projects. Projects were also completed in avian and mammalian curation for the University of Central Oklahoma Collection of Vertebrates, involving specimen preparation, cataloging, and reorganization of the existing collections.

Veterinary assistant: Hillcrest Animal Hospital, 5720 S. Pennsylvania, Oklahoma City, Oklahoma, May 1977 through December 1988. Duties included animal care, medical treatment, X-ray technology, surgical preparation and assistance, grooming, office and clerical work, and general building maintenance.

PROFESSIONAL ORGANIZATIONS:

American Society of Mammalogists
Sigma Xi Scientific Research Society

Society of Vertebrate Paleontologists
Southwestern Association of Naturalists

PROFESSIONAL SERVICES:

Southwestern Association of Naturalists Board of Governors – 2006-2009

Chair (2005-2008) Southwestern Association of Naturalists Howard McCarley Student Research Awards and Clark Hubbs Student Poster Award Committee

Chair for Conservation and Terrestrial Ecology, Texas Academy of Science, 1994-1998, 1999-2003, Vice-chair 2003-2004.

Manuscript reviewer: *Acta Chiropterologia*, *Archives of Environmental Contamination and Toxicology*, *Bulletin of Environmental Contamination and Toxicology*, *Bulletin of the Wildlife Society*, *Journal of Mammalogy*, *Proceedings of the Oklahoma Academy of Science*, *Southwestern Naturalist*, *Texas Journal of Science*

AWARDS RECEIVED:

- 1991 Oklahoma State University Zoology Department Outstanding PhD Student.
 1990-1991 Paul and Ruth Jonas Distinguished Graduate Fellowship, \$2000. Renewed for 1991-1992.

GRANTS RECEIVED:

- Thies, M. L., and P. J. Lewis. 2009. Post-wildfire vertebrate surveys of the Koanaka Hills, Botswana. National Science Foundation, \$45,830, one year no-cost extension through May 2011.
- Thies, M. L. 2009. A survey of small mammals from northwestern Botswana. SHSU Enhancement Grant for Research, \$18,000.
- Thies, M. L. 2008. A key to the skulls of South African Mammals. SHSU Faculty Research Grant, \$5,000.
- Thies, M. L. 2004-2008. 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.

PUBLICATIONS:

Books:

- Debelica, A., and M. L. Thies. 2009. An atlas and key to the hair of terrestrial Texas mammals. Texas Tech Museum Special Publication No. 55:1-102.
- 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.

Articles:

- Urban, C. C., J. D. Daza, C. Cadena, P. J. Lewis, and M. L. Thies. In review. A name for the innominate bone of *Zygaspis quadrifrons* (Squamata: Amphisbaenidae). Submitted to The Anatomical Record.
- Wozniak, J. R., M. L. Thies, J. A. Bytheway, and W. I. Lutterschmidt. In press. Paper - Environmental Science: Wetland catchment of nutrients from an applied forensic science facility: proof of concept through a water quality monitoring program. *Journal of Forensic Science*.
- McDonough, M. M., C. G. Sotero-Caio, A. W. Ferguson, P. J. Lewis, M. Tswiio, and M. L. Thies. 2013. Mitochondrial DNA and karyotypic data confirm the presence of multiple lineages of *Mus* (Mammalia, Rodentia, Muridae, *Nannomys*) in Botswana. *Zookeys*. 359:35–51. doi: [10.3897/zookeys.359.6247](https://doi.org/10.3897/zookeys.359.6247)
- Campbell, T. L., P. J. Lewis, M. L. Thies, and J. K. Williams. 2012. A Geographic Information Systems (GIS) based analysis of modern South African rodent distributions, habitat use, and environmental tolerances. *Ecology and Evolution*. doi:10.1002/ece3.384.

