Andrea R. Litt

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Education

- ***Ph.D., Wildlife and Fisheries Science, Statistics*** minor, University of Arizona, 2007
  Dissertation: Effects of experimental fire and nonnative grass invasion on small mammals and insects
- ***M.S., Wildlife Ecology and Conservation***, University of Florida, 1999
  Thesis: Herpetofaunal responses to longleaf pine sandhill restoration treatments
- ***B.S., Zoology***, University of Wisconsin, 1995

Experience

- ***Professor*** *Department of Ecology, Montana State University, 2023-present*
- ***Director, Fish and Wildlife Ecology and Management Program*** *2021-present*
- ***Associate Professor*** *2016-23*
- ***Assistant Professor*** *2011-16*

  Develop and maintain comprehensive research (40%) and teaching programs (50%) with service to the university and profession (10%). At MSU, I have graduated 14 MS students (17 total, 3 from a previous institution), supervised 1 post-doc and 1 research associate, supervised >10 undergraduate research projects, and served on numerous graduate committees.

- ***Assistant Professor*** *Caesar Kleberg Wildlife Research Institute, Texas A&M University–Kingsville, 2009-10*

  Research (25%), teaching (25%), and statistical consulting (50%). I graduated 3 MS students, served on committees for 1 PhD and 1 MS student, and supervised 1 undergraduate research project.

- ***Post-Doctoral Research Associate*** *Colorado State University, 2008*

  Develop optimal strategies for selecting parameters for large-scale ecological monitoring programs

- ***Research Associate*** *University of AZ, School of Natural Resources, 2007*

  Assess efficiency of nationwide monitoring efforts for marsh birds

- ***Adjunct Lecturer*** *University of AZ, Dept. of Ecology & Evolutionary Biology, 2007*

  Sabbatical replacement for Mammalogy; lead lectures and labs, supervise teaching assistants

- ***Biostatistics Intern*** *BIO5 - Institute for Collaborative Research, 2006*

  Develop methods to improve estimates of abundance with sparse data

- ***Lecturer*** *University of AZ, School of Natural Resources, 2005 and 2006*

  Sabbatical replacement for graduate-level course in applied statistics; lead lectures and labs, supervise teaching assistant

Courses Taught

Montana State University (MSU), Department of Ecology

BIOO 475	***Mammalogy***, 3 units, undergraduate, fall semesters: 40-64 students/semester, lecture and 3-4 lab sections, spring semesters: 14 students/semester, lecture and 1 lab section (beginning in Spring 2026), 100% responsibility
WILD 504	***Wildlife-Habitat Relationships***, 3 units, graduate, spring semesters of even years, 8-10 students, lecture/discussions/hands-on analytical activities, focused on conceptual and quantitative content
Guest lectures	Introduction to Fish and Wildlife Ecology (WILD 201); Biodiversity Methods (ENSC 410/LRES 510); Foundations of Ecology and Management (BIOE 594); Community Ecology (BIOL 580)
Workshops	Strategies for Analyzing Fisheries Data, co-taught with Dr. Megan Higgs (Statistics, MSU), annual meeting of the MT Chapter of the American Fisheries Society, *2015*

Previous Courses

Montana State University, Department of Ecology

BIOB 170IN	***Principles of Biological Diversity***, 3 units, undergraduate, 200-325 students, lecture only, 33% responsibility, taught 4 times (offered every semester)
WILD 401R	***Capstone in Fish and Wildlife Ecology and Management***, 4 units, undergraduate, spring semesters, 26-78 students/semester, lecture and 2 lab sections, team taught, research/writing intensive course (designated by MSU as a Research CORE course), taught annually from 2015 to 2025

Texas A&M University – Kingsville (TAMUK), Department of Animal and Wildlife Sciences

RWSC 4383	***Ecology of Arid and Semi-Arid Lands***, 3 units, undergraduate, 36 students, lecture only, taught once
WSCI 6390	***Applied Regression Analysis***, 3 units, graduate, 19-21 students, lecture only, taught twice
WSCI 6390	***Estimation and Analysis of Wildlife Populations***, 3 units, graduate, 13 students, lecture and 1 computer lab section, taught once

University of Arizona

RNR 613	***Applied Biostatistics***, School of Natural Resources, 4 units, graduate, lecture and 2 computer lab sections, 50% responsibility, taught twice
ECOL 485/585	***Mammalogy***, Department of Ecology and Evolutionary Biology, 3 units, undergraduate and graduate, lecture and 2 lab sections, taught once

Invited Refereed Journal Articles (* = *graduate student*)

Levandowski, M. L.*, **A. R. Litt**, M. F. McKenna, S. Burson, and K. L. Legg. 2021. Multi-method biodiversity assessments from wetlands in Grand Teton National Park. Ecological Indicators 131:108205. https://www.sciencedirect.com/journal/ecological-indicators/special-issue/103RXWLVGZM) doi: 10.1016/j.ecolind.2021.108205 ***Invited contribution to a special issue***: Long-term monitoring of a species suite of Ecological Indicators: A coordinated conservation framework for the Greater Yellowstone Ecosystem.

Litt, A. R., and A. M. Ray. 2019. Surrogate Species: Piecing together the whole picture. Vital Signs - Monitoring Yellowstone's Ecosystem Health. Yellowstone Science 27(1):40-43. https://www.nps.gov/articles/surrogate-species-piecing-together-the-whole-picture.htm ***Invited contribution.***

Litt, A. R., and D. E. Pearson. 2013. Invasive plants and wildlife in the Intermountain West. Wildlife Society Bulletin 37:517-526. ***Invited contribution***.

Steidl, R. J., **A. R. Litt**, and W. J. Matter. 2013. Effects of plant invasions on wildlife in desert grasslands. Wildlife Society Bulletin 37:527-536. ***Invited contribution***.

Kahl, S. S.*****, S. E. Henke, M. A. Hall, **A. R. Litt**, G. Perry, and D. Britton. 2012. Examining a potential brown treesnake transport pathway: Shipments from Guam. Human-Wildlife Interactions 6:204-211. ***Invited contribution: special issue on brown treesnakes.***

Publications (* = graduate student, ** = undergraduate student)

In review

Gorman, K. M., J. J. Melhuish*****, **A. R. Litt**, and W. M. Ford. Variation in social network cohesion of an endangered bat (*Myotis septentrionalis*) in Montana. Behavioral Ecology and Sociobiology.

Waxe, J. A.*****, **A. R. Litt**, K. A. Cutting, and B. Sowell. Carry-over effects from winter mediate influences of breeding habitat: reproductive performance in an umbrella species. Ecosphere.

Accepted or Published

Melhuish, J. J.*****, **A. R. Litt**, H. Harris, and M. Borgreen. Accepted. Living on the edge: Habitat characteristics of northern myotis at the periphery of its distribution. Journal of Wildlife Management. doi: 10.1002/jwmg.70282

Loggers, E. A.*****, **A. R. Litt**, M. Haroldson, K. Gunther, and F. T. van Manen. 2025. Female and male grizzly bears differ in their responses to low-intensity recreation in a protected area. Journal of Wildlife Management 89: e70068: e70068. doi: 10.1002/jwmg.70068 ***Best Student Paper– The Wildlife Society 2026***

Bowersock, N. R.*****, **A. R. Litt**, M. A. Sawaya, K. A. Gunther, and F. T. van Manen. 2024. Spatial variation in black bear density on Yellowstone's Northern Range. Journal of Wildlife Management 88: e22497. doi: 10.1002/jwmg.22497

Hilty, S. L.*****, **A. R. Litt**, B. A. Maxell, R. A. Garrott, C. N. Gower, and L. Hanauska-Brown. 2024. Characterizing diurnal roosts of male Little Brown Myotis (*Myotis lucifugus*) during summer. Journal of Mammalogy 105:652-666. doi: 10.1093/jmammal/gyae022

Loggers, E. A.*****, **A. R. Litt**, F. T. van Manen, M. Haroldson, and K. Gunther. 2024. Grizzly bear responses to restrictions of recreation in Yellowstone National Park. Journal of Wildlife Management 88: e22527. doi: 10.1002/jwmg.22527

Bowersock, N. R.*****, H. Okada******, **A. R. Litt**, K. A. Gunther, and F. T. van Manen. 2022. Rub tree use and selection by bears in northern Yellowstone. Ursus 33:e7. doi: 10.2192/URSUS-D-21-00009.3

Lehman, C. P., Yarnall, M. J.*****, **A. R. Litt**, C. T. Rota, and J. J. Rotella. 2022. Factors influencing rate of decline in a Merriam's wild turkey population. Journal of Wildlife Management 86: e22240. doi: 10.1002/jwmg.22240

Litt, A. R., and D. E. Pearson. 2022. A functional ecology framework for understanding and predicting animal responses to plant invasion. Biological Invasions 24:2693–2705. 10.1007/s10530-022-02813-7

Bowersock, N. R.*, **A. R. Litt**, J. Merkle, K. A. Gunther, and F. T. van Manen. 2021. Responses of American black bears to spring resources. Ecosphere 12:e03773. doi: 10.1002/ecs2.3773

Cutting, K. A.*, J. J. Rotella, J. A. Waxe, A. O'Harra, S. R. Schroff, L. Berkley, M. Szczypinski, **A. R. Litt**, and B. K. Sowell. 2021. Resource allocation effects on the timing of reproduction in an avian habitat specialist. Ecosphere 12: e03700. doi: 10.1002/ecs2.3700

Hinderer, R. K.*, **A. R. Litt**, and M. McCaffery. 2021. Habitat selection by a threatened desert amphibian. Ecology and Evolution 11: 536-546. doi: 10.1002/ece3.7074

Mitchell, A. B.*, **A. R. Litt**, and F. Smith. 2021. Using locally-adapted seeds to restore native plants and arthropods after plant invasion and drought. Rangeland Ecology and Management 77:30-38.

Wright, W. J., K. M. Irvine, T. J. Rodhouse, and **A. R. Litt**. 2021. Spatial Gaussian processes improve multi-species occupancy models when range boundaries are uncertain and non-overlapping. Ecology and Evolution 11:8516-8527. doi: 10.1002/ece3.7629

Lula, E. S.*, B. Lowrey, K. M. Proffitt, **A. R. Litt**, J. A. Cunningham, C. J. Butler, and R. A. Garrott. 2020. Is habitat constraining bighorn sheep restoration? A case study. Journal of Wildlife Management 84:588–600. doi: 10.1002/jwmg.21823

Wright, W. J., K. M. Irvine, E. S. Almberg, and **A. R. Litt**. 2020. Modelling misclassification in multi-species acoustic data when estimating occupancy and relative activity. Methods in Ecology and Evolution 11:71-81. doi: 10.1111/2041-210X.13315

Yarnall, M. J.*, **A. R. Litt**, C. P. Lehman, and J. J. Rotella. 2020. Precipitation and reproduction are negatively associated with female turkey survival. Journal of Wildlife Management 84:1153-1163. doi: 10.1002/jwmg.21884

Banner, K. M., K. M. Irvine, T. J. Rodhouse, D. Donner, and **A. R. Litt**. 2019. Statistical power of dynamic occupancy models to detect temporal change: Informing the North American Bat Monitoring Program. Ecological Indicators 105:166.176.

