

Raymond S. Matlack

Revised 22 August 2009

PERSONAL DATA:

Professional Address: Department of Life, Earth and Environmental Sciences
West Texas A&M University Box 60808
Canyon, TX 79016
Phone: (806) 651-2583
Email: rmatlack@mail.wtamu.edu
Fax: (806) 651-2928

EDUCATION:

Kansas State University, Manhattan, Kansas, 1997-2001, Ph. D. in Biology (Dissertation: Ecology of shrews in tallgrass prairie; Donald W. Kaufman and Glennis A. Kaufman, Major Professors)

Kansas State University, Kansas Cooperative Fish and Wildlife Research Unit, Manhattan, Kansas, 1994-1997, M. S. in Biology (Thesis: The swift fox in rangeland and cropland in western Kansas: relative abundance, mortality, and body size; Philip S. Gipson, Major Professor)

Kansas State University, Manhattan, Kansas, 1990-1994, B. S. in Wildlife Biology

HONORS, AWARDS, AND RECOGNITION:

1992-1994	Howard Hughes Medical Institute Science Initiative Scholarship
1994	Tri-County Rod and Gun Club Conservation Scholarship
1997	Phi Kappa Phi Honor Society
1997	Recognized by the American Academy of Distinguished Students
1999	Sigma Xi, The Scientific Research Society
2005	The President's (G. W. Bush) Volunteer Service Award (for work at Crossbar Ranch with BLM)
2005-2006	Provost's Appreciation Award
2006	Faculty Development Summer Grant, WTAMU
2007-2008	College of ASE Teaching Excellence Award
2007-2008	West Texas A&M University Teaching Excellence Award

TEACHING INTERESTS:

Wildlife Management, Vertebrate Zoology, Mammalogy, Ornithology, Wildlife Conservation, Conservation Biology, Animal Behavior, General Biology, Zoogeography

TEACHING AND ADMINISTRATIVE EXPERIENCE:

Principal Investigator. REU Site Ecology and Environment of the Southern High Plains. Serve as PI for National Science Foundation (NSF) funded project that provides support for 8 undergraduates each summer (for 3 years) to conduct research under the guidance of a faculty member at West Texas A&M University. The program is part of the NSF's Research Experience for Undergraduates Program. 2007-present.

Co-Principal Investigator. INCREASE Project. Serve as Co-PI for National Science Foundation funded project designed to increase enrollment and retention in the sciences. Primary responsibilities include renovating laboratory portion of two Introductory Biology courses. 2006-present.

Associate Professor and Advisor. West Texas A&M University, Canyon. Serve as advisor for students majoring in Wildlife Biology and for graduate students. Teach Introductory Biology (2 courses), Natural History of Vertebrates, Mammalogy, Ornithology, Wildlife Conservation, Wildlife Management, Wildlife Management Techniques, Animal Behavior, Field Biology, and Zoogeography. Team taught an interdisciplinary honors course with Dr. Alex Hunt (Department of English and Modern Languages) examining nature writing and ecology with canyons as its central focus. 2002-Present.

Visiting Assistant Professor. College of Wooster, Wooster, Ohio. Taught Natural History of the Vertebrates, Biology of Organisms, Junior Independent Studies class (Biostatistics), Animal Behavior and Introduction to the Biology of Populations. Served as advisor for 5 undergraduates conducting Senior Independent Study. 2001-2002 academic year.

Coordinator, Grassland Ecology Research Experience for Undergraduates (REU) Program. Kansas State University, Manhattan. Administer REU Program that places 11 undergraduate students with faculty mentors in the Division of Biology. Oversee application process and aide in participant selection and mentor assignment. Arrange student housing, class schedules, and campus privileges. Coordinate and instruct grassland ecology seminar course. Plan and coordinate activities for students including trip to national scientific meeting and local fieldtrips. Troubleshoot problems with students, mentors, or accommodations. Organize seminar for student presentations. Produce annual report for the National Science Foundation. Fall 2000 through Summer 2001.

Instructor. Kansas State University, Manhattan. Instructed students in introductory biology using computer and hands-on methods in studio setting. Presented lectures and wrap-up sessions utilizing Power Point presentations in a high-technology classroom. Summers, 2000 and 2001.

Graduate Research Assistant for Kansas GAP Project (Reptile Vertebrate Layer).
Kansas State University, Manhattan. 1997-2001.

Teaching Assistant. Kansas State University, Manhattan. Served as teaching assistant in Organismic Biology, Mammalogy and Ornithology. 1994-2001.

Adjunct Instructor. Neosho County Community College, Chanute, Kansas. Led field course on the Ecology of the Rio Grande Valley and the Texas Coastal Plain. Organized, prepared, and taught field ecology course with emphasis on birds, mammals, and reptiles. Winter, 1995.

Graduate Students:

Greg Lewellen. Influence of topography on plant and small mammal communities in Palo Duro Canyon. M.S. Awarded in 2005.

Laura Baar. Waterfowl and shorebird use of playas. M.S. Awarded in 2006.

Karah Gallagher. Ecology of small mammals in Palo Duro Canyon with emphasis on the Texas and Palo Duro mouse. M.S. Awarded in 2006.

Naima Montacer. Ecology of ringtail in the Panhandle of Texas. M.S. In progress.

Tamera Hartline. Ecology of the bat community of Palo Duro Canyon State Park. M.S. In Progress.

Melanie Hartman. Ecology of small mammals in playa wetlands. M.S. In Progress.

Dessa Gray. Home range, habitat use, and survival of porcupines in the Texas panhandle. M.S. In Progress.