- Kennedy, A. M., J. Marias, A. M. Bauer, P. J. Lewis, and M. L. Thies. 2012. Effect of Fire on the Herpetofauna of the Koanaka Hills, Ngamiland, Botswana. *Check List* 8:666-674.
- Thies, M. L. 2011. Extreme periodontal disease in a Brazilian free-tailed bat (*Molossidae: Tadarida brasiliensis*) from east Texas. *Southwestern Naturalist* 56:112-115.
- Cureton II, J. C., P. J. Lewis, and M. L. Thies. 2010. Evaluating acetic acid for removing microvertebrate fossils from cave breccias. *Botswana Notes and Records* 42:172-178.
- Ferguson, A. W., M. M. McDonough, M. L. Thies, P. J. Lewis, and M. Gabadirwe. 2010. Mammals of the Koanaka Hills (Nqumtsa Hills) Region, Ngamiland, Botswana: A Provisional Checklist. *Botswana Notes and Records* 42:163-171.
- Kraig, S. E., S. M. Roels, and M. L. Thies. 2010. Effectiveness of chemical repellents in deterring red imported fire ants (*Solenopsis invicta*) from Sherman live traps. *Southwestern Naturalist* 55:203-206.
- Kennedy, A. M., B.-A. S. Bhullar, P. J. Lewis, and M. L. Thies. 2010. A preliminary analysis of a Plio-Pleistocene herpetofauna from Botswana: A conservative apomorphy-based identification. *Proceedings of the 16th Conference of the Palaeontological Society of Southern Africa (Howick, August 5-8, 2010)*, Pietermaritzburg, 2010:49-51.
- Thies, M. L., M. Aguilar, and P. J. Lewis. 2010. A morphometric comparison of *Aethomys chrysophilus* and *Micaelamys namaquensis* from northwestern Botswana. *Proceedings of the 16th Conference of the Palaeontological Society of Southern Africa (Howick, August 5-8, 2010)*, Pietermaritzburg, 2010:106-107.
- Bauer, A. M., A. M. Kennedy, P. J. Lewis, M. L. Thies, and M. Gabadirwe. 2009. The herpetofauna of Koanaka South and adjacent regions, Ngamiland, Botswana. *Herpetological Bulletin*, 107:16-26.
- 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 *Syrhophus 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.

Other Publications and Final Reports:

Koanaka Hills Project: 2007-2009 Final Report. Botswana National Museum and Botswana Ministry of Youth, Sport and Culture. Assembled and edited by P. J. Lewis, April 2011.

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.

PAPERS PRESENTED - Over 125 to date, with the most recent listed below:

Cranial morphology of the Cape dwarf gecko (*Lygodactylus capensis*) using high resolution x-ray computed tomography. Joint meeting of Ichthyologists and Herpetologists, Albuquerque, NM. 10-15 July 2013.

Pearman, K. R., P. Crump, M. L. Thies, R. Rommel, L. M. Avendano, D. Suttinger, and C. E. Comer, Christopher. A survey of the medium and large mammals in the Big Thicket National Preserve using hair snares and camera traps with a comparison of survey methods and relative abundances. 60th Annual Meeting of the Southwestern Association of Naturalists, McNeese State University, Lake Charles, LA. 2013

Pearman, K. R., P. Crump, M. L. Thies, R. Rommel, L. M. Avendano, D. Suttinger, and C. E. Comer, Christopher. . A survey of the medium and large mammals in the Big Thicket National Preserve using hair snares and camera traps with a comparison of survey methods and relative abundances. 16th Annual Graduate Research Exchange, Sam Houston State University, Huntsville, TX. 2013

