

Melissa B. Meierhofer
PhD Candidate and Finland Fulbright Scholar

Wildlife and Fisheries Sciences
 Texas A&M University
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Education

- Ph.D. Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX.
Advisor: Dr. Michael Morrison. Title: Texas winter bats and roosts prior to the arrival of white-nose syndrome. **Anticipated August 2020.**
- M.S. Animal Behavior, Bucknell University, Lewisburg, PA.
Advisor: Dr. DeeAnn Reeder. Title: Physiological consequences of white-nose syndrome. 2013.
- B.A. Psychobiology, Ripon College, Ripon, WI.
Advisor: Dr. Memuna Khan. McNair Scholar Undergraduate Research. Title: Fecal testosterone metabolites, begging behavior, and growth of Eastern bluebird (*Sialia sialis*) nestlings. 2011.
 Maymester, Ethology of Killer Whales, San Juan Island, WA. 2010.

Current position(s)

Visiting Research Fellow, Metazoa Team, Finnish Museum of Natural History, LUOMUS, University of Helsinki. Supervisor: Dr. Thomas Lilley. August 2019 – present.

Research Associate, Natural Resources Institute, Texas A&M University. Supervisor Dr. Brian Pierce. November 2015 – present.

Grants received

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| 2020 | Travel Grant, University of Helsinki (\$939) |
| 2018–2021 | Texas Parks and Wildlife Department, Sub-contract, Co-author* (\$199,123) |
| 2017–2019 | U.S. Fish and Wildlife Service, Co-author* (\$119,000) |
| 2017–2019 | FightWNS (\$3,100) |
| 2017–2018 | National Speleological Society, WNS Rapid Response Fund Grant (\$4,800) |
| 2017–2018 | Texas EcoLab (\$2,333) |
| 2016–2019 | Texas Aggie Graduate Grant, Texas A&M University (\$1,500/sem; total \$7,500) |
| 2013 | Travel Grant, Bucknell University (\$300) |

*Graduate students were not allowed to be PI's

Awards and honors

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| 2019–2020 | Fulbright U.S. Student Program (\$17,056) |
| 2019–2020 | Philanthropic Educational Organization (P.E.O.) Scholar (\$15,000) |
| 2019 | Tom Slick Graduate Research Fellowship, Texas A&M University (\$30,552) |
| 2018 | WFSC Graduate Student Scholarship, Texas A&M University (\$390) |
| 2012 | Best poster presentation, Organization for Bat Conservation Award |
| 2011 | Best senior poster presentation, Ripon College |
| 2007–2011 | Founders Scholarship, Ripon College (\$7,000/yr) |
| 2007–2011 | Art Scholarship, Ripon College (\$5,000/yr) |
| 2007 | Alumni Scholarship, Ripon College (\$2,000) |

Peer-reviewed publications

Meierhofer, M.B., J.S. Johnson, S.J. Leivers, B.L. Pierce, J.E. Evans, and M.L. Morrison. 2019. Winter habitats of bats in Texas. *PLOS One* 14:e0221590. doi: 10.1371/journal.pone.0220839.

Meierhofer, M.B., S.J. Leivers R. Fern, L.K. Wolf, J.H. Young Jr., B.L. Pierce, J.W. Evans, and M.L. Morrison. 2019. Structural and environmental predictors of tri-colored bat presence and abundance in Texas culverts. *Journal of Mammalogy* 100:1274–1281.

Meierhofer, M.B., H.-H. Wang, W.E. Grant, J.H. Young Jr., L.H. Johnston, L.K. Wolf, J.W. Evans, B.L. Pierce, J.M. Szewczak, and M.L. Morrison. 2018. Use of box beam bridges as day roosts by Mexican free-tailed bats (*Tadarida brasiliensis*) in Texas. *Southeastern Naturalist* 17:605–615.

Meierhofer, M.B., J.S. Johnson, K.A. Field, S.S. Lumadue, A. Kurta, J.A. Kath, and D.M. Reeder. 2018. Bats recovering from white-nose syndrome elevate metabolic rate during spring wing healing. *Journal of Wildlife Disease* doi:10.7589/2017-08-195.

Meierhofer, M.B., and K.D. Demere. 2017. Leucism in two tri-colored bats (*Perimyotis subflavus*) in Texas. *Southeastern Naturalist* 16:N43–N45.

Demere, K.D., **M.B. Meierhofer**, M.L. Morrison, B.L. Pierce, J.M. Szewczak, and L.K. Ammerman. 2017. Noteworthy records for six species of bats from 13 Texas counties and the first voucher specimens from *Pseudogymnoascus destructans* positive sites. *Occasional Papers, Museum of Texas Tech University* 351:1–10.