Yarnall, M. J.*, **A. R. Litt**, and C. P. Lehman. 2019. Timing of vegetation sampling does not influence associations between visual obstruction and turkey nest survival in a montane forest. Ecology and Evolution 9:11791-11798. doi: 10.1002/ece3.5681

Bachen, D. A.*, **A. R. Litt**, and C. Gower. 2018. Simulating cheatgrass (*Bromus tectorum*) invasion decreases access to food resources for small mammals in sagebrush steppe. Biological Invasions 20:2301-2311. doi: 10.1007/s10530-018-1701-8

Banner, K. M., K. M. Irvine, T. J. Rodhouse, W. J. Wright, R. M. Rodriguez, and **A. R. Litt**. 2018. Improving geographically extensive acoustic survey designs for modeling species occurrence with imperfect detection and misidentification. Ecology and Evolution 8:6144-6156. doi: 10.1002/ece3.4162

Hinderer, R. K.*, **A. R. Litt**, and M. McCaffery. 2017. Movement of imperiled Chiricahua leopard frogs during summer monsoons. Journal of Herpetology 51:497-503. doi: 10.1670/16-093

Turnock, B. Y.*, **A. R. Litt**, J. Vore, and C. Hammond. 2017. Habitat characteristics of the hoary marmot: Assessing distribution limitations in Montana. Ecosphere 8:e10977. doi: 0.1002/ecs2.1977

Andrews, T. M.*, B. B. Shepard, **A. R. Litt**, C. G. Kruse, M. L. Nelson, P. Clancey, A. V. Zale, M. L. Taper, and S. T. Kalinowski. 2016. Performance of juvenile Cutthroat Trout translocated as embryos from five populations into a common habitat. North American Journal of Fisheries Management 36:926-941. doi: 10.1080/02755947.2016.1165774

Bielfelt, B.*, and **A. R. Litt**. 2016. Effects of increased *Heteropogon contortus* (tanglehead) on rangelands: The tangled issue of native invasive species. Rangeland Ecology and Management 69:508-512. doi:

10.1016/j.rama.2016.06.006

Block, W. M., L. M. Conner, P. A. Brewer, P. Ford, J. Haufler, **A. Litt**, R. E. Masters, L. R. Mitchell and J. Park. 2016. Effects of prescribed fire on wildlife and wildlife habitat in selected ecosystems of North America. The Wildlife Society Technical Review 16-01. The Wildlife Society, Bethesda, Maryland, USA. http://wildlife.org/wp-content/uploads/2014/05/TechManual16-01FINAL.pdf

Kenison, E.*, **A. R. Litt**, D. S. Pilliod, and T. E. McMahon. 2016a. Larval long-toed salamanders incur nonconsumptive effects to morphology and life-history traits in the presence of introduced trout. Ecosphere 7:e01258. doi: 10.1002/ecs2.1258

Kenison, E.*, **A. R. Litt**, D. S. Pilliod, and T. E. McMahon. 2016b. The role of habitat complexity in predator-prey dynamics between an introduced fish and larval long-toed salamanders (*Ambystoma macrodatylum*). Canadian Journal of Zoology 94:243-249. doi: 10.1139/cjz-2015-0160

Litt, A. R., and R. J. Steidl. 2016. Complex demographic responses of a common small mammal to a plant invasion. Wildlife Research 43:304-312. doi:10.1071/WR15147

Mitchell, A. B.*, and **A. R. Litt**. 2016. Nonnative plant shifts arthropod functional groups following drought. Biological Invasions 18:1351-1361. doi: 10.1007/s10530-016-1072-y

Zabransky, C. J.*, D. G. Hewitt, R. W. DeYoung, S. S. Gray, C. Richardson, **A. R. Litt**, and C. A. DeYoung. 2016. A detection probability model for aerial surveys of mule deer. *Journal of Wildlife Management* 80:1379-1389. doi: 10.1002/jwmg.21143

Ray, A., A. Sepulveda, B. Hossack, D. Patla, D. Thoma, R. Al-Chokhachy, and **A. R. Litt**. 2015. Monitoring greater Yellowstone ecosystem wetlands: Can long-term monitoring help us understand their future? Yellowstone Science 23(1):44-53. *Special Issue on Ecological Implications of Climate Change on the Greater Yellowstone Ecosystem*

Litt, A. R., E. E. Cord*, T. E. Fulbright, and G. L. Schuster. 2014. Effects of invasive plants on arthropods. Conservation Biology 28:1532-1549.

Andrews, T. M.*, B. B. Shepard, **A. R. Litt**, C. G. Kruse, A. V. Zale, and S. T. Kalinowski. 2013. Juvenile movement among different populations of cutthroat trout introduced as embryos to vacant habitat. North American Journal of Fisheries Management 33:795-805.

Donohue, R. N.*, D. G. Hewitt, T. E. Fulbright, C. A. DeYoung, **A. R. Litt**, and D. A. Draeger. 2013. Aggressive behavior in white-tailed deer at concentrated food sites as affected by population density. Journal of Wildlife Management 77:1401-1408.

Fulbright, T. E., A. Lozano-Cavazos*, D. C. Ruthven, and **A. R. Litt**. 2013. Plant and small vertebrate composition and diversity 36-39 years after root plowing. Rangeland Ecology and Management 66:19-25.

Kalinowski, S. T., M. J. Leonard, T. M. Andrews*, and **A. R. Litt.** 2013. Six classroom exercises for teaching natural selection to undergraduate biology students. CBE Life Sciences Education 12:483-493.

Steen, D. A., L. L. Smith, L. M. Conner, **A. R. Litt**, L. Provencher, J. K. Hiers, S. Pokswinski, and C. Guyer. 2013. Reptile assemblage response to restoration of fire-suppressed longleaf pine sandhills. Ecological Applications 23:148-158.

Steen, D. A., L. L. Smith, G. Morris, L. M. Conner, **A. R. Litt**, S. Pokswinski, and C. Guyer. 2013. Response of *Aspidoscelis sexlineatus* (six-lined racerunner) to habitat restoration in fire-suppressed *Pinus palustris* (longleaf pine) sandhills. Restoration Ecology 21:457-463.

Steidl, R. J., C. J. Conway, and **A. R. Litt**. 2013. Power to detect trends in abundance of secretive marsh birds: Effects of species traits and sampling effort. Journal of Wildlife Management 77:445-453.

Ayala-A, F.*, J. A. Ortega-S, T. E. Fulbright, G. A. Rasmussen, D. L. Drawe, D. R. Synatzke, and **A. R. Litt**. 2012. Long-term effects of aeration and fire on invasion of exotic grasses in mixed-brush plant communities. Rangeland Ecology and Management 62:153-159.

Litt, A. R., and R. J. Steidl. 2011. Interactive effects of fire and nonnative plants on small mammals in grasslands. Wildlife Monographs 176:1-31. ***Outstanding Monograph – The Wildlife Society 2012***

Litt, A. R., and R. J. Steidl. 2010. Insect assemblages change along a gradient of invasion by a nonnative grass. Biological Invasions 12:3449-3463.

Litt, A. R., and R. J. Steidl. 2010. Improving estimates of abundance by aggregating sparse capture-recapture data. The Journal of Agricultural, Biological, and Environmental Statistics 15:228-247.

Steidl, R. J., and **A. R. Litt**. 2009. Do plant invasions change the effects of fire on animals? Fire Ecology 5:56-66.

Provencher, L., **A. R. Litt**, and D. R. Gordon. 2003. Predictors of species richness in northwestern Florida longleaf pine sandhills. Conservation Biology 17:1660-1671.

Litt, A. R., B. J. Herring, and L. Provencher. 2001. Herbicide effects on ground-layer vegetation in southern pinelands, USA: A review. Natural Areas Journal 21:177-188.

Litt, A. R., L. Provencher, G. W. Tanner, and R. Franz. 2001. Herpetofaunal responses to restoration treatments of longleaf pine sandhills in Florida. Restoration Ecology 9:462-474.

Provencher, L., B. J. Herring, D. R. Gordon, L., H. L. Rodgers, G. W. Tanner, J. L. Hardesty, L. A. Brennan, and **A. R. Litt**. 2001. Longleaf pine and oak responses to hardwood reduction techniques in fire-suppressed sandhills in northwest Florida. Forest Ecology and Management 148:63-77.

Provencher, L., **A. R. Litt**, D. R. Gordon, H. L. Rodgers, B. J. Herring, K. E. M. Galley, J. P. McAdoo, S. J. McAdoo, N. M. Gobris, and J. L. Hardesty. 2001. Restoration fire and hurricanes in longleaf pine sandhills. Ecological Restoration 19:92-98.

Litt, A. R., L. Provencher, D. R. Gordon, B. J. Herring, J. P. McAdoo, S. J. McAdoo, J. L. Hardesty, G. W. Tanner, and L. A. Brennan. 2000. How are longleaf pines affected by different methods of hardwood reduction? Journal of Forestry Focus Section 98:3.

Litt, A. R. 1998. Response of the herpetofaunal community to three sandhill restoration treatments. Bulletin of the Gopher Tortoise Council 18:4.

In preparation

Yarnall, M. J.*, **A. R. Litt**, C. P. Lehman, and J. J. Rotella. Does hen age influence nest site selection in wild turkeys?

Yarnall, M. J.*, **A. R. Litt**, C. P. Lehman, and J. J. Rotella. Wild turkey reproduction in the northern Black Hills, South Dakota.

Invited Refereed Book Chapters

Litt, A. R., A. B. Mitchell, and D. W. Tallamy. 2024. Alien plants and insect diversity, Pages 119–142 *in* J. Rodríguez, A. Novoa, and P. Pyšek, editors. Biological Invasions and Global Insect Decline. Elsevier, San Diego, CA. ***Invited contribution.***

Litt, A. R. 2010. Population. Encyclopedia of Research Design. SAGE Publications, Inc., Thousand Oaks, CA. ***Invited contribution.***

Technical Reports

Wright, W. J., K. M. Irvine, and **A. R. Litt**. 2020. Bat data from the Northern Great Plains Inventory and Monitoring Network: exploratory analysis and recommendations for future monitoring. Project report for the Northern Great Plains Inventory and Monitoring Network, National Park Service.

Wright, W. J., K. M. Irvine, B. Reichert, C. Talbert, and **A. R. Litt**. 2019. Analysis of Colorado NABat data from 2016 and 2017. Project report for Colorado Parks and Wildlife. https://cnhp.colostate.edu/wpcontent/uploads/download/documents/misc/ColoradoResultsReport-BAOApproved.pdf

Wright, W. J., K. M. Irvine, **A. R. Litt**, and E. S. Almberg. 2019a. Study design and sampling effort recommendations for acoustic monitoring of bat populations in Montana. Project report for Montana Fish, Wildlife and Parks.

Wright, W. J., **A. R. Litt**, and E. S. Almberg. 2019b. Modeling overall bat activity at acoustic detectors in Montana. Project report for Montana Fish, Wildlife and Parks.

Wright, W. J., **A. R. Litt**, and E. S. Almberg. 2018. Estimating occupancy for Montana bat species prior to the arrival of white-nose syndrome. Project report for Montana Fish, Wildlife and Parks. http://fwp.mt.gov/fwpDoc.html?id=85655

Press Coverage and Outreach (also posted at http://www.montana.edu/litt/news.html)

Written communication

Heinz, M. 2026. **From bear wrestling to wildlife monitoring, AI and tech evolution fuels research.** Cowboy State Daily. https://cowboystatedaily.com/2026/02/03/from-bear-wrestling-to-deer-monitoring-ai-and-tech-evolution-fueling-research/

Montana Fish, Wildlife and Parks. 2025. **Coeur D'Alene salamanders breathe through their skin.** https://fwp.mt.gov/homepage/news/2025/nov/1119--coeur-dalene-salamanders-breathe-through-their-skin

French, B. 2024. **Black bear density in Yellowstone's Northern Range is highest in Northern Rockies.** Bozeman Daily Chronicle. https://www.bozemandailychronicle.com/news/yellowstone-national-park-black-bears-bowersock/article_a42cdf58-2b75-51b6-9e2d-3caf98cf9139.html

Rapp Learn, J. 2024. **Are Yellowstone recreation restrictions beneficial to bears?** The Wildlife Society News. https://wildlife.org/jwm-are-yellowstone-recreation-restrictions-beneficial-to-bears/

Robinson, C. November 8, 2019. **Bats aren't just for Halloween: Insectivorous bats in North America**. https://methodsblog.com/2019/11/08/bats-arent-just-for-halloween/

Montana State University News Service. 2018. **MSU College of Letters and Science faculty members to share research at April 9 roundup.** http://www.montana.edu/news/17606

Schontzler, G. April 14 2018. **MSU student researchers apply lessons to real world problems.** Bozeman Daily Chronicle. pp. A3, A7 https://www.bozemandailychronicle.com/news/montana_state_university/msu-student-researchers-apply-lessons-to-real-world-problems/article_d48bf9af-38fd-5a5a-98fe-4f9f60c6b362.html

Hoepfer, D. 2017-2018. **Ecology professor co-authors publication describing the impacts of fire on ecosystems.** Confluence 14:21. http://www.montana.edu/lettersandscience/documents/confluence_17.pdf

Hoepfer, D. 2016. **MSU professor co-authors publication describing ways prescribed fires can affect ecosystems.** Montana State University News Service. http://www.montana.edu/news/16572/msu-professor-co-authors-publication-describing-ways-prescribed-fires-can-affect-ecosystems

Boswell, E. 2015. **MSU senior searches for signs of bats in Glacier National Park**. Montana State University

News Service. http://www.montana.edu/news/15619/msu-senior-searches-for-signs-of-bats-in-glacier-national-park

Madison, E. 2015. **Researchers look at genetics of marmots**. Great Falls Tribune. July 2, pp. 10, 40