Whitney Priesmeyer. Influence of fire and frequency of fire on small mammals in shrub-invaded shortgrass prairie. M.S. In Progress.

UNDERGRADUATE RESEARCH STUDENTS:

Sadie Solomon. Summer 2000. Habitat associations of Coleoptera in tallgrass prairie. National Science Foundation Research Experience for Undergraduates Program, Division of Biology, Kansas State University, Manhattan.

Alex Pries. 2001. Influence of habitat fragmentation on predation rates of ground-nesting birds. Department of Biology, College of Wooster, OH.

Jenny Nicol. 2001. Ecology of fishes in reef and blue-hole habitats of the Bahamas. Department of Biology, College of Wooster, OH.

Jess Decker. 2001. Conservation of the giant yellow lady slipper, *Cypripedium calceolus*. Department of Biology, College of Wooster, OH.

Todd Naelitz. 2001. Prey selection in green anoles, *Anoles carolinensis*. Department of Biology, College of Wooster, OH.

Lori Mitskavich. 2001. Using geographic information systems to predict the occurrence

- of antibiotic-resistant bacteria in Ohio streams. Department of Biology, College of Wooster, OH.
- Matt Poole. 2003-2004. Distribution of prairie voles (*Microtus ochrogaster*) in the Texas Panhandle. West Texas A&M University.
- Laura Baar and Trey Barron. 2004. Chronology of use of playas by waterfowl. West Texas A&M University.
- Ricardo Hernandez. 2006. Effects of wildfire on occurrence and abundance of bobwhite in the Texas Panhandle. McNair Scholar Program, West Texas A&M University.
- Tamera Hartline. 2006-2007. Ecology of bats in Palo Duro Canyon. Senior Honors Thesis, West Texas A&M University.
- Andrew Carrano. 2005-2007. Population survey and ecology of a colony of free-tailed bats in Clarity Tunnel. West Texas A&M University.
- Cassie Cox. 2007. Influence of woody vegetation on small mammals in the panhandle of Texas. REU Program, West Texas A&M University.
- Sara Jackrel. 2008. Factors influencing use of artificial water sources by bats & Assessing AnaBat Acoustic monitors using forward looking infrared video. REU Program, West Texas A&M University.

PROFESSIONAL ACTIVITIES AND SERVICE:

- | | |
|--------------|--|
| 1997 | Member, Conservation of Land Mammals Committee, American Society of Mammalogists |
| 1998 | Manuscript Review: The Prairie Naturalist |
| 1998-2000 | Surveyor, Kansas Amphibian Monitoring Program |
| 2000-present | Member, Public Education Committee, American Society of Mammalogists |
| 2001-2002 | Member, Public Relations Committee, American Society of Mammalogists |
| 2000-2001 | Board of Governors, Student-at-Large, Central Plains Society of Mammalogists |
| 2002 | Member, Land Steward Committee, The Wilderness Center, Ohio |
| 2002 | Advisor, Salvation Army Program House, College of Wooster |
| 2002-present | Advisor, WTAMU Wildlife Club |
| 2002 | Manuscript review: Proceedings of the Colloquium on the Biology of the Soricidae II |
| 2003 | Manuscript Review: Texas Journal of Science, Journal of Mammalogy, American Midland Naturalist |
| 2003 | Member, Land Use Committee, Wildcat Bluff Nature Center, Amarillo |
| 2003 | Member, Local Organization Committee, Texas Master Naturalist Program, Wildcat Bluff Nature Center, Amarillo |
| 2004 | Member, Scientific Advisory Committee, Wildcat Bluff Nature Center, Amarillo |

- 2004-2005 Member, Local Organizing Committee for the 2005 Annual Meeting of the Texas Chapter of The Wildlife Society
- 2004 Manuscript Review: Journal of Mammalogy, Canadian Journal of Zoology, American Midland Naturalist
- 2004 Book Review for Great Plains Research
- 2005 Manuscript review: Journal of Mammalogy, The Prairie Naturalist, Canadian Journal of Zoology
- 2006 Manuscript review: Conservation Biology
- 2006 Judge for Cottam Award, Texas Chapter, The Wildlife Society
- 2006 Scholarship Committee Member, Department of Life, Earth and Environmental Sciences, West Texas A&M University
- 2007 Board Member, Amarillo Zoological Society
- 2007 Curriculum Committee Member, Department of Life, Earth and Environmental Sciences, West Texas A&M University
- 2007 Scholarship Committee Member, Department of Life, Earth and Environmental Sciences, West Texas A&M University
- 2007 Campus Visit Coordinator, Department of Life, Earth and Environmental Sciences, West Texas A&M University
- 2007 Book review: Great Plains Research
- 2007 Proposal review: National Science Foundation, Research Experience for Undergraduates Program
- 2007 Manuscript review, American Midland Naturalist
- 2007 Abstract Reviewer: 14th Annual Conference of the Wildlife Society, Tucson, AZ
- 2008 Manuscript review, Canadian Journal of Zoology

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

The Wildlife Society
 American Society of Mammalogists
 Southwestern Association of Naturalists
 Kansas Herpetological Society
 The Nature Conservancy
 Bat Conservation International
 Great Plains Natural Science Society

GRANT AND OTHER SUPPORT:

- 2002 Sophomore summer research assistant. \$2,400 and room and board for student research assistant. College of Wooster, Wooster, OH.
- 2002 Influence of land use on stream health in northeast Ohio using invertebrates as bioindicators. Leigh Hutchison and Raymond S. Matlack. \$900 award from Geauga Park District, Chardon, OH.