- Pearman, K. R., P. Crump, M. L. Thies, R. Rommel, L. M. Avendano, D. Suttinger, and C. E. Comer, Christopher. 2013. A survey of the medium and large mammals in the Big Thicket National Preserve using hair snares and camera traps with a comparison of survey methods and relative abundances. 31st Annual Meeting of the Texas Society of Mammalogists, Texas Tech University Center at Junction, Junction, TX.
- Thies, M. L., R. Tutalo, M. D. Labbe, and P. J. Lewis. Assessing the difficulties of genus-level diagnoses of fossil rodents. 72nd Annual Meetings of the Society of Vertebrate Paleontology, Raleigh, NC, 17-20 October 2012.
- Cadena, C., P. J. Lewis, and M. L. Thies. Cranial morphology of the Cape dwarf gecko (*Lygodactylus capensis*) based on high resolution x-ray computed tomography. 8th Annual McNair Scholars Program Research Conference, Sam Houston State University, 28 September 2012.
- Reid, L., T. J. Cook, and M. L. Thies. Helminths of *Micaelamys namaquensis* and *Aethomys chrysophilus* (Rodentia: Muridae) from northwestern Botswana. 87th Annual Meetings of the American Society of Parasitologists, Richmond, VA, 13 July 2012.
- Cadena, C., P. J. Lewis, and M. L. Thies. Cranial morphology of Bradfieldi's dwarf gecko (*Lygodactylus bradfieldi*) based on high resolution x-ray computed tomography. 5th Annual Undergraduate Research Symposium, Sam Houston State University, 21 April 2012.
- Reid, L., T. J. Cook, and M. L. Thies. Helminths of *Micaelamys namaquensis* and *Aethomys chrysophilus* (Rodentia: Muridae) from northwestern Botswana. 5th Annual Undergraduate Research Symposium, Sam Houston State University, 21 April 2012.
- Reid, L., T. J. Cook, and M. L. Thies. Helminths of *Micaelamys namaquensis* and *Aethomys chrysophilus* (Rodentia: Muridae) from northwestern Botswana. Southwestern Association of Parasitologists Annual Meeting, The University of Oklahoma Biological Station, Lake Texoma, OK, 12-14 April 2012.
- Campbell, T. L., P. J. Lewis, and M. L. Thies. Issues with museum specimen identifications: discriminant function analysis of mandibular first molar measurements for two cryptic rodent taxa, *Gerbilliscus leucogaster* and *G. brantsii*. Texas Academy of Science Annual Meetings, Sul Ross University, Alpine, TX, 3-5 March 2012.
- McDonough, M. M., C. G. Sotero-Caio, R. J. Baker, P. J. Lewis, M. L. Thies, and M. Tswiio. Mitochondrial, morphological, and karyotypic data confirm the presence of multiple lineages of *Mus* in Botswana. Texas Academy of Science Annual Meetings, Sul Ross University, Alpine, TX, 3-5 March 2012.
- Estill, K., and M. L. Thies. Morphological variation in domestic rabbit (*Oryctolagus cuniculus*) hair. Texas Society of Mammalogists Annual Meetings, Texas Tech University Llano River Field Station, Junction, TX, 17-19 February 2012.
- Reid, L., T. J. Cook, and M. L. Thies. Helminths of *Micaelamys namaquensis* and *Aethomys chrysophilus* (Rodentia: Muridae) from northwestern Botswana. Texas Society of Mammalogists Annual Meetings, Texas Tech University Llano River Field Station, Junction, TX, 17-19 February 2012.
- Thies, M. L., I. Arney, B. Denova, J. Taylor, and P. J. Lewis. Species-level apomorphies in southern African microfauna: data from the post-crania. Society of Vertebrate Paleontologists Annual Meetings, Las Vegas, NV, 2-5 November 2011.
- Lewis, P. J., M. L. Thies, T. Campbell, R. Tutalo, and A. Kennedy. The small mammal fauna from Koanaka South and the utility of rodents as paleoenvironmental indicators. Society of Vertebrate Paleontologists Annual Meetings, Las Vegas, NV, 2-5 November 2011.
- Denova, B., J. Taylor, I. Arney, P. J. Lewis, and M. L. Thies. Species-level apomorphies in southern African microfauna: data from the post-crania. American Society of Mammalogists, Portland State University, Oregon, 24-29 June 2011.