Oral Communication

Bowersock, N. 2019. **Bear research in Yellowstone National Park.** Podcast - Today's Voices of Conservation Science. Season 2, Episode 2. https://www.buzzsprout.com/144534/949881

Hilty, S. 2018. **Bat conservation in Montana**. Podcast - Today's Voices of Conservation Science. Season 1, Episode 2. http://conservationscience.buzzsprout.com/144534/627548-shannon-hilty-bat-conservation-in-montana

Levandowski, M. 2020. **Wetland Biodiversity in Grand Teton National Park**. Podcast - Today's Voices of Conservation Science. Season 2, Episode 13. http://conservationscience.buzzsprout.com/144534/2936920-mary-levandowski-wetland-biodiversity-in-grand-teton-national-park

Litt, A. 2020. **Dr. Andrea Litt shares her career path and passion for wildlife science.** Podcast - Today's Voices of Conservation Science. Season 3, Episode 1. http://conservationscience.buzzsprout.com/144534/3143857-start-of-season-3-dr-andrea-litt-shares-her-career-path-and-passion-for-wildlife-science

Loggers, E. 2021. **Give back to the world and Bear Management Areas in Yellowstone.** Podcast - Today's Voices of Conservation Science. Season 4, Episode 5. https://conservationscience.buzzsprout.com/144534/9061443-elise-loggers-give-back-to-the-world-and-bear-management-areas-in-yellowstone

Segal, C. 2022. **Bison grazing and arthropods in Yellowstone National Park.** Podcast - Today's Voices of Conservation Science. Season 5, Episode 9. https://conservationscience.buzzsprout.com/144534/11723884-carlisle-segal-bison-grazing-and-arthropods-in-yellowstone-national-park

Sutton, T. 2020. **Mesic habitat restoration.** Podcast - Today's Voices of Conservation Science. Season 3, Episode 7. http://conservationscience.buzzsprout.com/144534/5713348-thomas-sutton-mesic-habitat-restoration

Waxe, J. 2019. **Sage grouse research in Montana (Red Rock Lakes National Wildlife Refuge).** Podcast - Today's Voices of Conservation Science. Season 2, Episode 7. https://www.buzzsprout.com/144534/1278457-james-waxe-sage-grouse-research-in-montana-red-rock-lakes-national-wildlife-refuge

Yarnall, M. 2018. **Turkeys in South Dakota**. Podcast - Today's Voices of Conservation Science. Season 1, Episode 3. http://conservationscience.buzzsprout.com/144534/654863-michael-yarnall-turkeys-in-south-dakota

Grants and Contracts

Current

2025-31	Evaluating population structure and habitat connectivity in Coeur d'Alene salamanders using genetics, *Principal Investigator*, Montana Fish, Wildlife, and Parks, $509,130
2025-27	Evaluating bat populations in Glacier National Park, *Principal Investigator*, National Park Service, $111,930
2024-29	Increasing understanding of northern myotis along the edge of its distribution, *Principal Investigator*, Bureau of Land Management, $742,150

2023-28 Marten monitoring in Montana, *Principal Investigator*, Montana Fish, Wildlife, and Parks, $612,419

2023-27 Using camera traps to estimate density of grizzly bears in Yellowstone National Park, *Principal Investigator*, Yellowstone Forever, $239,091

2023-27 Roost characteristics of *Myotis lucifugus* and *Myotis septentrionalis*, *Principal Investigator*, Montana Fish, Wildlife and Parks, $30,368

2023-27 Current demographics and future climate scenarios for Yellowstone grizzly bears, *Principal Investigator*, Yellowstone Forever, $282,000

Completed

2024-25 Behavior and nutritional condition buffer a large endotherm from an ever-changing environment, *Co-Principal Investigator* (with Elise Loggers, graduate student, Ecology, MSU), University of Wyoming NPS Research Center, $5,000

2023-24 Characterizing day roosts of northern long-eared (*Myotis septentrionalis*) and little-brown bats (*Myotis lucifugus*) in northeastern Montana, *Co-Principal Investigator* (with Jacob Melhuish, graduate student, Ecology, MSU), Bob Berry Holohil Award, Western Bat Working Group, $1,000

2023-24 Deploying camera traps to estimate density of grizzly bears in Yellowstone National Park, *Principal Investigator*, Yellowstone Forever, $27,955

2021-24 Roost site selection of two bat species (*Myotis septentrionalis* and *Myotis lucifugus*) in northeastern Montana, *Principal Investigator*, Bureau of Land Management, $227,395

2021-24 Measuring effects of bison grazing on arthropod and small mammal communities in Yellowstone National Park, *Principal Investigator*, National Park Service, $70,568

2019-24 Building stronger relationships with communities in SW Montana: Addressing factors limiting range production in the sagebrush ecosystems around Red Rock Lakes National Wildlife Refuge, *Principal Investigator*, US Fish and Wildlife Service, $35,000

2023-24 Day roost characteristics of northern long-eared bats (*Myotis septentrionalis*) and little-brown bats (*Myotis lucifugus*) in northeastern Montana, *Co-Principal Investigator* (with Jacob Melhuish, graduate student, Ecology, MSU), Montana Chapter of The Wildlife Society Small Grant, $1,000

2019-23 Snowbanks to grassbanks, Co-*Principal Investigator* (with Bok Sowell, Animal and Range Sciences, MSU), Western Sustainable Agriculture and Education Program, US Department of Agriculture, $349,709

2019-23 Resource selection of grizzly bears and evaluation of Bear Management Areas, *Principal Investigator*, Yellowstone Forever, $79,000

2022-23 Examining the roles of human activity and diet on stress responses in brown bears, *Co-Principal Investigator* (with Elise Loggers, graduate student, Ecology, MSU), Sitka, $2,500

2022-23 Factors influencing the arthropod community in American Bison (*Bison bison*)-grazed grasslands of Yellowstone National Park, *Co-Principal Investigator* (with Carly Segal, graduate student, Ecology, MSU), Sitka, $1,500

2022-23 Factors influencing arthropod communities in bison-grazed grasslands of Yellowstone, *Co-Principal Investigator* (with Carly Segal, graduate student, Ecology, MSU), Montana Chapter of The Wildlife Society Small Grant, $1,000

2022-23 Arthropod community diversity in grasslands grazed by American bison (*Bison bison*) in Yellowstone National Park, *Co-Principal Investigator* (with Carly Segal, graduate student, Ecology, MSU), Meg and Burt Raynes Wildlife Fund, $5,000

2021-23 Enhancing visitor safety and conservation of grizzly bears: evaluating and identifying Bear Management Areas, *Principal Investigator*, US Geological Survey, $36,000

2021-22 Resource selection of grizzly bears and evaluation of Bear Management Areas, *Co-Principal Investigator* (with Elise Loggers, graduate student, Ecology, MSU), Sitka Ecosystem Grant, $5,000

2017-22 Statistical methodological development for long-term vegetation monitoring, *Co-Principal Investigator* (with Kathi Irvine – USGS), National Park Service, $65,213

2020-21 Assessing the efficacy of Yellowstone's Bear Management Areas for grizzly bears (*Ursus arctos*), *Co-Principal Investigator* (with Elise Loggers, graduate student, Ecology, MSU), Sitka Ecosystem Grant, $5,000

2020-21 Enhancing visitor safety and conservation of grizzly bears: Evaluating and identifying Bear Management Areas in Yellowstone and Grand Teton National Parks, *Co-Principal Investigator* (with Elise Loggers, graduate student, Ecology, MSU), Sarah Baker Memorial Fund, Yellowstone to Yukon Conservation Initiative, $5,000

2020-21 Assessing habitat quality for grizzly bears (*Ursus arctos*) in Grand Teton and Yellowstone National Parks and the efficacy of Yellowstone's Bear Management Areas, *Co-Principal Investigator* (with Elise Loggers, graduate student, Ecology, MSU), Meg and Burt Raynes Wildlife Fund, $5,000

2016-21 Effects of forest disturbances on bat habitat, *Principal Investigator*, USDA, US Forest Service, Northern Region, $34,600

2016-21 Seasonal contributions to breeding in sage-grouse, co-PI (in collaboration with Bok Sowell – MSU and Kyle Cutting – USFWS), USFWS, $45,000

2019-20 Mesic restoration in sagebrush communities, *Principal Investigator*, The Nature Conservancy, $20,000

2018-20 Characterizing foraging areas and maternity roost sites of bat species and evaluating the effects of forest disturbance, *Principal Investigator*, Bureau of Land Management, $40,000

2017-20 Abundance and foraging habits of the American black bear (*Ursus americanus*) on Yellowstone's Northern Range, *Principal Investigator*, Yellowstone Forever, $120,000

2017-19 Abundance of grizzly bears (*Ursus arctos*) on Yellowstone's Northern Range, *Principal Investigator*, Yellowstone Forever, $52,600

2017-19 Bat population monitoring and disease surveillance, *Principal Investigator* (in collaboration with Kathi Irvine - USGS and Emily Almberg – MFWP), Montana Fish, Wildlife, and Parks, $80,000

2017-18 Understanding wetland response to climate change in the Greater Yellowstone Area, co-*Principal Investigator* (with Mary Levandowski, graduate student, Ecology, MSU/NPS),

University of Wyoming-NPS Research Station, $5,000

2016-20 Acoustic bat sampling design and analysis in support of the North American Bat Monitoring Program (NABat), *Principal Investigator* (in collaboration with Kathi Irvine - USGS and Thomas Rodhouse – NPS), USGS, $204,569

2016-20 Characterizing foraging areas and maternity roost sites of bat species and evaluating the effects of forest disturbance – with a focus on beetle kill and salvage logging, *Principal Investigator*, Montana Fish, Wildlife, and Parks, $74,100

2015-20 Survival and reproduction of Merriam's wild turkeys in the Northern Black Hills, South Dakota, *Principal Investigator*, South Dakota Game, Fish, and Parks, $199,541

2015-18 Cattle grazing strategies to sustain and enhance sage-grouse habitat, Co-*Principal Investigator*, 20% responsibility (with Jeffrey Mosley, Brent Roeder, Tracy Mosley, and J.P. Tanner), National Institute of Food and Agriculture, Agriculture and Food Research Initiative, Critical Agricultural Research and Extension, $149,924

2015-18 Targeted cattle grazing strategies to enhance sage-grouse brood-rearing habitat, Co-*Principal Investigator*, 20% responsibility (with Jeffrey Mosley, Brent Roeder, Tracy Mosley, and J.P. Tanner, Lance McNew, and Dave Dahlgren), Bair Ranch Foundation, $56,746

2014-16 Occupancy, genetics, and management of the hoary marmot (*Marmota caligata*) in Montana, Co-*Principal Investigator*, 50% responsibility (with Steven Kalinowski), Montana Fish, Wildlife, and Parks, $108,386

2014-16 Status and trends of bat populations in southeastern Arizona: Analysis of a long-term data set and recommendations for future monitoring, *Principal Investigator*, National Park Service, Southern Arizona Group, $21,031

2013-15 Population ecology and landscape use of the Chiricahua leopard frog (*Lithobates chiricahuensis*), *Principal Investigator*, Turner Enterprises, Inc., $89,350

2013-14 Facilitating the coexistence of long-toed salamanders and trout through the addition of structurally complex habitat, *Principal Investigator*, Montana Fish, Wildlife, and Parks, $4,950

2013-14 Soil modification to restore areas dominated by Old World Bluestems, *Principal Investigator*, Texas Parks and Wildlife Department, $28,553

2012 Direct and indirect responses to herbivory in semi-arid ecosystems: Indicators of vulnerability to climate and land-use changes in the High Plains region of Montana, *Co-Principal Investigator*, Montana Institute on Ecosystems, Incubation grant, $8,265 (plus $3,300 to support an undergraduate fellowship)

2011-13 Soil modification as a restoration tool to reduce Old World bluestems, *Principal Investigator*, Student Fellowship – Rob and Bessie Welder Wildlife Foundation, $51,300

2010-11 Statistical power and population trends of high conservation priority bird species, *Co-Principal Investigator*, 50% responsibility (with Leonard Brennan), Gulf Coast Joint Venture, USFWS, $79,456

2010 Understanding a native invader: Effects of tanglehead (*Heteropogon contortus*) on flora and fauna, *Principal Investigator*, ExxonMobil Foundation Summer Jobs Program, $2,500

2010 Understanding a native invader: Effects of tanglehead (*Heteropogon contortus*) on grassland birds, *Principal Investigator*, George and Mary Josephine Hamman Foundation, $10,000