- 2002 Small mammal community ecology in Palo Duro Canyon: spatial variation in occurrence and abundance. Raymond S. Matlack. \$4,810 award from Killgore Research Center, WTAMU.
- 2003 Temperature and relative humidity related to topography in Palo Duro Canyon. \$991 award from Killgore Research Center.
- 2004 Awarded \$22, 899 for Equipment through HEAF.
- 2004 Field identification, status, and habitat associations of the Palo Duro mouse (*Peromyscus truei comanche*) in Palo Duro Canyon. Raymond S. Matlack. \$2,900 award from Killgore Research Center.
- 2004 Population Survey of the Bats of Clarity Tunnel. Raymond S. Matlack. \$4,800 awarded by Texas Parks and Wildlife Department.
- 2004 Use of playas by waterfowl and shorebirds: chronology, abundance, and the influence of landscape features. Raymond S. Matlack. \$3,289. awarded by Killgore Research Center.
- 2004 Baseline survey of the mammals of Palo Duro Canyon State Park including Cañoncita Ranch. Raymond S. Matlack. \$4,998 awarded by Texas Parks and Wildlife Department.
- 2005 Use of playas by waterfowl and shorebirds: chronology, abundance, and the influence of landscape features. Raymond S. Matlack. \$7,400 awarded by Playa Lakes Joint Venture/Conoco Phillips.
- 2005 Ecological assessment of the Canadian River Breaks Ecoregion of Texas. R. S. Matlack and R. T. Kazmaier. \$95,000 awarded by Bureau of Land Management.
- 2005 Use of playas by waterfowl and other wetland birds: chronology, abundance, and the influence of landscape features. Raymond S. Matlack. \$30,000 awarded by Texas Parks and Wildlife Department.
- 2005 West Texas Export Seed Grant. Raymond S. Matlack. \$8,000 awarded by Texas Tech Health Science Center.
- 2006 Baseline survey of the mammals of Palo Duro Canyon State Park. Raymond S. Matlack. \$4005 awarded by Texas Parks and Wildlife Department.
- 2006 STEP Phase 1: Increasing Numbers, Connections, and Retention in Science and Engineering (INCRSE). R. S. Matlack, CoPI. \$980,204 awarded by National Science Foundation.
- 2006 Population survey of the bats of Clarity Tunnel, Caprock Canyons State Park. Raymond S. Matlack. \$9,940 awarded by Texas Parks and Wildlife Department.
- 2007 REU Site: Ecology and Environment of the Southern High Plains. R. S. Matlack, PI. \$235,404 awarded by National Science Foundation.
- 2008 Baseline inventory of mammals at Palo Duro Canyon State Park and population survey of bats at Clarity Tunnel. Raymond S. Matlack. \$8,587.50 awarded by Texas Parks and Wildlife Department.
- 2008 Wildlife characterization and nuisance management re: population of bobcats. Raymond S. Matlack. \$54,869 total awarded by BWXT Pantex, LLC.

- 2008 Baseline inventory of mammals at Palo Duro Canyon State Park and population survey of bats at Clarity Tunnel. Raymond S. Matlack. \$9,600 awarded by Texas Parks and Wildlife Department.
- 2009 S-STEM: Connecting Community College Transfers for STEM Success. Pam Lockwood (PI), Raymond S. Matlack (Co-PI), Emily Hunt (Co-PI), Clay Robinson (Co-PI), and Dan Garcia (Co-PI). \$572,670 awarded by National Science Foundation.
- 2009 Baseline inventory of mammals at Palo Duro Canyon State Park and population survey of bats at Clarity Tunnel. Raymond S. Matlack. \$9,600 awarded by Texas Parks and Wildlife Department.
- 2009 Impacts of wind generator turbines – wildlife and habitat. Raymond S. Matlack. \$536,425 by BWXT Pantex, LLC.

INVITED LECTURES AND SEMINARS:

- 2001 Analysis and presentation of ecological data. Konza Prairie Environmental Education Program, Technology Workshop, Manhattan, KS.
- 2001 Spatial and temporal dynamics of short-tailed shrews in tallgrass prairie. Science Roundtable, College of Wooster, Wooster, OH.
- 2002 Introduction to spreadsheets, graphing and visualization of data, and hypotheses and data collection. Konza Prairie Environmental Education Program, Technology Workshop, Manhattan, KS.
- 2003 Mammals. Texas Master Naturalist Training.
- 2003 Ecology. Texas Master Naturalist Training.
- 2004 Mammals. Texas Master Naturalist Training.
- 2005 Mammals. Texas Master Naturalist Training.

POPULAR PRESENTATIONS AND DEMONSTRATIONS:

- 1992 The snakes of Kansas. University for Mankind, Manhattan, KS.
- 1992 The snakes of Kansas. University for Mankind, Manhattan, KS.
- 1992 Snake walk. University for Mankind, Manhattan, KS.
- 1993 The snakes of Kansas. University for Mankind, Manhattan, KS.
- 1992 Snake walk. University for Mankind, Manhattan, KS.
- 1993 The snakes of Kansas. University for Mankind, Manhattan, KS.
- 1997 Graduate school from a graduate student's perspective. Kansas State University Student Chapter, The Wildlife Society, Manhattan.
- 1996 Mammals of Konza Prairie. Soil Erosion Conference, Kansas State University, Manhattan
- 1997 Tracks and sign of Kansas mammals. Konza Prairie Docent In-Service Program, Manhattan, KS.
- 1997 Orders of mammals of the world. Docent Training Program, Sunset Zoological Park, Manhattan, KS.
- 1998 Mammals of Kansas. Riley County 4-H, Manhattan, KS.
- 1998 Konza Prairie at night. Kansas State University Student Chapter, The Wildlife