Moore, M.S., K.A. Field, M.J. Behr, G.G. Turner, M.E. Furze, D.W.F. Stern, P.R. Allegra, S.A. Bouboulis, C.D. Musante, M.E. Vodzak, M.E. Biron, **M.B. Meierhofer**, W.F. Frick, J.T. Foster, D. Howell, J.A. Kath, A. Kurta, G. Nordquist, J.S. Johnson, T.M. Lilley, B.W. Barrett, and D.M. Reeder. 2017. Energy conserving thermoregulatory patterns and lower disease severity in a bat resistant to the impacts of white-nose syndrome. *Journal of Comparative Physiology B* doi:10.1007/s00360-017-1109-2.

Johnson, J.S., D.M. Reeder, T. Lilley, G.Á. Czirják, C. Voight, J.W. McMichael III, **M.B. Meierhofer**, S.S. Lumadue, A.J. Altmann, M.A. Toro, and K.A. Field. 2015. Antibodies to *Pseudogymnoascus destructans* are not sufficient for protection against white-nose syndrome. *Ecology and Evolution* 5:2203–2214.

Johnson, J.S., D. M. Reeder, J. W. McMichael III, **M. B. Meierhofer**, D. W. F. Stern, S. S. Lumadue, L. E. Sigler, H. D. Winters, M. E. Vodzak, A. Kurta, J. A. Kath, and K. A. Field. 2014. Host, pathogen, and environmental characteristics predict white-nose syndrome mortality in captive little brown bats (*Myotis lucifugus*). *PLOS ONE* 9:e112502. doi:10.1371/journal.pone.0112502.

Peer-reviewed publications in review

Leivers, S.J., **M.B. Meierhofer**, B.L. Pierce, J.W. Evans, and M.L. Morrison. External temperature and distance from entrance influences microclimate temperature of cave and culvert roosting tri-colored bats (*Perimyotis subflavus*).

Published artwork

Scientific illustration for a figure published in: Reeder, D.M., K.M. Helgen, M.E. Vodzak, D.P. Lunde, and I. Ejotre. A new genus for a rare African vespertilionid bat: insights from South Sudan. 2013. ZooKeys 285:89-115.

Teaching and tutoring experience

- 2018 Undergraduate Research Mentor, Texas A&M University. 10-week summer session undergraduate research project.
- 2012 Teaching Assistant, Bucknell University. Courses: Anatomy and Physiology, Plant Systematics.
- 2010–2011 Teaching Assistant, Ripon College. Course: Ecology.
- 2009 Tutor, Ripon College. Course: Introduction to Psychology.

Professional memberships and service

Steering Committee Member: 15th European Bat Research Symposium

Delegate: Graduate and Professional Student Counsel, Texas A&M University

Reviewer: Northeastern Naturalist, Journal of Wildlife Management and Monographs

Presentation Judge: North American Joint Bat Working Group Meeting & 28th Annual Colloquium on the Conservation of Mammals in the Southeastern U.S.

Wildlife Monitor: Bluebird Restoration Association of Wisconsin

Volunteer: Study skin preparation (birds and mammals), Field Museum, Chicago, IL.

Professional society memberships, North American Society for Bat Research, National Speleological Society, Texas Cave Management Association, Southwest Section of the Wildlife Society, Texas Chapter of the Wildlife Society

Outreach

- 2018 Skype a Scientist, Texas A&M University. Taught a 3rd grade class in Nevada about bats.
- 2018, 2019 Texas BioBlitz Bat Walk Leader, Texas A&M University.

Training and certifications

- 2018 National Cave Rescue Commission Level 1 Cave Rescue Certification
- 2016 Bat Survey Solutions Combined Field Surveys Technique Training

Invited seminars

Viherlaakson Koulu, Espoo, Finland. 18 September 2019 and 9 October 2019. Title: School life in the United States.

- Edward Jones Financial Group, College Station, TX. 12 September 2018. Title: The importance of bats to humans and the threats they face.
- Brazos Texas Master Naturalist Meeting, College Station, TX. 10 March 2017. Title: Texas bats and white-nose syndrome.
- Annual Texas Speleological Association Spring Convention, Rocksprings, TX. April 22–24, 2016. Title: Going deep: the distances we go for bats.
- Ripon College Senior Seminar Class, Ripon, WI. 12 February 2014. Title: Physiological consequences of white-nose syndrome.
- Mifflinburg Garden Tour, Mifflinburg, PA. June 2012. Title: Bats in your backyard.
- Public Library of Union County, Lewisburg, PA. 21 June 2012. Title: Bats of the world.
- Oshkosh Ornithological Society, Oshkosh, WI. August 2010. Title: Testosterone and behavior of Eastern Bluebird nestlings.
- Ripon Rotary Club, Ripon, WI. May 2010. Title: Attracting Eastern Bluebirds to the box.
- Oshkosh Ornithological Society, Oshkosh, WI. August 2009. Title: Birds of North America: The Eastern Bluebird (*Sialia sialis*).