2010 Understanding a native invader: Effects of tanglehead on grassland birds, *Principal Investigator*, Harvey Weil Sportsman Conservation Award, $7,500

2009 Understanding a native invader: Effects of tanglehead on grassland birds, *Principal Investigator*, University Research Awards, TAMUK, $25,000

2009-11 Small mammal and avian response to high-intensity wildfire, *Principal Investigator*, Texas Parks and Wildlife Department, $204,742

2006 *Biostatistical Internship*, BIO5 Institute for Collaborative Research, University of AZ, $8,000

2003-6 Fire as a tool to restore biodiversity in ecosystems dominated by invasive grasses, *Co-PI*, Legacy Resource Management Program, Department of Defense, $437,820

Students and Staff

Major advisor – In progress

Caralie Brewer, Ph.D. student, spring 2025 – present, Understanding northern myotis along the edge of its distribution

- *Collaborators*: Mike Borgreen, BLM
- *Funding*: Bureau of Land Management
- *Awards*: Crawford Graduate Wildlife Habitat Scholarship (2025), MSU; Don C. Quimby Wildlife Research Scholarship (2025), MSU

Gabriella Cantrell, M.S. student, spring 2025 – present, Evaluating design features of bat boxes as alternate habitat for bats

- *Collaborators*: Lisa Bate, NPS, Dr. Joy O'Keefe, University of Illinois Urbana-Champaign
- *Funding*: Glacier Conservancy, Glacier National Park
- *Awards*: Kenneth D. Lorang Memorial Award (2025), MSU; Crawford Graduate Wildlife Habitat Scholarship (2026), MSU

Oscar Dalling, M.S. student, spring 2024 – present, Using camera traps to estimate density of Yellowstone grizzly bears

- *Collaborators*: Dr. Frank van Manen, USGS; Kerry Gunther, NPS - Yellowstone National Park; Dr. Anna Moeller, Oklahoma State University
- *Funding*: Yellowstone Forever
- *Awards*: Crawford Graduate Wildlife Habitat Scholarship (2025), MSU; Dr. Lynn Irby Fish & Wildlife Biology Graduate Scholarship (2025), MSU

Lydia Diehl, Ph.D. student, spring 2026 – present, Evaluating population structure and habitat connectivity in Coeur d'Alene salamanders

- *Collaborators*: Dr. Jessy Coltrane, Montana Fish, Wildlife and Parks
- *Funding*: Montana Fish, Wildlife and Parks
- *Awards*: Crawford Graduate Wildlife Habitat Scholarship (2026), MSU

Nolan Helmstetter, Ph.D. student, fall 2023 – present, Marten (*Martes* spp.) monitoring to inform management across Montana

- *Collaborators*: Drs. Jessy Coltrane and Nick DeCesare, Montana Fish, Wildlife and Parks
- *Funding*: Montana Fish, Wildlife and Parks
- *Awards*: GRA PhD Start Award (2023-24), Graduate School, MSU; Don C. Quimby Graduate

Wildlife Research Scholarship (2024), MSU; Wynn Freeman Award (2026), Montana chapter of The Wildlife Society; Crawford Graduate Wildlife Habitat Scholarship (2026), MSU; Dr. Lynn Irby Fish & Wildlife Biology Graduate Scholarship (2026), MSU

Elise Loggers, Ph.D. candidate, fall 2022 – present, Current demographics and future climate scenarios for Yellowstone grizzly bears

- *Collaborators*: Dr. Frank van Manen, USGS; Kerry Gunther, NPS - Yellowstone National Park
- *Funding*: Yellowstone Forever; Montana Institute on Ecosystems; University of Wyoming-NPS Research Station
- *Awards*: Yellowstone Doctoral Scholars Fellowship (2023-24), Montana Institute on Ecosystems; Jim Posewitz Memorial Scholarship (2023), MSU; P.E.O. Scholar Award (2026); Crawford Graduate Wildlife Habitat Scholarship (2026), MSU; Student Travel Grant (2026), College of Letters & Science, MSU; Best Student Paper (2026), The Wildlife Society

Committee member – In progress

Laura Dykstra, Ph.D. candidate, Animal and Range Science, Advised by Lance McNew.

Parker Levinson, Ph.D. student, Ecology, Advised by Jay Rotella.

Colleen Piper, Ph.D. candidate, University of Montana, Advised by Lisa Eby/Blake Hossack.

Nathanael Jourdonnais, M.S. student, Ecology, Advised by Jay Rotella.

Undergraduate research advisor – In progress

Alma Golden, undergraduate MSU, summer 2026, Changes in the frequency of roost switching due to reproductive stage in female little brown bats

- *Collaborators*: Gabby Cantrell, MSU; Lisa Bate, Glacier National Park
- *Funding*: Undergraduate Scholars Program (2026), MSU
- *Awards*: Crawford Undergraduate Wildlife Habitat Scholarship (2026), MSU

Post-doctoral and other researchers – Completed

Katharine Banner, Ph.D., spring 2017 – summer 2018, Post-doctoral Research Associate, Characterizing and quantifying uncertainty in species identification from acoustic recordings of bats

- *Collaborators*: Dr. Kathi Irvine, USGS and Dr. Tom Rodhouse, NPS
- *Funding*: US Geological Survey
- *Current position:* Associate Professor, Department of Mathematical Sciences, Montana State University

Wilson Wright, M.S., fall 2017 – summer 2020, Research Associate, Data analysis for structured population monitoring and disease surveillance for bats

- *Collaborators*: Dr. Kathi Irvine, USGS; Dr. Emily Almberg, MFWP; Dr. Tom Rodhouse, NPS; Dr. Brian Reichert, USGS
- *Funding*: Montana Fish, Wildlife, and Parks (MFWP), USGS NABat
- *Current position*: Assistant Professor, Department of Statistics, University of Missouri

Major advisor – Completed *(reverse chronological order of completion)*

Jacob Melhuish, M.S., spring 2022 – summer 2024, Bat homes in the Big Sky: Habitat characteristics of northern myotis (*Myotis septentrionalis*) in northeastern Montana

- *Collaborators*: Mike Borgreen, BLM; Heather Harris, Montana Fish Wildlife and Parks
- *Funding*: Bureau of Land Management; Montana Fish, Wildlife and Parks; Montana Chapter of The Wildlife Society
- *Awards*: Bob Berry Holohil Award, Western Bat Working Group

Carly Segal, M.S., fall 2021 – summer 2024, Bugs, bison, and biodiversity: Testing hypotheses of community assembly in Yellowstone National Park

- *Collaborators*: Dr. Chris Geremia, NPS; Dr. Bill Hamilton, Washington and Lee University; Dr. Laura Burkle, MSU
- *Funding*: Yellowstone National Park, National Park Service; Montana Chapter of The Wildlife Society; Meg and Burt Raynes Wildlife Fund; Sitka Ecosystem Grant
- *Awards*: Conservation Nation Grant; John H. Rumely Award, Don C. Quimby Graduate Wildlife Research Scholarship, MSU
- *Current position*: Ph.D. student, Department of Ecology, Montana State University

James Waxe, M.S., spring 2017 – summer 2022, Carry-over effects in partially migratory Greater Sage-grouse, southwest Montana

- *Collaborators*: Dr. Bok Sowell, MSU; Dr. Kyle Cutting, USFWS
- *Funding*: US Fish and Wildlife Service
- *Scholarships*: Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), NSF Macrosystems Biology Project Inter-University Training in Continental-scale Ecology (ITCE)
- *Awards*: Graduate Enhancement Award, Montana Institute on Ecosystems; Jim Patton Wildlife Management Scholarship, MSU
- *Current position*: High Divide Headwaters Land Steward and Science Manager, The Nature Conservancy

Elise Loggers, M.S., fall 2019 – spring 2022, Evaluating Bear Management Areas for grizzly bears in Yellowstone National Park

- *Collaborators*: Dr. Frank van Manen, USGS; Kerry Gunther, NPS - Yellowstone National Park; and Dr. Dave Gustine NPS - Grand Teton National Park
- *Funding*: Yellowstone Forever, USGS - Natural Resource Preservation Program, Meg and Burt Raynes Wildlife Fund, SITKA Ecosystem Grant, Sarah Baker Memorial Fund
- *Awards*: Daniel Goodman Conservation Biology Scholarship, MSU; Conservation Nation Grant; Jim Patton Wildlife Management Scholarship, MSU, Wynn Freeman Award, Montana chapter of The Wildlife Society, 2022
- *Current position*: Ph.D. candidate, Department of Ecology, Montana State University

Mary Levandowski, M.S., fall 2016 – spring 2022, Dynamics and species use of wetlands

- *Collaborators*: Kristin Legg and Dr. Andy Ray, NPS
- *Funding*: National Park Service, American Association of University Women, University of Wyoming-NPS Research Station
- *Awards*: Student Scholarship, Biennial Scientific Conference of the Greater Yellowstone Ecosystem

Thomas Sutton, M.S., spring 2019 – spring 2022, Efficacy of water conservation structures to create food resources for sage-grouse

- *Collaborators*: Dr. Kyle Cutting, USFWS; Dr. Bok Sowell, MSU; Sean Claffey and Jim Berkey, TNC
- *Funding*: Western Sustainable Agriculture and Education Program (USDA-NIFA), US Fish and Wildlife Service (USFWS), The Nature Conservancy (TNC)
- *Current position*: Area Biologist, Montana Fish, Wildlife, and Parks

Nate Bowersock, M.S., fall 2016 – spring 2020, Habitat use and abundance of black bears in the Northern Range of Yellowstone National Park

- *Collaborators*: Dr. Frank van Manen, USGS and Kerry Gunther, NPS
- *Funding*: Yellowstone Forever
- *Awards*: Student Scholarship, Biennial Scientific Conference of the Greater Yellowstone Ecosystem; Kenneth D. Lorang Memorial Award, MSU; Jack Creek Preserve Wildlife Scholarship, MSU
- *Previous position*: Research Associate, University of Wyoming
- *Current position*: Furbearer/Black Bear Biologist, Missouri Department of Conservation

Shannon Hilty, M.S., fall 2016 – spring 2020, Characterizing foraging areas and roost sites for bats across a gradient of forest disturbance

- *Collaborators*: Dr. Claire Gower, MFWP
- *Funding*: Montana Fish, Wildlife, and Parks, USDA Forest Service – Northern Region, Bureau of Land Management
- *Awards*: Small Grant Award, Montana chapter of The Wildlife Society; Student Travel Grant, College of Letters & Science, MSU, 2018, 2019; Don C. Quimby Graduate Wildlife Research Scholarship, MSU; Wynn Freeman Award, Montana chapter of The Wildlife Society, 2020
- *Previous positions*: Wildlife Biologist, Westech Environmental, Inc.; Nongame Biologist, Montana Fish, Wildlife, and Parks
- *Current position:* State Bat Biologist, Montana Fish, Wildlife, and Parks

Michael Yarnall, M.S., fall 2015 – fall 2018, Survival and reproduction of Merriam's wild turkeys in the northern Black Hills, South Dakota

- *Collaborators*: Dr. Chad Lehman, SDGFP
- *Funding*: South Dakota Game, Fish, and Parks, Pittman-Robertson Funds
- *Awards*: Student Travel Grant, College of Letters & Science, MSU, 2017, 2018; Student Scholarship, Shikar-Safari Foundation
- *Previous positions:* Research Associate, MSU; Research Associate, Glacier National Park
- *Current position:* Area Biologist, Montana Fish, Wildlife, and Parks

Ben Turnock, M.S., summer 2014 – fall 2016, Characterizing habitat relationships and establishing monitoring strategies for an alpine obligate, Co-advised with Steven Kalinowski

- *Collaborators*: Chris Hammond, MFWP
- *Funding*: Montana Fish, Wildlife, and Parks
- *Awards*: Don C. Quimby Graduate Research Scholarship, MSU; Wynn Freeman Award, Montana chapter of The Wildlife Society
- *Previous positions:* Research Technician, Weddell Seal Project in Erebus Bay, Antarctica; Research Associate, Montana State University; Assistant District Biologist, Washington Department of Fish and Wildlife
- *Current position:* Priority Habitats and Species Shrubsteppe Biologist, Washington

Department of Fish and Wildlife

Ross Hinderer, M.S., spring 2013 – summer 2015, Habitat selection and movement of Chiricahua leopard frogs during dispersal