- Society, Manhattan.
- 1999 Research efforts and wildlife of Konza Prairie, KS. Wildlife Management Class, University of Connecticut.
- 1999 Ecology and wildlife of the tallgrass prairie. 4-H National Wildlife Habitat Evaluation Contest, Manhattan, KS.
- 1999 Tallgrass prairie at night. Kansas State University Student Chapter, The Wildlife Society, Manhattan.
- 2000 Snakes of Kansas. Children's Wonder Workshop, Manhattan, KS.
- 2000 Snakes of Kansas. Tuttle Creek State Park, Manhattan, KS.
- 2001 Reptiles and Amphibians of Kansas. University for Mankind, Manhattan, KS.
- 2002 Small mammals: more than just mice, Panhandle Audubon Club, Canyon, TX.
- 2003 Night hike leader, Wildcat Bluff Nature Center, Amarillo, TX.
- 2004 Mammals: Texas Master Naturalist Training (lecture and field trip).
- 2004 Wildlife biology and the study of mammals. All 5th grade classes, Canyon Intermediate School.
- 2005 Mammals: Texas Master Naturalist Training.
- 2005 On the wing – the adventures of a fledgling wildlife photographer. Texas Panhandle Audubon Society, Amarillo, TX
- 2005 Challenges of the transition from high school to college. Canyon High School PTSA, Canyon, TX.
- 2006 Wildlife. Amarillo Photographic Society.
- 2007 Bats of Palo Duro Canyon, Hereford 4-H Club
- 2007 Wildlife biology, Dimmitt High School Career Day, TX
- 2007 Birds of the Panhandle, Junior League Garden Club, Amarillo, TX
- 2008 Discovering Panhandle Wildlife, Canyon Kiwanis Club, Canyon, TX
- 2008 Birds in the garden, The Women's Auxiliary to the Panhandle Geological Society, Amarillo, TX

RESEARCH INTERESTS:

Major topics: Mammalian population and community ecology and prairie ecology
Current interests: Spatial and temporal dynamics of vertebrate populations with emphasis on the influence of abiotic and biotic factors and their interactions; influence of anthropogenic management practices (e.g., fire and grazing) on vertebrate populations; use of geographic information systems (GIS) to examine spatial variation in vertebrates; ecology and natural history of small mammals, bats, carnivores and grassland birds.

RESEARCH AND PROFESSIONAL EXPERIENCE:

2006-present	Webmaster, Department of Life, Earth and Environmental Sciences, WTAMU.
2003-2004	Faculty Mentor for NSF sponsored Graduate to K-12 Teaching Fellows Program.
2002-present	Assistant Professor, Department of Life, Earth and Environmental Sciences, West Texas A&M University, TX.
2001-2002	Visiting Assistant Professor, Department of Biology, College of Wooster, Wooster, OH.
1999-2001	Webmaster, Organismic Biology Laboratory, Division of Biology, Kansas State University, Manhattan.
1999	Webmaster, Mammalogy Laboratory, Division of Biology, Kansas State University, Manhattan.
1997-2001	Graduate Research Assistant for Kansas GAP Project (Reptile Vertebrate Layer), Division of Biology, Kansas State University, Manhattan.
1996-2001	Graduate Teaching Assistant, Division of Biology, Kansas State University, Manhattan.
1994-1996	Graduate Research Assistant, Division of Biology, Kansas State University, Manhattan.
Winter 1995	Adjunct Instructor, Ecology of the Rio Grande Valley and the Texas Coastal Plain, Neosho County Community College, Chanute, Kansas.
August 1993	Research Aide, Stream Ecology Project, U. S. Biological Survey, Holton, Kansas.
Summer 1993	Naturalist, Kansas Department of Wildlife and Parks, Tuttle Creek State Park, Manhattan, Kansas.
1986-1990	United States Army, highest rank achieved: Sergeant (E-5).

TRAINING SEMINARS AND WORKSHOPS:

1997	Great Plains Regional GAP Meeting, Lawrence, KS.
1998	Great Plains Regional GAP Meeting, Lincoln, NE.
1998	Great Plains Regional GAP Meeting, Columbia, MO.
2000	Twelve keys to successful grantwriting, Manhattan, KS.
2001	Student writing workshop, Wooster, OH.
2006	Faculty Development, (Staley), WTAMU
2006	Bat Conservation International Acoustic Monitoring Workshop, Portal AZ.
2007	Bat Conservation International Bat Conservation and Management Workshop, Portal AZ.
2007	Faculty Development, (Staley), WTAMU
2008	Creating active learning strategies that work, WTAMU
2008	How to build a learning community in your discipline, WTAMU

PRESENTATIONS AT NATIONAL SCIENTIFIC MEETINGS:

- 1996 Use of agricultural lands by swift foxes (*Vulpes velox*) in western Kansas. American Society of Mammalogists, Grand Forks, ND. (R. S. Matlack, P. S. Gipson, and D. W. Kaufman).
- 1997 Short-tailed shrews in tallgrass prairie: patterns of abundance in space and time. American Society of Mammalogists, Stillwater, OK. (R. S. Matlack, G. A. Kaufman, D. W. Kaufman, and B. R. McMillan).
- 1997 Spatio-temporal variation in abundance of short-tailed shrews: a fifteen-year study. Ecological Society of America, Albuquerque, NM. (R. S. Matlack, D. W. Kaufman, G. A. Kaufman, and B. R. McMillan).
- 1998 Influence of abiotic factors on population dynamics of Elliot's short-tailed shrews (*Blarina hylophaga*) in tallgrass prairie. American Society of Mammalogists, Blacksburg, VA. (R. S. Matlack, D. W. Kaufman, G. A. Kaufman, and B. R. McMillan).
- 1999 Long-term dynamics of Elliot's short-tailed shrew (*Blarina hylophaga*): effects of precipitation, fire, and temperature. American Society of Mammalogists, Seattle, WA. (R. S. Matlack, G. A. Kaufman, D. W. Kaufman, and B. R. McMillan).
- 1999 Autumn abundance of Elliot's short-tailed shrew (*Blarina hylophaga*) in tallgrass prairie: abiotic factors and long-term temporal patterns. Ecological Society of America, Spokane, WA. (R. S. Matlack, G. A. Kaufman, D. W. Kaufman, and B. R. McMillan).
- 2000 Effects of grazing by bison and cattle on small mammals in tallgrass prairie. American Society of Mammalogists, Durham, NH. (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 2000 Effects of season of fire on small mammals in tallgrass prairie. American Society of Mammalogists, Durham, NH. (B. R. McMillan, G. A. Kaufman, D. W. Kaufman, R. S. Matlack, and R. L. Rehmeier).
- 2000 Importance of long-term, multiple-place studies: population and community aspects of small mammals in tallgrass prairie. LTER All Scientists Meeting, Snowbird, UT. (G. A. Kaufman, D. W. Kaufman, D. M. Kaufman, B. R. McMillan, R. S. Matlack, R. L. Rehmeier, and A. W. Reed; Poster).
- 2001 Predicting the occurrence of short-tailed shrews in tallgrass prairie by using a logistic model. American Society of Mammalogists, Missoula MT. (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 2002 Influence of shrub invasion on a community of small mammals in tallgrass prairie. American Society of Mammalogists, Lake Charles, LA. (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 2003 Small mammals of the interface of the Llano Estacado and the Escarpment: preliminary results. American Society of Mammalogists, Lubbock, TX. (R. S. Matlack, G. T. Lewellen, K. L. Gallagher, and M. Lloyd).

- 2003 A survey of small mammals with habitat associations at Wildcat Bluff Nature Center, Amarillo, TX. American Society of Mammalogists, Lubbock, TX. (G. T. Lewellen, R. S. Matlack, K. L. Gallagher, and D. P. Walker).
- 2004 Relationships between topography, vegetation and small mammals in Palo Duro Canyon. American Society of Mammalogists, Arcata, CA. (G. T. Lewellen, R. S. Matlack, K. L. Gallagher, R. A. Spruance and D. P. Walker).
- 2004 Ecology of small mammals in the canyonlands of the Texas Panhandle. American Society of Mammalogists, Arcata, CA. (R. S. Matlack, G. T. Lewellen, K. L. Gallagher, D. P. Walker and R. A. Spruance).
- 2004 Small mammals and seasonal fires: species response to post-fire conditions. American Society of Mammalogists, Arcata, CA. (G. A. Kaufman, D. W. Kaufman, R. L. Rehmeier, A. W. Reed, B. R. McMillan and R. S. Matlack).
- 2005 Small mammals and seasonal fire: community response to post-fire conditions. American Society of Mammalogists, Springfield, MO. (G. A. Kaufman, D. W. Kaufman, D. M. Kaufman, A. W. Reed, B. R. McMillan, R. S. Matlack, and R. L. Rehmeier).
- 2005 Shrub invasion in tallgrass prairie: influence of woody vegetation on small mammals. American Society of Mammalogists, Springfield, MO. (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 2005 The influence of juniper patch characteristics on the small mammal community of Palo Duro Canyon. American Society of Mammalogists, Springfield, MO. (G. T. Lewellen, R. S. Matlack, K. L. Gallagher, M. Lange, and J. Owens).
- 2008 Ecological study of bats in the Texas panhandle. American Society of Mammalogists, Brookings, SD. (T. Hartline and R. S. Matlack).
- 2008 Seasonal variation in the size of a colony of free-tailed bats. American Society of Mammalogists, Brookings, SD. (R. S. Matlack, T. Hartline, N. Montacer, and A. Carrano).
- 2008 Small mammal response to varying amounts of woody vegetation in shortgrass prairie. American Society of Mammalogists, Brookings, SD. (C. L. Cox and R. S. Matlack).
- 2008 Ecology of a mesocarnivore community in Palo Duro Canyon. American Society of Mammalogists, Brookings, SD. (N. Montacer, R. S. Matlack, and A. Carrano).
- 2009 Seasonal activity of bats in Palo Duro Canyon (Texas): Mist netting and acoustic monitoring. American Society of Mammalogists, Fairbanks, AK. (T. D. Hartline and R. S. Matlack).
- 2009 Wind development and major bat roosts in the Texas Panhandle. American Society of Mammalogists, Fairbanks, AK. (R. S. Matlack, J. Mashburn, B. Brooks, and T. D. Hartline).
- 2009 Bat use of artificial water sources: Influence of surface area, water depth, and adjacent vegetation. American Society of Mammalogists, Fairbanks, AK. (S. L. Jackrel and R. S. Matlack).