- Estill, K., and M. L. Thies. Morphological and molecular variation in domestic rabbit breeds (*Oryctolagus cuniculus*) with a comparison to wild stock. American Society of Mammalogists, Portland State University, Oregon, 24-29 June 2011.
- McDonough, M. M., C. G. Sotero-Caio, P. J. Lewis, M. L. Thies, M. Tswiiio, and R. J. Baker. Reevaluation of African *Mus* in Botswana using DNA sequences, cytogenetics, and morphology. American Society of Mammalogists, Portland State University, Oregon, 24-29 June 2011.
- Thies, M. L., A. M. Kennedy, and P. J. Lewis. Preliminary analyses of post-wildfire vertebrate surveys of the Koanaka Hills, Botswana. American Society of Mammalogists, Portland State University, Oregon, 24-29 June 2011.
- Tutalo, R., P. J. Lewis, and M. L. Thies. A comparative analysis of small mammals from barn owl pellets and live trapping from the Koanaka Hills, northwestern Botswana. American Society of Mammalogists, Portland State University, Oregon, 24-29 June 2011.
- Estill, K., and M. L. Thies. Morphological and molecular variation in domestic rabbit breeds (*Oryctolagus cuniculus*) with a comparison to wild stock. Southwestern Association of Naturalists Annual Meetings, University of Texas at Tyler, 22-24 April 2011.
- Arney, I., B. Denova, J. Taylor, P. J. Lewis, and M. L. Thies. Species-level apomorphies in southern African microfauna: data from the post-crania. Southwestern Association of Naturalists Annual Meetings, University of Texas at Tyler, 22-24 April 2011.
- Denova, B., J. Taylor, I. Arney, P. J. Lewis, and M. L. Thies. Species-level apomorphies in southern African microfauna: data from the post-crania. 4th Annual Undergraduate Research Symposium, Sam Houston State University, 16 April 2011.
- Tutalo, R., P. J. Lewis, and M. L. Thies. A comparative analysis of small mammals from barn owl pellets and live trapping from the Koanaka Hills, northwestern Botswana. Southwestern Association of Naturalists Annual Meetings, University of Texas at Tyler, 22-24 April 2011.
- Jones, D., R. Tutalo, M. L. Thies, and P. J. Lewis. A comparison of cranial and post-cranial elements for estimating MNI in owl pellets. 4th Annual Undergraduate Research Symposium, Sam Houston State University, 16 April 2011.
- Estill, K., E. Waters, N. Sutter, and M. L. Thies. An analysis of morphological variation in domestic rabbit breeds (*Oryctolagus cuniculus*). 1st Annual Research Symposium, Sam Houston State University Department of Biological Sciences, Huntsville, Texas, 8 April 2011.
- Reeve, J. L., M. Choudhary, P. J. Lewis, and M. L. Thies. A molecular analysis of owl pellet remains from Koanaka Hills, Botswana. 1st Annual Research Symposium, Sam Houston State University Department of Biological Sciences, Huntsville, Texas, 8 April 2011.
- Tutalo, R. S., P. J. Lewis, and M. L. Thies. Comparative analysis of small mammals from barn owl pellets and live trapping from NW Botswana. 1st Annual Research Symposium, Sam Houston State University Department of Biological Sciences, Huntsville, Texas, 8 April 2011.
- Arney, I., P. J. Lewis, and M. L. Thies. The diagnosis of South African microfauna using femoral morphology. Texas Academy of Science Annual Meetings, St. Edwards University, Austin, Texas, 3-5 March 2011.
- Campbell, T. L., P. J. Lewis, J. K. Williams, and M. L. Thies. New southern African rodent niche models for use in taxonomic habit indices. Texas Academy of Science Annual Meetings, St. Edwards University, Austin, Texas, 3-5 March 2011.
- Estill, K., and M. L. Thies. Morphological and molecular variation in domestic rabbit breeds (*Oryctolagus cuniculus*) with a comparison to wild stock. Texas Academy of Science Annual Meetings, St. Edwards University, Austin, Texas, 3-5 March 2011.
- Reeve, J. L., M. Choudhary, P. J. Lewis, and M. L. Thies. A molecular analysis of owl prey from Koanaka Hills, Botswana. Texas Academy of Science Annual Meetings, St. Edwards University, Austin, Texas, 3-5 March 2011.
- Tutalo, R. S., P. J. Lewis, and M. L. Thies. A comparative analysis of small mammals from barn owl pellets and live trapping from the Koanaka Hills, Northwestern Botswana. Texas Academy of Science Annual Meetings, St. Edwards University, Austin, Texas, 3-5 March 2011.