Professional conferences

- MB Meierhofer, SL Leivers, R Fern, LK Wolf, BL Pierce, JW Evans, and ML Morrison. 2019. Structural and environmental predictors of tri-colored bat presence and abundance in Texas. 55th Annual Meeting of the Texas Chapter of The Wildlife Society, February 21–23, 2019. Montgomery, TX.
- MB Meierhofer, R Fern, LK Wolf, BL Pierce, JW Evans, and ML Morrison. 2018. Culvert use of overwintering tri-colored bats in Texas. 48th Annual North American Society for Bat Research, October 23–28, 2018. Puerto Vallarta, Mexico.
- MB Meierhofer, BL Pierce, JM Szewczak, JW Evans, and ML Morrison. 2017. Baseline data on overwintering bats and roosts in Texas. Poster. North American Joint Bat Working Group Meeting and 28th Annual Colloquium on the Conservation of Mammals in the Southeastern U.S., March 27–29, 2018. Roanoke, VA.
- MB Meierhofer, BL Pierce, JM Szewczak, JW Evans, and ML Morrison. 2018. Baseline data on overwintering bats and roosts in Texas: An update. Annual Texas Chapter of the Wildlife Society, February 9–11, 2018. Dallas, TX.
- MB Meierhofer, BL Pierce, JM Szewczak, JW Evans, and ML Morrison. 2017. Baseline data on overwintering bats and roosts in Texas. Poster. 47th Annual North American Society for Bat Research, October 18–21, 2017. Knoxville, TN.
- MB Meierhofer, BL Pierce, JM Szewczak, JW Evans, and ML Morrison. 2017. Baseline data on overwintering bats and roosts in Texas. Poster. Annual Texas Chapter of the Wildlife Society, February 16–18, 2017. San Antonio, TX.

- MB Meierhofer, BL Pierce, JM Szewczak, JW Evans, and ML Morrison. 2016. Gathering baseline data on winter bats and roosts in Texas: How you can help. 17th Annual Texas Master Naturalist Meeting, October 21–23, 2016. Montgomery, TX.
- MB Meierhofer, JW Evans, BL Pierce, JM Szewczak, and ML Morrison. 2016. Gathering baseline data on overwintering bats and roosts in Texas. Poster. 46th Annual North American Society for Bat Research, October 12–15, 2016. San Antonio, TX.
- MB Meierhofer, JS Johnson, and DM Reeder. Physiological consequences of white-nose syndrome. 43rd annual North American Society for Bat Research, August 12–15, 2013. San Jose, Costa Rica.
- MB Meierhofer, M Pucciarello, C Butchkoski, G Turner, and DM Reeder. 2012. Reproduction in big brown bats: fitness in a post white-nose world. Poster. 42nd Annual North American Society for Bat Research, October 24–27, 2012. San Juan, Puerto Rico.
- MB Meierhofer. Fecal testosterone metabolites, begging behavior, and growth of Eastern Bluebird (*Sialia sialis*) nestlings. Poster. Ripon College Senior Symposium, April, 2011. AFO-COS-WOS Conference, March 8–13, 2011. Kearney, NE.
- MB Meierhofer. Parental care and growth in Eastern Bluebirds (*Sialia sialis*). Poster. 19th Annual Ronald E. McNair Scholars Research Conference, November 5–7, 2010. Delavan, WI.

Recent media coverage

- 2018** AgriLife Today. (July 2018). Interview. Skype A Scientist program lets NRI research associate connect to new audience.
- 2017** Popular Science. (Aug 2017). Interview. Hurricane Harvey's putting bats at risk-but help is on the way.
- Natural Resources Institute (July 2017). Blog Post. White-nose syndrome 101.
- Natural Resources Institute (NRI). (Mar 2017). Interview. NRI bat researchers help detect fungus that causes white-nose syndrome.
- Associated Press. (Mar 2017). Interview. Fungus potentially lethal to bats found in northwest Texas.
- The Wildlife Society. (Mar 2017). Interview White-nose fungus found in Texas
- Albuquerque Journal. (Mar 2017). Interview. Fungus potentially lethal to bats found in northwest Texas.
- High Plains/Midwest Ag Journal. (Jan 2017). Interview. Texas A&M institute sends up 'bat signal' for help from Texas landowners.
- Houston Public Media. (Jan 2017). Interview. Help a team of Texas researchers create a bat census.
- The Eagle. (Jan 2017). Interview. Bat researchers need public's help.
- 2016** Wild Wonderings. (Apr 2016). Blog Post. White-nose syndrome: Understanding the implications for Texas bats.