- 2009 Small mammals in shortgrass prairie in Texas: Composition, abundance and dynamics. American Society of Mammalogists, Fairbanks, AK. (W. J. Priesmeyer, R. S. Matlack, C. Hathaway, and A. Bogrand).
- 2009 Effects of prescribed burning and mesquite density on lark sparrow nest success. American Ornithologist Union, Philadelphia. (A. M. Long, W. E. Jensen, and R. S. Matlack).
- 2009 Leeward nest orientation in shrub-steppe birds of the southern Great Plains. American Ornithologist Union, Philadelphia. (L. A. Eaton, A. M. Long, W. E. Jensen, and R. S. Matlack).

PRESENTATIONS AT REGIONAL SCIENTIFIC MEETINGS:

- 1994 Preliminary results on survival and cause-specific mortality of swift foxes in western Kansas. Prairie States Ecology Conclave, Prairie State Park, Liberal, MO. (R. S. Matlack, L. B. Fox, and P. S. Gipson).
- 1996 Is cropland suitable habitat for swift foxes in western Kansas? 58th Midwest Fish and Wildlife Conference, Omaha, NE. (R. S. Matlack, P. S. Gipson, and D. W. Kaufman).
- 1997 Swift fox in rangeland and cropland in western Kansas: effects of habitat and gender on body size. Prairie States Ecology Conclave, Pittsburg, KS. (R. S. Matlack, P. S. Gipson, and D. W. Kaufman).
- 1997 Preliminary results on the effects of grazing by cattle and bison on small mammal abundance. Prairie States Ecology Conclave, Eureka Springs, AR (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 1998 Influence of abiotic factors on abundances of Elliot's short-tailed shrews (*Blarina hylophaga*) in tallgrass prairie. Southwestern Association of Naturalists, Albuquerque, NM. (R. S. Matlack, G. A. Kaufman, D. W. Kaufman, and B. R. McMillan).
- 1998 Response of small mammals to bison (*Bos bison*) grazing in tallgrass prairie. Sixteenth North American Prairie Conference, Kearney, NE. (R. S. Matlack, D. W. Kaufman, G. A. Kaufman, and B. R. McMillan).
- 1998 Importance of long-term, large space studies: examples from small mammals in tallgrass prairie. Sixteenth North American Prairie Conference, Kearney, NE. (D. W. Kaufman, G. A. Kaufman, D. M. Kaufman, B. R. McMillan, R. S. Matlack, and R. L. Rehmeier; Poster).
- 2000 Deer mice in tallgrass prairie: the influence of grazing by native and introduced ungulates. Central Plains Society of Mammalogists, Emporia, KS. (R. S. Matlack, G. A. Kaufman, D. W. Kaufman).
- 2001 A spatially explicit model of occurrence of short-tailed shrews in tallgrass prairie. Southwestern Association of Naturalists, Hays, KS. (R. S. Matlack, G. A. Kaufman, D. W. Kaufman).
- 2004 Evaluating the influence of topography on juniper-oak woodlands and small mammals in Palo Duro Canyon using GIS. Southwestern Association of Naturalists, San Antonio, TX. (G. T. Lewellen, R. S. Matlack, K. L. Gallagher, R. A. Spruance, and D. P. Walker).

- 2004 Ecology of the Palo Duro mouse and other small mammals in the canyonlands of the Texas Panhandle. Southwestern Association of Naturalists, San Antonio, TX. (R. S. Matlack, G. T. Lewellen, D. P. Walker, R. A. Spruance, and K. L. Gallagher).
- 2005 Small mammals and seasonal fires: species responses to post-fire conditions. Southwestern Association of Naturalists, Huntsville, TX. (G. A. Kaufman, D. W. Kaufman, R. L. Rehmeier, A. W. Reed, B. R. McMillan, and R. S. Matlack).
- 2005 Small mammals in the canyons of the Texas Panhandle. Southwestern Association of Naturalists, Huntsville, TX. (R. S. Matlack, G. T. Lewellen, K. L. Gallagher, J. A. Owens, S. D. Grant, and K. G. Coffee).
- 2007 Monitoring the number of free-tailed bats roosting in an abandoned railroad tunnel. Southwestern Association of Naturalists, Stephenville, TX. (R. S. Matlack, A. Carrano, T. Hartline, and N. Montacer)
- 2007 A survey of carnivores in Palo Duro Canyon with emphasis on ringtails (*Bassariscus astutus*). Southwestern Association of Naturalists, Stephenville, TX. (N. Montacer, R. S. Matlack, A. Carrano, and T. Hartline).
- 2008 Mesocarnivores in Palo Duro Canyon: a surprising abundance of ringtails. Central Plains Society of Mammalogists, Warrensburg, MO. (N. Montacer and R. S. Matlack).
- 2009 Composition, abundance and dynamics of small mammals in shortgrass prairie in the Texas Panhandle. Central Plains Society of Mammalogists, Emporia, KS. (W. J. Priesmeyer, R. S. Matlack, C. Hathaway, and A. Bogrand).
- 2009 Home range size and tree selection of North American porcupines in the Texas panhandle. Central Plains Society of Mammalogists, Emporia, KS. (D. K. Montgomery, J. Trammell, and R. S. Matlack).
- 2009 Bat activity and topography: potential for conflict between bats and wind energy in the Texas Panhandle. Central Plains Society of Mammalogists, Emporia, KS. (K. B. Ganow and R. S. Matlack).