- Estill, K., and M. L. Thies. Morphological and molecular variation in domestic rabbit breeds (*Oryctolagus cuniculus*) with a comparison to wild stock. Texas Society of Mammalogists Annual Meetings, Texas Tech University Llano River Field Station, Junction, TX, 25-27 February 2011.
- McDonough, M. M., C. G. Sotero-Caio, P. J. Lewis, M. L. Thies, M. Tswiio, and R. J. Baker. Reevaluation of African *Mus* in Botswana using DNA sequences, cytogenetics, and morphology. Texas Society of Mammalogists Annual Meetings, Texas Tech University Llano River Field Station, Junction, TX, 25-27 February 2011.
- Campbell, T. L., P. J. Lewis, J. K. Williams, and M. L. Thies. New Southern African rodent niche models for use in taxonomic habitat indices. Texas Association of Biological Anthropologists annual meeting, Baylor University, Waco, Texas, 5-6 November 2010.
- Arney, I., P. J. Lewis, and M. L. Thies. Diagnosis of Southern African microfauna: Data from the post-crania. 70th annual meeting of the Society of Vertebrate Paleontologists, Pittsburgh, Pennsylvania, 10-13 October 2010.
- Kennedy, A. M., B.-A. S. Bhullar, P. J. Lewis, and M. L. Thies. A preliminary analysis of a Plio-Pleistocene herpetofauna from Botswana: A conservative apomorphy-based identification. 16th Annual Conference of the Palaeontological Society of Southern Africa (Howick), Pietermaritzburg, 5-8 August 2010.
- Thies, M. L., M. Aguilar, and P. J. Lewis. A morphometric comparison of *Aethomys chrysophilus* and *Micaelamys namaquensis* from northwestern Botswana. 16th Annual Conference of the Palaeontological Society of Southern Africa (Howick), Pietermaritzburg, 5-8 August 2010.
- Estill, K., and M. L. Thies. A preliminary analysis of morphological variation in the skull of domestic rabbit breeds. 90th annual meeting of the American Society of Mammalogists, University of Wyoming, Laramie, 11-15 June 2010. (Travel for Katy Estill paid in part by an ASM Student Travel Award)
- Estill, K., and M. L. Thies. A preliminary analysis of morphological variation in skulls of domestic rabbit breeds (*Oryctolagus cuniculus*). 57th annual meeting of the Southwestern Naturalists, Texas Tech University Llano River Field Station, Junction, TX, 22-24 April 2010.
- Thies, M. L., P. J. Lewis, and M. M. McDonough. A morphometric comparison of *Aethomys chrysophilus* and *Micaelamys namaquensis* from northwestern Botswana. 57th annual meeting of the Southwestern Naturalists, Texas Tech University Llano River Field Station, Junction, TX, 22-24 April 2010.
- Tutalo, R., P. J. Lewis, and M. L. Thies. An analysis of small mammals in owl pellets from the Koanaka Hills, northwestern Botswana. 57th annual meeting of the Southwestern Naturalists, Texas Tech University Llano River Field Station, Junction, TX, 22-24 April 2010.
- Wilson, C., J. L. Cook, P. J. Lewis, and M. L. Thies. A provisional checklist to the invertebrates of the Koanaka Hills, Ngamiland Province, Botswana. 57th annual meeting of the Southwestern Naturalists, Texas Tech University Llano River Field Station, Junction, TX, 22-24 April 2010.
- Labbe, M., D. Ortiz, P. J. Lewis, and M. L. Thies. Preliminary analysis of a fossil Honey Badger (Mustelidae) from the Koanaka Hills, Botswana. Sam Houston State University Undergraduate Research Symposium, Huntsville, TX, 23 April 2010.
- Estill, K., and M. L. Thies. Morphological variation in the skull of domestic rabbit breeds. Beta Beta Beta District Convention, Oklahoma University Biological Field Station, Kingston, Oklahoma, 26-28 March 2010.
- Knight, J., T. L. Campbell, P. J. Lewis, and M. L. Thies. Analysis of a sub-fossil leopard skeleton from the Koanaka Hills, Botswana. Texas Academy of Sciences. March 2010.

Invited Symposium on Koanaka Hills research at the Botswana National Museum, 10 July 2009:

Lewis, P. J. *The Koanaka Hills Project: An Overview with Particular Attention to the Paleontological Excavation of Bone Cave.*

Thies, M. L. *The Modern Small Mammals of the Koanaka Hills.*

Kennedy, A. M. *The Past and Present Herpetofauna of the Koanaka Hills.*

McDonough, M. M., and A. W. Ferguson. *Genetic Variation in the Small Mammals of the Koanaka Hills and the Implications for Regional Diversity.*

PUBLIC SERVICE PRESENTATIONS:

Thies, M. L. Mammals of East Texas. Camp Olympia Teachers Education Program, 17 December 2009

Thies, M. L. Bats. Huntsville City Government and ISD, Mance Park Middle School, 14 April 2008.

Thies, M. L. Bats. ,Jesse Jones State Park, Spring, TX,

Thies, M. L. Bats. Houston Independent School District – Camp Olympia, 4 September 2003.

Thies, M. L. The world of bats. The Woodlands Garden Club, The Woodlands, TX, 21 March 2002.

Thies, M. L. The world of bats. Huntsville Audubon Society, Huntsville, TX, 21 February 2002.

Thies, M. Radio talk show on bats, KMVL AM, Madisonville, Texas, 8 January 1994.

Thies, M. Organochlorine pesticide contamination in the free-tailed bat. BEES Club, Sam Houston State University, Huntsville, Texas, 1 April 1993.

Thies, M. Bats. Huntsville Audubon Society, Huntsville, Texas, 4 March 1993.

Thies, M. Bats are our friends. Fourth Grade Classes, Richmond Elementary School, Stillwater, Oklahoma, 7 November 1990.