- *Collaborators*: Dr. Magnus McCaffery, Turner Endangered Species Fund
- *Funding*: Turner Endangered Species Fund, Turner Enterprises, Inc.
- *Previous positions:* Research Technician, Weddell Seal Project in Erebus Bay, Antarctica; Associate Environmental Scientist, Quad-Knopf Inc.; Field Biologist, National Park Service; Field Biologist, Western EcoSystems Technology, Inc.; Ph.D. candidate, University of Montana; Post-doctoral Research Associate, University of Montana
- *Current position:* Data Analyst, Missoula County Health Department

Adam Mitchell, M.S., summer 2011 – summer 2014, Soil modification as a tool to reduce Old World bluestems and restore vegetation and arthropod communities

- *Collaborators*: Forrest Smith, Texas Natives
- *Funding*: Welder Wildlife Foundation and Texas Parks and Wildlife Department
- *Awards*: Welder Wildlife Fellow, Welder Wildlife Foundation; Graduate Enhancement Grant, Montana Institute on Ecosystems
- *Previous position:* Ph.D. candidate, University of Delaware
- *Current position:* Associate Professor, Tarleton State University

Daniel Bachen, M.S., fall 2011 – spring 2014, Cheatgrass invasion of sagebrush steppe: Impacts of vegetation structure on small mammals

- *Collaborators*: Dr. Claire Gower, MFWP
- *Funding*: Montana Fish, Wildlife, and Parks, Montana Institute on Ecosystems, Montana chapter of The Wildlife Society, and Montana State University
- *Awards*: Outstanding Teaching Assistant, Department of Ecology, MSU; Don C. Quimby Graduate Research Scholarship, MSU; Kenneth D. Lorang Memorial Award, MSU; Counter Assault Grant, Montana chapter of The Wildlife Society; Best Student Poster, Montana chapter of The Wildlife Society; Graduate Enhancement Grant, Montana Institute on Ecosystems; Student Travel Grant, College of Letters & Science, MSU
- *Previous positions:* Wildlife Biologist, Montana Natural Heritage Program; Biologist, USGS and Montana Institute on Ecosystems
- *Current position:* Senior Zoologist, Montana Natural Heritage Program

Erin Kenison, M.S., spring 2012 – spring 2014, Investigating predator-prey interactions between introduced trout and long-toed salamanders and ways to mitigate non-consumptive effects

- *Funding*: Montana Fish, Wildlife, and Parks, Montana Institute on Ecosystems, Montana chapter of The Wildlife Society, and Montana State University
- *Awards*: Wynn Freeman Award, Montana chapter of The Wildlife Society; Best Student Presentation, Montana chapter of The Wildlife Society; Nongame Research Stipend, Montana Fish, Wildlife, and Parks; Matthew F. Clow Memorial Scholarship, MSU; Counter Assault Grant, Montana chapter of The Wildlife Society; Student Travel Grant, College of Letters & Science, MSU; Graduate Enhancement Grant, Montana Institute on Ecosystems; Best Student Poster, Western Division of the American Fisheries Society
- *Previous position:* Ph.D. candidate, Purdue University; Fish and Wildlife Biologist, USFWS, Boise, ID
- *Current position:* Hydro Branch Chief, USFWS, Boise, ID

Brian Bielfelt, M.S., CKWRI, TAMUK, 2009–2012, Invasion by a native grass: Implications of tanglehead (*Heteropogon contortus*) for grassland birds

- *Funding*: Texas A&M University - Kingsville, Harvey Weil Conservation Award, and the Hamman Foundation
- *Awards*: American Ornithologist's Union student award; Cooper Ornithological Society student award; Houston Safari Club Scholarship
- *Previous position:* Wildlife Biologist, Sapphos Environmental; Terrestrial Biologist, Southern California Edison
- *Current position:* Project Manager, AECOM

Mark Witecha, M.S., CKWRI, TAMUK, 2009–2011, Effects of high-intensity wildfire on small mammal communities

- *Funding*: Texas Parks and Wildlife Department
- *Awards*: Houston Safari Club Scholarship
- *Previous positions:* Wildlife Biologist, Pheasants Forever; Upland Wildlife Ecologist and Farm Bill Specialist, Wisconsin Department of Natural Resources
- *Current position:* Soil and Watershed Management Section Chief, Wisconsin Department of Agriculture, Trade and Consumer Protection

Erin Cord, M.S., CKWRI, TAMUK, 2009–2011, Changes in arthropod abundance and diversity with invasive grasses

- *Funding*: Texas A&M University - Kingsville
- *Awards:* Student presentation award – Third place, Texas Chapter of The Wildlife Society; President's Award for Best Oral Presentation, TAMUK; Outstanding Graduate Student – College of Agriculture, TAMUK
- *Previous positions:* Director, Wildlife Austin, Austin Parks & Recreation Department; Natural Resources Biologist, Travis County, TX; Community Programs Coordinator, Keep Austin Beautiful; Bat Walk Network Coordinator, Bat Conservation International
- *Current position:* Community Engagement Manager, Bat Conservation International

Committee member – Completed *(reverse chronological order of completion)*

Elisabeth Krieger, M.S., 2024, Ecology, MSU, Factors associated with elk (*Cervus canadensis*) distributions during rifle season and individual responses to harvest risk in a prairie environment, Advised by Jay Rotella.

Kaitlin Macdonald, Ph.D., 2024, Ecology, MSU, Patterns and drivers of variation in Weddell seal survival rates, and population implications of unobserved individual heterogeneity in vital rates, Advised by Jay Rotella.

Aaron O'Harra, M.S., 2023. Animal and Range Sciences, MSU, Greater sage-grouse (*Centrocercus urophasianus*) nest survival and nest predator response to fence modifications in a grazing modified landscape, Advised by Bok Sowell.

Kyle Cutting, Ph.D., 2021, Ecology, MSU, Breeding ecology of greater sage-grouse in southwestern Montana, Advised by Jay Rotella.

Cierra Keith, M.S. student, 2020-2021, Wildlife Biology, University of Montana, Advised by Lisa Eby and Blake Hossack, changed degree programs.

Colleen Detjens, M.S., 2020, Ecology, MSU, Use of eDNA to estimate abundances of spawning Yellowstone cutthroat trout in Yellowstone National Park, Wyoming, USA, Advised by Al Zale.

Jason Marsh, M.S., 2020, Ecology, MSU, Fish assemblage response to habitat restoration in Elk Springs Creek, Montana: Implications for Arctic Grayling (*Thymallus arcticus*) restoration, Advised by Al Zale.

Shane Petch, M.S., 2020, Ecology, MSU, Investigating diverse sources of variation in the amount of time Weddell seal (*Leptonychotes weddellii*) pups spend in the water during the lactation period, Advised by Jay Rotella.

Ethan Lula, M.S., 2019, Ecology, MSU, Is habitat constraining bighorn sheep (*Ovis canadensis*) distribution and restoration: A case study in the Greater Yellowstone Ecosystem. Advised by Robert Garrott.

Brent Cascaddan, M.S., 2018, Ecology, MSU, Effects of mountain pine beetle on elk habitat and nutrition in the Elkhorn Mountains of Montana, Advised by Robert Garrott.

Kaitlin Macdonald, M.S., 2018, Ecology, MSU, Sources of variation in maternal allocation to offspring during lactation in the Weddell seal, Advised by Jay Rotella.

Adam Mitchell, Ph.D., 2018, Entomology and Wildlife Ecology, University of Delaware, Restructuring of arthropod trophic relationships in response to plant invasion, Advised by Doug Tallamy.

Jarrett Payne, M.S., 2018, Animal and Range Sciences, Can targeted cattle grazing increase abundance of forbs or arthropods in sage-grouse brood-rearing habitat?, Advised by Jeff Mosley.

Allison Stringer, M.S., 2018, Ecology, Status of dace in Montana prairie streams -- Effects of non-native piscivores. Advised by Bob Bramblett and Al Zale.

Carson Butler, M.S., 2017, Ecology, MSU, Assessing respiratory pathogen communities and demographic performance of bighorn sheep: A framework to develop management strategies for respiratory disease, Advised by Robert Garrott.

Mike Ebinger, M.S., 2016, Ecology, MSU, Varying nonlinear dependencies in habitat selection: Estimating instead of imposing functional forms, Advised by Robert Garrott.

Adam Kehoe, M.S., 2016, Ecology, MSU, Space use and foraging patterns of the white-headed woodpecker in western Idaho, Advised by Vicki Saab and Jay Rotella.

Matthew Dresser, M.S., 2015, Ecology, MSU, Demographic responses of three woodpecker assemblages in relation to a mountain pine beetle epidemic in the Elkhorn Mountains of Montana, Advised by Vicki Saab and Jay Rotella.

Andrew Gilham, M.S., 2015, Ecology, MSU, Relationships between variable intensity livestock grazing and trout biomass in headwaters of east front Rocky Mountain streams, Montana, Advised by Brad Shepard and Al Zale.

Ryan Lamb, M.S., 2015, Ecology, MSU, Relating tubificid communities to the transmission of *Myxobolus cerebralis*, the cause of salmonid whirling disease, Advised by Billie Kerans and David Roberts.

Erin Shanahan, M.S., 2015, Ecology, MSU, Whitebark pine in the Greater Yellowstone Ecosystem, Advised by David Roberts.

Brandi Skone, M.S., 2014, Ecology, MSU, An assessment of the usefulness of winter wheat for nesting dabbling ducks in North and South Dakota, Advised by Jay Rotella.

Jennifer Korn, Ph.D., 2013, CKWRI, Genetic pedigree and prey dynamics of ocelots and fine-scale movement patterns of bobcats in south Texas, Advised by Mike Tewes.

Megan O'Reilly, M.S., 2013, Ecology, MSU, Development of occupancy surveys for mountain ungulates, Advised by Robert Garrott.

Katie Tierney, M.S., 2013, Animal and Range Sciences, MSU, Effects of training on cattle grazing spotted knapweed and Canada thistle, Advised by Bret Olson.

Michele de Verteuil, M.S., 2011, CKWRI, Texas A&M University – Kingsville, Impacts of wildfire on local avian communities of the Rio Grande Plains, Advised by William Kuvlesky.

Undergraduate research advisor – Completed *(reverse chronological order of completion)*

Riley Parker, undergraduate MSU, spring 2025, Characterizing feeding sites for grizzly bears in the Greater Yellowstone Ecosystem

- *Collaborators*: Elise Loggers, MSU
- *Funding*: Undergraduate Scholars Program, MSU

Jackson Connors, undergraduate MSU, spring – fall 2022, Relationship between remotely sensed NDVI and soil moisture in Yellowstone National Park

- *Funding*: Undergraduate Scholars Program, MSU
- *Collaborators*: Carly Segal, MSU

Sarah Deaton, undergraduate MSU, spring 2021, Using hunting data to assess changes in bighorn sheep and mountain goats in Montana

- *Funding*: Kevin Hurley Wild Sheep Biology Internship

Ethan Palen, undergraduate MSU, fall 2020, Effects of low-tech restoration structures on activity of Coleoptera in sagebrush steppe

- *Funding*: Undergraduate Scholars Program, MSU
- *Collaborators*: Thomas Sutton, MSU

Monique Metza, undergraduate student, MSU, summer 2018-fall 2018, How does bat activity change with mountain pine beetle?