PRESENTATIONS AT STATE OR LOCAL SCIENTIFIC MEETINGS:

- 1995 Survival and mortality factors of swift foxes in western Kansas. Kansas Chapter, The Wildlife Society, Wildwood, KS. (R. S. Matlack, L. B. Fox, and P. S. Gipson).
- 1997 Variation in use of small mammals by the long-eared owl (*Asio otus*). Kansas Mammal Society, Emporia, KS. (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 1997 Responses of small mammals to seasonal burns: some initial observations and thoughts. 9th Annual Konza Prairie LTER Workshop, Manhattan, KS. (D. W. Kaufman, G. A. Kaufman, B. R. McMillan, and R. S. Matlack).
- 1997 KS-GAP: The vertebrate layers in Kansas. 24th Annual Meeting of the Kansas Herpetological Society, Wichita, KS. (N. M. Gerlanc, G. A. Kaufman, R. S. Matlack, M. Wong, and J. F. Cully; Poster).
- 1998 KS-GAP: progress on the vertebrate layer in Kansas. Kansas Academy of

- Science, Wichita, KS. (G. A. Kaufman, J. F. Cully, Jr., R. S. Matlack, N. M. Gerlanc, and M. Wong; Poster).
- 1998 Temporal variation in abundance of short-tailed shrews (*Blarina hylophaga*) in tallgrass prairie: the effect of abiotic factors. Kansas Academy of Science, Wichita, KS. (R. S. Matlack, D. W. Kaufman, G. A. Kaufman, and B. R. McMillan; Poster).
- 1998 Influence of abiotic factors on population dynamics of Elliot's short-tailed shrews (*Blarina hylophaga*) in tallgrass prairie. 10th Konza Prairie LTER Workshop, Kansas State University, Manhattan. (R. S. Matlack, D. W. Kaufman, G. A. Kaufman, and B. R. McMillan).
- 1999 KS-GAP: Progress on the amphibian and reptile layer in Kansas. Kansas Herpetological Society Silver Anniversary Meeting, Lawrence, KS. (N. M. Gerlanc, R. S. Matlack, G. A. Kaufman, and J. F. Cully, Jr.; Poster).
- 2000 Influence of grazing by bison and cattle on small mammals in annually burned tallgrass prairie. 12th Konza Prairie LTER Workshop, Kansas State University, Manhattan. (R. S. Matlack, D. W. Kaufman, and G. A. Kaufman).
- 2002 Reptiles in an agricultural landscape: use of GIS and road-survey data. Ohio Academy of Science, Capital University, Columbus, OH (R. S. Matlack and R. L. Rehmeier).
- 2002 Ecology and schooling behavior of fishes in reef and blue hole habitats. Ohio Academy of Science, Capital University, Columbus, OH (J. M. Nicol and R. S. Matlack).
- 2003 Small mammals of Wildcat Bluff Nature Center, Amarillo: a survey and habitat associations. Texas Society of Mammalogists Meeting, Junction, Texas. (K. L. Gallagher, R. S. Matlack, G. T. Lewellen, and S. Patry).
- 2004 Small Mammals of Palo Duro Canyon State Park: Community Composition and Habitat Associations. Annual Meeting, Texas Chapter of The Wildlife Society, Kerrville, Texas. (R. A. Spruance, D. P. Walker, G. T. Lewellen, R. S. Matlack and K. L. Gallagher).
- 2004 The influence of topography on juniper woodlands and small mammals in Palo Duro Canyon: a GIS approach. Texas Society of Mammalogists Meeting, Junction, Texas. (G. T. Lewellen, R. S. Matlack, K. L. Gallagher, D. P. Walker, and R. A. Spruance).
- 2004 Noteworthy records of prairie voles and other small mammals from the northeast panhandle of Texas. Texas Society of Mammalogists Meeting, Junction, Texas. (M. W. Poole and R. S. Matlack).
- 2004 Reptiles in an Agricultural Landscape: Use of GIS and Road-survey Data. Kansas Herpetological Society Meeting, Manhattan, Kansas (R. L. Rehmeier and R. S. Matlack).
- 2005 Chronology of use of playas in the Texas Panhandle by waterfowl and shorebirds. Texas Chapter, The Wildlife Society Meeting, Amarillo, Texas (L. J. Baar, R. B. Barron, W. P. Johnson, and R. S. Matlack).
- 2005 Ecology of small mammals in the canyonlands of the southern Great Plains.