- *Funding*: Undergraduate Scholars Program, MSU
- *Collaborators*: Shannon Hilty, MSU

Hitomi Okada, undergraduate student, MSU, spring 2018- fall 2018, Characteristics of bear rub trees in Yellowstone National Park's Northern Range

- *Funding*: Undergraduate Scholars Program, MSU (research funding in spring & summer 2018)
- *Collaborators*: Nate Bowersock, MSU

Jacob Melhuish, undergraduate student, MSU, summer 2017-spring 2018, Comparing nest site characteristics of juvenile and adult wild turkeys

- *Funding*: Undergraduate Scholars Program, MSU (research funding in summer 2017, travel grant in spring 2018)
- *Collaborators*: Michael Yarnall, MSU
- *Awards*: Wynn Freeman Award, Montana chapter of The Wildlife Society, 2019

Megan Heinemann, undergraduate student, MSU, summer – fall 2017, Estimating recovery rates of PIT tags consumed by American White Pelicans (*Pelecanus erythrorhynchos*)

- *Funding*: Montana Fish, Wildlife, and Parks, the Howard Johnson fund, and Undergraduate Scholars Program, MSU
- *Collaborators*: Mike Lance and Al Zale, MSU, Jason Mullen and Katie Vivian, MFWP

Thomas Sutton, undergraduate student, MSU, summer 2016 – spring 2017, Nest site characteristics and nest survival of Merriam's turkeys
- *Funding*: Undergraduate Scholars Program, MSU (research funding in summer and fall 2016, travel grant in spring 2017)
- *Collaborators*: Michael Yarnall, MSU
- *Awards*: Wynn Freeman Award, Montana chapter of The Wildlife Society

Adam Starecheski, undergraduate student, MSU, spring – fall 2015, Decreasing snowpack and shifting flow regimes in western Montana: Current and future effects on the hoary marmot
- *Funding*: Undergraduate Scholars Program, MSU
- *Collaborators*: Ben Turnock, MSU

Cheyenne Stirling, undergraduate student, MSU, summer – fall 2015, Bats in buildings: Assessing human structures as roost sites in Glacier National Park
- *Funding*: Jerry O'Neal National Park Service Student Fellowship
- *Collaborators*: Lisa Bate, National Park Service

Niall Clancy, undergraduate student, MSU, spring 2015 – fall 2016, Amphibians and ecosystems (independent study)
- *Co-advisor*: Wyatt Cross, MSU

Noah Bosworth, undergraduate, MSU, spring – summer 2014, Developing and testing a key for Montana shrews based on morphology of dorsal hairs
- *Funding*: Undergraduate Scholars Program, MSU
- *Collaborators*: Dan Bachen, MSU

Bryan Cossairt, undergraduate student, MSU, summer 2013, Understanding factors affecting vulnerability of wetlands and associated species in the Greater Yellowstone Area
- *Funding*: Montana Institute on Ecosystems
- *Collaborators*: Andy Ray, David Thoma, Rob Daley, and Kristin Legg, NPS

Jayme Feyhl-Buska, undergraduate student, MSU, summer 2012, Examination of current and previous research related to herbivory in semi-arid ecosystems in the High Plains of Montana
- *Funding*: Montana Institute on Ecosystems
- *Collaborators*: Ray Callaway and Solomon Dobrowski, University of Montana, Erik Beever, USGS

Taylor Garrison, undergraduate student, TAMUK, 2011. Avian associations with mesquite motte characteristics
- *Funding*: Student travel grant, The Wildlife Society
- *Collaborators*: Brian Bielfelt, CKWRI

Presentations (reverse chronological order)

Invited presentations (underlined = presenter, ***** = graduate student, ****** = undergraduate student)

Litt, A. R. 2026-27. *Invited speaker*, Provost's Distinguished Lecture Series, MSU, Bozeman, MT.

Litt, A. R. 2026. My writing journey. *Invited speaker*, Graduate Writing Retreat. College of Letters & Science, MSU, Bozeman, MT.

Mitchell, A.B., **A.R. Litt**, and D.W. Tallamy. 2025. Biological invasions and global insect decline. *Invited presentation*, Annual meeting of the Status of Insects Research Coordination Network, virtual.

Loggers, E. A.*, **A. R. Litt**, M. Haroldson, F. T. van Manen, and K. Gunther. 2024. Evaluating Bear Management Areas in Yellowstone National Park. I*nvited webinar* for the North American Bear Expert Team.

Mitchell, A. B., **A. R. Litt,** and D. Tallamy. 2024. Aliens in the Anthropocene: Invasive plants as a driver of global insect decline, *Invited symposium presentation*, A Better Tomorrow: Understanding Human Impacts on Insect Biology, organized by Chloe Hawkings, Annual meeting of the Entomological Society of America, Phoenix, AZ.

Loggers, E. A.*, and **A. R. Litt**. 2023. Flexible Foragers? Grizzly bears in a changing ecosystem. *Invited seminar*, Rough Cut Science Seminar Series, Montana Institute on Ecosystems, Bozeman, MT.

Mitchell, A.B., **A.R. Litt**, and D.W. Tallamy. 2023. Biological invasions and global insect decline: What can we learn from alien plant invasion? *Invited seminar*, Native Plant Society of Texas Cross Timbers Chapter Meeting, Weatherford, TX.

Litt, A. R. 2022. Think habitat: Exploring habitat relationships to inform conservation and management. *Invited seminar*, Departmental Seminar Series, Department of Natural Resources and the Environment, University of Connecticut, Storrs, CT.

Litt, A. R. 2022. Ecology and conservation of Montana's bats. *Invited seminar*, Lewis and Clark Caverns State Park, Whitehall, MT.

Litt, A. R. 2021. Going to bat for bats: Informing bat conservation at three scales. *Invited seminar*, Dr. Dave Otis Speaker Series, Department of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO.

Banner, K. M., K. M. Irvine, T. J. Rodhouse, W. J. Wright, and **A. R. Litt**. 2020. Bats and stats: Improving our understanding of North American bats through listening in the dark. *Invited seminar*, Department of Mathematics and Statistics, Washington State University, Pullman, WA.

Litt, A. R. 2020. Developing a conceptual framework to understand and predict animal responses to plant invasion (and other sabbatical adventures). *Invited seminar*, Department of Ecology, Montana State University, Bozeman, MT.

Litt, A. R. 2020. Going to bat for bats: Informing bat conservation at three scales. *Invited seminar*, Wildlife Biology Program, University of Montana, Missoula, MT.

Litt, A. R. 2020. Understanding effects of anthropogenic change on animals. *Invited seminar,* Agora presentation, USDA-USFS Rocky Mountain Research Station, Missoula, MT.

Litt, A. R. 2019. Mathematical modeling in wildlife ecology. *Invited presentation,* Montana Models: Connecting Local and Disciplinary Practices through University-Community Partnerships, modeling-based summer program for middle/high school students. National Science Foundation and Montana State University, Bozeman, MT.

Litt, A. R. 2019. Hands-on learning in Ecology. *Invited presentation,* Leadership MSU, Montana State University, Bozeman, MT.

Wright, W. J., K. M. Irvine, E. S. Almberg, and **A. R. Litt**. 2019. Modeling species classification errors when estimating occupancy and relative activity rates with acoustic data. *Invited symposium presentation,* Model-based approaches for addressing false positive detection errors in fish and wildlife studies, organized by Paige Ferguson, Brittany Mosher, and David Miller, Annual meeting of The Wildlife Society, Reno, NV.

Irvine, K. M., W. J. Wright, T. J. Rodhouse, E. S. Almberg, J. Gude, L. Hanauska-Brown, and **A. R. Litt**. 2018. NABat and Stats: Estimating species-level occupancy and overall activity of Montana bats prior to the arrival of white-nose syndrome, *Invited plenary presentation,* Disease Surveillance and Diagnostics Plenary Session, White Nose Syndrome National Meeting, Tacoma, WA.

Irvine, K. M., K. Banner, W. J. Wright, T. J. Rodhouse, and **A. R. Litt**. 2018. NABat and Stats – Improving the search for cryptic mammals in the dark. *Invited plenary presentation,* NABat Plenary Session, White Nose Syndrome National Meeting, Tacoma, WA.

Litt, A. R. 2018. Going to bat for bats: Informing bat conservation at three scales. *Invited seminar*, Distinguished Lecturer Series, Montana Institute on Ecosystems, Montana State University, Bozeman, MT. http://montanaioe.org/video/going-bat-bats-informing-bat-conservation-three-scales

Litt, A. R. 2018. Science sleuth: Collecting clues to track changes in abundance and distribution of animals. *Invited presentation*, College of Letters & Science Rising Stars Research Roundup, Montana State University, Bozeman, MT.

Irvine, K. M., W. J. Wright, T. J. Rodhouse, R. Rodriguez, S. Reif, P. Ormsbee, K. Banner, **A. R. Litt**, and J. Barnett. 2017. NABat and Stats: Exploring and improving statistical guidance in "the Plan". *Invited symposium presentation,* Special Symposium on NABat Monitoring Program, Western Bat Working Group Biennial Meeting and Workshop, Fort Collins, CO.

Litt, A. R. 2016. Nonnative species: Changing the rules for native animals. *Invited presentation* – Meeting of the Sacajawea chapter of the Montana Audubon Society, Bozeman, MT.

Litt, A. R. 2015. Influence of patch size and neighborhood composition on arthropod communities in the face of plant invasion. *Invited symposium presentation* – Arthropod Mediated Associational Effects Among Native and Non-Native Plants, organized by Sarah O'Neill and Carl Clem, Annual meeting of the Entomological Society of America, Minneapolis, MN.

Mitchell, A. B.*, and **A. R. Litt.** 2015. Arthropods as indicators of restoration success: lessons from an invaded grassland. *Invited symposium presentation* – Use of Arthropods in Wildlife and Applied Ecology: Recognition of Our Common Goals, organized by Steven Grodsky and Adam Mitchell, Annual meeting of the Entomological Society of America, Minneapolis, MN.

Litt, A. R. 2014. Using a mathematical toolbox to understand nature. *Invited presentation,* Girls' Adventures in Mathematics, Engineering, and Science (summer camp for middle school girls), Math Association of America and Montana State University, Bozeman, MT.

Litt, A. R. 2014. Nonnative plants have complex effects on animal populations. *Invited seminar*, Science Wednesday, USFWS, Red Rock Lakes National Wildlife Refuge, MT.

Litt, A. R. 2013. Dynamics of animal populations and communities in invaded ecosystems. *Invited departmental seminar*, School of Natural Resources and the Environment, University of Arizona, Tucson, AZ.

Litt, A. R. 2013. Plant invasions and disturbance regimes: Complex consequences for wildlife populations and communities. *Invited symposium presentation* – Indirect Effects of Invasive Species, organized by the Invasive Species Working Group, Annual meeting of The Wildlife Society, Milwaukee, WI.

Litt, A. R., and R. J. Steidl. 2013. Restoration in light of ecological changes: Complex consequences for wildlife populations and communities. *Invited symposium presentation* – Challenges and opportunities for western rangeland restoration under a changing climate, organized by Paulette Ford and Justin Derner, Annual meeting of the Society for Ecological Restoration, Madison, WI.

Litt, A. R. 2011. Invasive plants: Changing the rules for populations, communities, and ecosystems. *Invited seminar*, EcoLunch seminar series, USGS Northern Rocky Mountain Science Center, Bozeman, MT.

Litt, A. R., and F. C. Bryant. 2009. Invasive plants in south Texas: An ecologist's perspective. *Invited presentation*, Annual meeting of the Texas Invasive Plant and Pest Council, San Antonio, TX.

Litt, A. R., and R. J. Steidl. 2008. Restoring fire to grasslands invaded by nonnative plants: consequences for small mammals. *Invited presentation*, Mammal Research Symposium, Tucson, AZ.

Litt, A. R. 2006. Reliably quantifying wildlife populations with limited information. *Invited symposium presentation*, BIO5 Symposium, Tucson, AZ.

Provencher, L., K. E. M. Galley, **A. R. Litt**, D. R. Gordon, L. A. Brennan, G. W. Tanner, and J. L. Hardesty. 2000. Fire, herbicide, and chainsaw felling effects on arthropods in fire-suppressed longleaf pine sandhills at Eglin Air Force Base, FL. *Invited symposium presentation*, Annual meeting of The Wildlife Society, Nashville, TN.

Contributed presentations (underlined = presenter, * = graduate student, ** = undergraduate student)

Brewer, C.*, and **A. R. Litt**. 2026. Increasing our understanding of the northern long-eared Myotis along the edge of its distribution. Contributed poster, Crawford Scholars Project Showcase, Montana State University, Bozeman, MT.

Dalling, O. G.*, **A R. Litt**, K. A. Gunther, M. A. Haroldson, F. T. van Manen, M. J. Gould, and A. K. Moeller. 2026. Unmarked but not unseen: Estimating density of American black bears and grizzly bears in Yellowstone National Park, USA using camera traps, Contributed paper, 29th Conference of the International Association for Bear Research and Management, Pescasseroli, Italy.

Dalling, O. G.*, **A R. Litt**, K. A. Gunther, M. A. Haroldson, F. T. van Manen, M. J. Gould, and A. K. Moeller. 2026. Using camera traps to estimate grizzly bear density without the need for individual identification. Contributed poster, Crawford Scholars Project Showcase, Montana State University, Bozeman, MT.

Lehman, C. P., R. M. Tyl, L. N. McCray, M. J. Yarnall*, **A. R. Litt**, and C. T. Rota. 2026. Population growth rates of wild turkeys across South Dakota -- Adult hen survival matters. Contributed paper, Annual meeting of the Midwest Deer and Wild Turkey Study Group, Custer, SD.

Loggers, E. A.*, **A. R. Litt**, J. Becker, M. J. Gould, K. A. Gunther, M. A. Haroldson, and F. T. van Manen. 2026. Foraging strategies of grizzly bears: Insights from stable isotopes in a dynamic ecosystem, Contributed paper, Annual meeting of The Wildlife Society, Des Moines, IA.

Loggers, E. A.*, **A. R. Litt**, J. Becker, M. J. Gould, K. A. Gunther, M. A. Haroldson, and F. T. van Manen. 2026. Foraging strategies of grizzly bears: Insights from stable isotopes in a dynamic ecosystem, Contributed paper, 29th Conference of the International Association for Bear Research and Management, Pescasseroli, Italy.

Loggers, E. A.*, **A. R. Litt**, O. G. Dalling, M. J. Gould, K. A. Gunther, M. A. Haroldson, and F. T. van Manen. 2026. Missing the Point: Consequences of behavioral bias in GPS telemetry data, Contributed poster, 29th Conference of the International Association for Bear Research and Management, Pescasseroli, Italy.

Loggers, E. A.*, **A. R. Litt**, M. J. Gould, K. A. Gunther, M. A. Haroldson, and F. T. van Manen. 2026. Missing the point: Behavioral bias in GPS telemetry data. Contributed poster, Annual meeting of the Montana Chapter of The Wildlife Society, Missoula, MT.

Helmstetter, N.*, **A. R. Litt**, J. Coltrane, and N. DeCesare. 2025. Confronting challenges in distribution modeling for marten in western Montana. Contributed paper, Annual meeting of the Montana Chapter of The Wildlife Society, Billings, MT.

Litt, A. R., Melhuish, J.*, M. Borgreen, and H. Harris. 2025. Life on the edge: Habitat characteristics of northern myotis (*Myotis septentrionalis*) at the periphery of their range. Contributed paper, Annual meeting of the North American Society for Bat Research, Edmonton, AB.

Litt, A. R., Melhuish, J.*, M. Borgreen, and H. Harris. 2025. Life on the edge: Habitat characteristics of northern myotis (*Myotis septentrionalis*) at the periphery of their range. Contributed paper, Annual meeting of The Wildlife Society, Edmonton, AB.

Litt, A. R., Melhuish, J.*, M. Borgreen, and H. Harris. 2025. Bat homes in the Big Sky: Habitat characteristics of northern myotis (*Myotis septentrionalis*) in northeastern Montana. Contributed paper, Annual meeting of the Montana Chapter of The Wildlife Society, Billings, MT.

Loggers, E. A.*, J. Becker, M. Gould, K. Gunther, M. Haroldson, **A. R. Litt**, and F. van Manen. 2025. Identifying behavior and estimating energetics of grizzly bears. Contributed poster, Movement Ecology of Animals Gordon Research Conference, Ventura, CA.

Loggers, E. A.*, **A. R. Litt**, K. Gunther, M. Haroldson, and F. T. van Manen. 2025. Grizzly bears change their behavior near trails in a protected area. Contributed paper, Annual meeting of the Montana Chapter of The Wildlife Society, Billings, MT.

Loggers, E. A.*, **A. R. Litt**, J. Becker, K. Gunther, M. Haroldson, and F. T. van Manen. 2025. Foraging strategies of grizzly bears: Long-term insights from stable isotope analysis in a dynamic ecosystem. Contributed poster, Annual meeting of the Montana Chapter of The Wildlife Society, Billings, MT. ***Awarded Best Graduate Student Poster***.

Parker, R.**, E. A. Loggers, and **A. R. Litt**. 2025. Characterizing environmental effects on grizzly bear consumption of yampa and ants in the Greater Yellowstone Ecosystem. Contributed poster, Undergraduate Research Celebration, Montana State University, Bozeman, MT.

Loggers, E. A.*, **A. R. Litt**, F. T. van Manen, M. Haroldson, and K. Gunther. 2024. Grizzly bears change their behavior near recreation sites in a protected area. Contributed paper, 28th Conference of the International Association for Bear Research and Management, Edmonton, AB, Canada.

Mitchell, A. B., **A. R. Litt,** and D. Tallamy. 2024. Invasive plants and insect diversity: Implications for wildlife and global insect decline, Contributed paper, Annual meeting of The Wildlife Society, Baltimore, MD.

Grusing, E. C., K. A. Cutting, **A. R. Litt**, and B. F. Sowell. 2023. Switching sagebrush types influences survival of sage-grouse broods in a grazed landscape. Contributed poster, Annual meeting of the Montana Chapter of The Wildlife Society, Helena, MT.

Melhuish, J.*, **A. R. Litt**, H. Harris, and M. Borgreen. 2023. Characterizing day roosts of *Myotis septentrionalis* in northeastern Montana. Contributed poster, Biannual meeting of the Western Bat Working Group, Victoria, BC, Canada.

Loggers, E. A.*, **A. R. Litt**, F. T. van Manen, M. Haroldson, and K. Gunther. 2022. What can individual variation teach us when managing wildlife? Contributed paper, Annual meeting of The Wildlife Society, Spokane, WA.

Loggers, E. A.*, **A. R. Litt**, F. T. van Manen, M. Haroldson, and K. Gunther. 2021. Refuge within a refuge: Do bears respond to limiting human access? Contributed paper, Annual meeting of The Wildlife Society, virtual.

Palen, E.**, T. Sutton*, and **A. R. Litt**. 2021. Effects of low-tech restoration structures on activity of Coleoptera in sagebrush steppe, Contributed poster, National Conference on Undergraduate Research, virtual.

Bowersock, N. R.*, **A. R. Litt**, K. Gunther, J. Merkle, and F. T. van Manen. 2020. Do American black bears track resource waves in Yellowstone National Park? Contributed paper, Annual meeting of the Montana Chapter of The Wildlife Society, Butte, MT.

Hilty, S. L.*, **A. R. Litt**, B. A. Maxell, R. A. Garrott, C. N. Gower, and L. Hanauska-Brown. 2020. Characterizing summer roosts of male little brown myotis in lodgepole pine-dominated forests. Contributed paper, Annual meeting of Montana Chapter of The Wildlife Society, Butte, MT.

Litt, A. R., Yarnall, M. J.*, and C. Lehman. 2020. Roles of vegetation and age on nest site selection by wild turkeys. Contributed paper, Annual meeting of The Wildlife Society, virtual conference.

Bowersock, N. R.*, **A. R. Litt**, K. Gunther, J. Merkle, and F. T. van Manen. 2019. Do American black bears track resource waves in Yellowstone National Park? Contributed paper, Annual meeting of The Wildlife Society, Reno, NV.

Hilty, S. L.*, **A. R. Litt**, B. A. Maxell, R. A. Garrott, C. N. Gower, and L. Hanauska-Brown. 2019. Characterizing summer roosts of male little brown myotis in lodgepole pine-dominated forests. Contributed paper, Annual meeting of The Wildlife Society, Reno, NV.

Hilty, S. L.*, **A. R. Litt**, B. A. Maxell, R. A. Garrott, C. N. Gower, and L. Hanauska-Brown. 2019. Characterizing summer roosts of male little brown myotis in lodgepole pine-dominated forests. Contributed paper, Annual meeting of the Western Bat Working Group, Tulsa, OK.

Irvine, K. M., W. J. Wright, K. Banner, T. J. Rodhouse, and **A. R. Litt**. 2019. Uncovering statistical idiosyncrasies of acoustic bat data. Contributed paper, Joint Statistical Meeting, Denver, CO.

Levandowski, M.*, **A. R. Litt**, and K. Legg. 2019. Complementing visual surveys with wildlife cameras for long-term wetland monitoring. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Metza, M. L.**, S. L. Hilty, and **A. R. Litt**. 2019. Effects of mountain pine beetle on bat activity in western Montana. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Waxe, J. A.*, **A. R. Litt**, K. A. Cutting, and B. Sowell. 2019. Influence of pre-breeding body condition on reproductive metrics of Greater Sage-grouse. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Wright, W. J., K. M. Irvine, **A. R. Litt**, and E. S. Almberg. 2019. Estimating occupancy and activity of Montana bat species prior to the arrival of white-nose syndrome. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Yarnall, M. J.*, **A. R. Litt**, C. Lehman, and J. Rotella. 2019. Timing of vegetation sampling does not influence associations between visual obstruction and turkey nest survival in a montane forest. Contributed paper, Annual meeting of The Wildlife Society, Reno, NV.

Yarnall, M. J.*, **A. R. Litt**, and C. Lehman. 2019. Precipitation and reproductive effort alter survival of turkey hens in the Northern Black Hills, SD. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Banner, K., K. Irvine, T. Rodhouse, W. Wright, R. Rodriguez, and **A. R. Litt**. 2018. Improving geographically extensive acoustic survey designs for modeling species occurrence with imperfect detection and misidentification. Contributed paper, White Nose Syndrome National Meeting, Tacoma, WA.

Banner, K., K. Irvine, T. Rodhouse, and **A. R. Litt**. 2018. Survey design tools for monitoring species distributions over time using a dynamic occupancy model. Contributed paper, Montana Chapter of the American Statistical Association, Bozeman, MT.

Banner, K., K. Irvine, T. Rodhouse, and **A. R. Litt**. 2018. Survey design tools and considerations for sustaining large-scale monitoring programs. Contributed paper, Joint Statistical Meeting, Vancouver, BC, Canada.

Detjens, C.*, A. V. Zale, T. M. Koel, **A. R. Litt**, and M. K. Schwartz. 2018. Use of eDNA to monitor the abundance of spawning Yellowstone Cutthroat Trout in tributaries to Yellowstone Lake. Contributed poster, Annual meeting of the Montana chapter of the American Fisheries Society, Butte, MT.

Heinemann, M.T.**, **A. R. Litt**, M. J. Lance, K. Vivian, J. Mullen, and A. Zale. 2018. Characterizing rearing habitat of American white pelicans using PIT tags from consumed fish. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Butte, MT.

Heinemann, M.**, **A. R. Litt**, M. Lance, K. Vivian, J. Mullen, and A. Zale. 2018. Estimating detection probability of PIT tags consumed by white pelicans to improve Inferences in fish movement and avian predation studies. Contributed poster, Annual meeting of the Montana chapter of the American Fisheries Society, Butte, MT.

Hilty, S. L.*, **A. R. Litt**, C. N. Gower, B. A. Maxell, R. A. Garrott, and L. Hanauska-Brown. 2018. Characterizing summer roosts of little brown myotis and evaluating the effects of mountain pine beetle disturbance. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Butte, MT.

Levandowski, M.*, **A. R. Litt**, and K. Legg. 2018. Acoustic monitoring in wetlands offers opportunities for partnership, citizen science and research on climate change. Contributed poster, 14th Biennial Scientific Conference on the Greater Yellowstone Ecosystem, Big Sky, MT.

Litt, A. R., W. J. Wright, E. S. Almberg, and K. M. Irvine. 2018. Estimating occupancy and activity of Montana bat species prior to the arrival of white-nose syndrome. Contributed paper, Annual meeting of The Wildlife Society, Cleveland, OH.

Lula, E. S.*, J. A. Cunningham, K. M. Profitt, **A. R. Litt**, and R. A. Garrott. 2018. Is habitat constraining bighorn sheep (*Ovis canadensis*) distribution and restoration? A case study in the Greater Yellowstone Ecosystem. Northern Wild Sheep and Goat Council Biennial Symposium, Whitefish, MT.

Melhuish, J.**, M. J. Yarnall *, **A. R. Litt**, and C. P. Lehmann. 2018. Understanding differences in nest site characteristics between juvenile and adult turkeys. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Butte, MT.

Okada, H.**, N. Bowersock*, and **A. R. Litt**. 2018. Characteristics of bear rub trees in Yellowstone National Park's Northern Range. Contributed poster, Annual Student Research Celebration, Montana State University, Bozeman, MT.

Payne, J.*, J. C. Mosley, **A. R. Litt**, B. L. Roeder, T. K. Mosley, L. B. McNew, and H. B. Goosey. 2018. Can targeted cattle grazing increase abundance of forbs or arthropods in sage-grouse brood-rearing habitat? Contributed presentation, Annual meeting of the Montana chapter of The Wildlife Society, Butte, MT.

Payne, J.*, J. C. Mosley, **A. R. Litt**, B. L. Roeder, T. K. Mosley, L. B. McNew, and H. B. Goosey. 2018. Targeted cattle grazing to enhance sage-grouse brood-rearing habitat. Contributed presentation, Annual meeting of the Society for Range Management, Reno, NV.