- Texas Chapter, The Wildlife Society Meeting, Amarillo. (R. S. Matlack, K. L. Gallagher, G. T. Lewellen, J. A. Owens, and S. D. Grant).
- 2006 Influence of Woody Vegetation on Small Mammals in Tallgrass Prairie. Annual Meeting, Texas Chapter, The Wildlife Society, South Padre Island. (R. S. Matlack, G. A. Kaufman, and D. W. Kaufman).
- 2006 Waterfowl and shorebird use of playas in the Panhandle of Texas. Annual Meeting, Texas Chapter, The Wildlife Society, South Padre Island. (L. J. Baar, R. S. Matlack, W. P. Johnson & R. B. Barron).
- 2007 A survey of bats and roost sites in Palo Duro Canyon State Park. Annual Meeting, Texas Chapter, The Wildlife Society, Beaumont. (T. Hartline, R. S. Matlack, N. Montacer, R. T. Kazmaier, and A. Carrano).
- 2007 Monitoring the number of free-tailed bats roosting in an abandoned railroad tunnel. Annual Meeting, Texas Chapter, The Wildlife Society, Beaumont. (R. S. Matlack, A. Carrano, T. Hartline, and N. Montacer).
- 2008 Ecology of the Palo Duro mouse and other small mammals in Palo Duro Canyon. Texas Wildlife Diversity Conference, Houston. (R.S. Matlack).
- 2008 Bats of Palo Duro Canyon: species, activity and reproduction. Annual Meeting, Texas Chapter, The Wildlife Society, San Antonio. (T. Hartline and R. S. Matlack).
- 2008 Temporal variation in the size of a colony of free-tailed bats. Annual Meeting, Texas Chapter, The Wildlife Society, San Antonio. (R. S. Matlack T. Hartline, N. Montacer and A. Carrano).
- 2008 Use of habitat by mesocarnivores in Palo Duro Canyon. Annual Meeting, Texas Chapter, The Wildlife Society, San Antonio. (N. Montacer, R. S. Matlack and A. Carrano).
- 2008 Influence of woody vegetation on small mammals in shortgrass prairie. Annual Meeting, Texas Society of Mammalogists, Junction, Texas. (C. Cox and R. S. Matlack; Winner, Best Undergraduate Oral Presentation, Texas Society of Mammalogists).
- 2008 Negative effects of mesquite density on Lark Sparrow nest success. Kansas Ornithological Society, Hays, KS. (Ashley M. Long, W. E. Jensen, and R. S. Matlack)
- 2009 Small mammal response to woody vegetation in tallgrass and shortgrass prairie. Annual Meeting, Texas Chapter, The Wildlife Society, Lubbock. (R. S. Matlack and Cassie L. Cox).
- 2009 Acoustic monitoring of bat activity in Palo Duro Canyon State Park. Annual Meeting, Texas Chapter, The Wildlife Society, Lubbock. (Tamera D. Hartline and R. S. Matlack)
- 2009 Negative effects of mesquite density on Lark Sparrow nest success. 141st Annual Meeting of the Kansas Academy of Science, Topeka, KS. (Long, A. M., W. E. Jensen, and R. S. Matlack)

- 2009 Effect of prescribed burning on the success and brood parasitism of Lark Sparrow nests in southern Great Plains shortgrass prairie. Annual Meeting of the Kansas Ornithological Society, Hutchinson, KS. (Long, A. M., W. E. Jensen, and R. S. Matlack)

PUBLICATIONS:

- Gipson, P. S., R. S. Matlack, D. P. Jones, H. J. Abel, and A. E. Hynek. 1995. Feral pigs, *Sus scrofa*, in Kansas. Pp. 93-95 in Proceedings of the Fourteenth North American Prairie Conference: Prairie Biodiversity (D. C. Hartnett, ed.). Kansas State University, Manhattan, KS.
- McMillan, B. R., D. W. Kaufman, G. A. Kaufman, and R. S. Matlack. 1997. Mammals of Konza Prairie: new observations and an updated species list. The Prairie Naturalist, 29:263-271.
- Gipson, P. S., J. K. Veatch, R. S. Matlack, and D. P. Jones. 1999. Health status of a recently discovered population of feral swine in Kansas. Journal of Wildlife Diseases, 35:624-627.
- Matlack, R. S., P. S. Gipson, and D. W. Kaufman. 2000. The swift fox in cropland and rangeland: effects on abundance, mortality, and body size. The Southwestern Naturalist, 45:221-225.
- Matlack, R. S., D. W. Kaufman, and G. A. Kaufman. 2001. Influence of grazing by bison and cattle on small mammals in burned tallgrass prairie. The American Midland Naturalist, 146:361-368.
- Matlack, R. S., D. W. Kaufman, and R. E. Charlton. 2001. First record of the cinereus shrew for Riley County, Kansas. The Prairie Naturalist. 33(2):107-108.
- Matlack, R. S., G. A. Kaufman, D. W. Kaufman, and B. R. McMillan. 2002. Long-term dynamics of Elliot's short-tailed shrew (*Blarina hylophaga*) in tallgrass prairie. Journal of Mammalogy, 83(1): 280-289.
- Matlack, R. S., and R. L. Rehmeier. 2002. Status of the western diamondback rattlesnake (*Crotalus atrox*) in Kansas. The Southwestern Naturalist. 47(2): 312-314.
- Rehmeier, R. L., and R. S. Matlack. 2004. *Thamnophis sirtalis* Diet. Journal of Kansas Herpetology. 11:15.

- Matlack, R. S., R. L. Rehmeier, B. R. McMillan, D. W. Kaufman, and G. A. Kaufman. 2006. Unusual disturbance of small-mammal live traps by American crows. *Transactions of the Kansas Academy of Sciences*. 109:242-244.
- Poole, M. W. and R. S. Matlack. 2007. Prairie vole and other small mammals from the Texas Panhandle. *Southwestern Naturalist*. 52(3):442-445.
- Matlack, R.S., D. W. Kaufman, and G. A. Kaufman. 2008. Influence of woody vegetation on small mammals in tallgrass prairie. *American Midland Naturalist* 160:7-19.
- Baar, L., R. S. Matlack, W. P. Johnson, and R. B. Barron. 2008. Migration chronology of non-breeding waterfowl in the Southern High Plains of Texas. *Waterbirds* 31:394-401.
- Johnson, W. P., L. Baar, R. S. Matlack, and R. B. Barron. 2009. Hatching chronology of ducks using playas in the Southern High Plains of Texas. *American Midland Naturalist*. *Accepted*.
- Jackrel, S. L., and R. S. Matlack. 2009. Influence of Surface Area, Water Level, and Adjacent Vegetation on Bat Use of Artificial Water Sources. *American Midland Naturalist*. *Accepted*.