Waxe, J. A.*, **A. R. Litt**, K. A. Cutting, and B. Sowell. 2018. Tracking Greater Sage-grouse migration and identifying wintering origin by combining radiotelemetry and stable isotopes. Contributed poster, Wildlife Migration Symposium, Jackson, WY.

Yarnall, M. J.*, and **A. R. Litt**. 2018. Hen, nest, and poult survival of Merriam's wild turkeys in the northern Black Hills. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Butte, MT.

Banner, K., K. Irvine, **A. R. Litt**, T. Rodhouse, W. Wright, and R. Rodriguez. 2017. Challenges in addressing sources of uncertainty in species classifications of acoustic bat calls used for monitoring. Contributed paper, Joint Statistical Meeting, Baltimore, MD.

Banner, K., K. Irvine, T. Rodhouse, W. Wright, and **A. R. Litt**. 2017. New methods to account for false positive detection errors in occupancy models with application to acoustic surveys of bats. Contributed paper, 2nd International Symposium on Bat Echolocation Research: Tools, Techniques, and Analysis, Tucson, AZ.

Bowersock, N. R.*, **A. R. Litt**, K. Gunther, and F. T. van Manen. 2017. Use of camera collars to reassess the foraging strategies of bears in Yellowstone National Park. Contributed paper, Annual meeting of the

Montana chapter of The Wildlife Society, Helena, MT.

Levandowski, M.*, A. Ray, **A. R. Litt**, A. Sepulveda, and S. Burson. 2017. Using emerging technologies to bolster long-term monitoring of wetlands. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Mitchell, A. B.*, **A. R. Litt,** and D. Tallamy. 2017. Shifts in arthropod trophic structure following plant invasion: Lessons from restored grasslands, Contributed paper, Annual meeting of the Ecological Society of America, Portland, OR.

Payne, J.*, J. C. Mosley, **A. R. Litt**, B. L. Roeder, T. K. Mosley, L. B. McNew, and H. B. Goosey. 2017. Targeted cattle grazing to enhance sage-grouse brood-rearing habitat. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Payne, J.*, J. C. Mosley, **A. R. Litt**, B. L. Roeder, T. K. Mosley, L. B. McNew, and H. B. Goosey. 2017. Targeted cattle grazing to enhance sage-grouse brood-rearing habitat. Contributed poster, Montana Nutrition Conference, Bozeman, MT.

Payne, J.*, J. C. Mosley, **A. R. Litt**, B. L. Roeder, T. K. Mosley, L. B. McNew, and H. B. Goosey. 2017. Targeted cattle grazing to enhance sage-grouse brood-rearing habitat. Contributed poster, Annual meeting of the Society for Range Management, St George, UT.

Sutton, T.**, M. J. Yarnall*, and **A. R. Litt**. 2017. Understanding how characteristics of the nest site affect nest success of wild turkeys. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Turnock, B.*, **A. R. Litt**, C. Hammond, and J. Vore. 2017. Habitat characteristics of the hoary marmot: Assessing distribution limitations in Montana. Contributed paper, Annual meeting of The Wildlife Society, Albuquerque, NM.

Turnock, B.*, **A. R. Litt**, C. Hammond, and J. Vore. 2017. Monitoring hoary marmots: Matching objectives and available effort. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Waxe, J.*, **A. R. Litt**, and K. Cutting. 2017. Combining radiotelemetry with stable isotope techniques to determine wintering origin of Greater Sage-grouse. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Yarnall, M.*, **A. R. Litt**, and C. Lehman. 2017. Survival and reproduction of wild turkeys in the northern Black Hills of South Dakota. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Bowersock, N. R.*, **A. R. Litt**, K. Gunther, and F. T. van Manen. 2016. Use of camera collars to reassess the foraging strategies of grizzly bears in Yellowstone National Park. Contributed paper, 13th Biennial Scientific Conference of the Greater Yellowstone Ecosystem, Jackson Lake, WY.

Clancy, N. G.**, **A. R. Litt**, and W. F. Cross. 2016. Impacts of larval amphibians on freshwater fisheries. Contributed poster, Annual meeting of the Montana chapter of the American Fisheries Society, Helena, MT.

Levandowski, M.*, A. Ray, **A. R. Litt**, A. Sepulveda, and S. Burson. 2016. Using emerging technologies to bolster long-term monitoring of wetlands. Contributed poster, 13th Biennial Scientific Conference of the Greater Yellowstone Ecosystem, Jackson Lake, WY.

Litt, A. R. 2016. What governs responses of animals to plant invasions? Contributed paper, Annual meeting of The Wildlife Society, Raleigh, NC.

Payne, J.*, J. C. Mosley, **A. R. Litt**, B. L. Roeder, T. K. Mosley, L. B. McNew, and H. B. Goosey. 2016. Targeted cattle grazing to enhance sage-grouse brood-rearing habitat. Fall meeting of the

International Mountain Section of the Society for Range Management, Bozeman, MT.

Power, A. R.**, B. Y. Turnock*, and **A. R. Litt**. 2016. Influence of boulder size on occupancy and detection of hoary marmots. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Missoula, MT.

Stirling, C. E.**, **A. R. Litt**, and L. Bate. 2016. Bats in buildings: Assessing human structures as roost sites in Glacier National Park. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Missoula, MT.

Turnock, B. Y.*, and **A. R. Litt**. 2016. Seeking out the hoary marmot: Habitat characteristics of an alpine obligate. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Missoula, MT.

Bosworth, N. P.**, D. A. Bachen*, and **A. R. Litt**. 2015. Can Montana shrews be identified using morphology of dorsal guard hairs? Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Hinderer, R.*, **A. R. Litt**, and M. McCaffery. 2015. Dispersal and habitat selection by Chiricahua leopard frogs during summer monsoons, Contributed paper, Annual meeting of the Society for the Study of Amphibians and Reptiles, Lawrence, KS.

Hinderer, R.*, **A. R. Litt**, and M. McCaffery. 2015. Habitat selection by Chiricahua leopard frogs during summer monsoons, Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Mitchell, A.*, and **A. R. Litt**. 2015. Invasive herbivores dominate arthropod community following plant invasion and drought, Contributed paper, Annual meeting of the Entomological Society of America, Minneapolis, MN.

Mitchell, A.*, and **A. R. Litt**. 2015. Invasive herbivores dominate arthropod community following plant invasion and drought, Contributed paper, Annual meeting of the Eastern Branch of the Entomological Society of America, Rehobeth Beach, DE.

Mitchell, A.*, and **A. R. Litt**. 2015. Modifying soil properties to restore plant communities for arthropods following plant invasion and drought, Contributed paper, Annual meeting of the Mid-Atlantic Chapter of the Society for Ecological Restoration, Newark, DE.

Starecheski, A.**, B. Turnock*, and **A. R Litt**. 2015. Habitat preferences of the Hoary marmot: The importance of water in alpine environments, Contributed poster, Annual meeting of the Montana chapter of the Society for Conservation Biology, Missoula, MT.

Turnock, B., **A. R. Litt**, J. Vore, C. Hammond, and S. Kalinowski. 2015. Investigating habitat characteristics important to hoary marmots (*Marmota caligata*) in Montana, Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Helena, MT.

Bachen, D.*, **A. R. Litt,** C. Gower, and M. Higgs. 2014. Indirect effects of nonnative brome grasses on small mammals in sagebrush steppe ecosystems. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Bozeman, MT.

Hinderer, R.*, **A. R. Litt,** M. McCaffery, and R. Garrott. 2014. Understanding movement patterns of Chiricahua leopard frogs (*Lithobates chiricahuensis*) to promote species persistence in desert ecosystems. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Bozeman, MT.

Kenison, E.*, **A. R. Litt,** D. Pilliod, and T. McMahon. 2014. Investigating direct and indirect effects of introduced fish predators on long-toed salamander larvae. Contributed paper, Joint meeting of Ichthyologists and Herpetologists, Chattanooga, TN.

Kenison, E.*, **A. R. Litt,** D. Pilliod, and T. McMahon. 2014. Investigating coexistence between trout and long-toed salamanders and the indirect effects of fish predators. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Bozeman, MT. ***Awarded Best Student Presentation.***

Kenison, E.*, **A. R. Litt,** D. Pilliod, and T. McMahon. 2014. Investigating coexistence between trout and long-toed salamanders and the indirect effects of fish predators. Contributed paper, Annual meeting of the Montana chapter of the American Fisheries Society, Chico, MT.

Shanahan, E.*, D. Roberts, K. M. Irvine, **A. R. Litt**, and K. Legg. 2014. Whitebark pine growth release potential following overstory disturbance. Contributed poster, International Union of Forest Research Organizations Conference, Fort Collins, CO.

Shanahan, E.*, D. Roberts, K. M. Irvine, **A. R. Litt**, and Greater Yellowstone Whitebark Pine Monitoring Working Group. 2014. Monitoring trends in white pine blister rust infection in the Greater Yellowstone Ecosystem. Contributed paper, International Union of Forest Research Organizations Conference, Fort Collins, CO.

Bachen, D.*, **A. R. Litt,** C. Gower, and M. Higgs. 2013. Effects of nonnative brome grasses: Moving toward a mechanistic understanding of small mammal declines. Contributed paper, Annual meeting of The Wildlife Society, Milwaukee, WI.

Bachen, D.*, **A. R. Litt,** and C. Gower. 2013. How do nonnative plants affect small mammals? Effects of vegetation structure on escape ability of small mammals. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Whitefish, MT.

Cossairt, B.**, **A. R. Litt,** A. Ray, D. Thoma, R. Daley, and K. Legg. 2013. Monitoring wetlands in the Greater Yellowstone Area to assess vulnerability to climate change. Contributed poster, Undergraduate Research Symposium, Bozeman, MT.

Cossairt, B.**, **A. R. Litt,** A. Ray, D. Thoma, R. Daley, and K. Legg. 2013. Monitoring wetlands in the Greater Yellowstone Area (GYA) to assess vulnerability to climate change. Contributed poster, Montana Institute on Ecosystems Summit, Helena, MT.

Hinderer, R.*, **A. R. Litt,** M. McCaffery, and R. Garrott. 2013. Understanding movement of Chiricahua leopard frogs (*Lithobates chiricahuensis*) to promote species persistence in desert ecosystems. Contributed poster, Annual meeting of the Montana chapter of the Society for Conservation Biology, Bozeman, MT.

Kenison, E.*, **A. R. Litt,** D. Pilliod, and T. McMahon. 2013. Investigating coexistence between trout and long-toed salamanders. Contributed poster, Annual meeting of the Montana chapter of the Society for Conservation Biology, Bozeman, MT.

Kenison, E.*, **A. R. Litt,** D. Pilliod, and T. McMahon. 2013. In a game of hide-and-seek with fish, where are long-toed salamanders found? Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Whitefish, MT.

Kenison, E.*, **A. R. Litt,** D. Pilliod, and T. McMahon. 2013. Where are long-toed salamanders found in a game of hide-and-seek with trout? Contributed poster, Annual meeting of the Western Division of the American Fisheries Society, Boise, ID. ***Awarded Best Student Poster.***

Litt, A. R. 2013. Plant invasions and disturbance regimes: Complex consequences for wildlife populations and communities. Contributed paper, Annual meeting of the Montana chapter of the Society for Conservation Biology, Bozeman, MT.

Mitchell, A.*, **A. R. Litt,** A. Falk, and F. Smith. 2013. Litter composition and drought severity influence on arthropod communities in Gulf Coastal prairies. Contributed poster, Annual meeting of the Montana chapter of the Society for Conservation Biology, Bozeman, MT.

Mitchell, A.*, **A. R. Litt,** A. Falk, and F. Smith. 2013. Shifts in plant and arthropod communities following

plant invasion and drought: Impacts of Old World bluestem grasses. Contributed paper, Annual meeting of The Wildlife Society, Milwaukee, WI.

Mitchell, A.*, **A. R. Litt,** A. Falk, and F. Smith. 2013. Decreased plant and arthropod richness in landscapes dominated by Old World bluestem grasses: Implications for wildlife. Contributed paper, Annual meeting of the Montana chapter of The Wildlife Society, Whitefish, MT.

Bachen, D.*, **A. R. Litt,** and C. Gower. 2012. Mechanisms driving nonnative plant-mediated changes in small mammal populations and communities. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Great Falls, MT. ***Awarded Best Student Poster***.

Mitchell, A.*, **A. R. Litt,** A. Falk, and F. Smith. 2012. Effects of nonnative plants on vegetation and arthropod communities. Contributed poster, Annual meeting of the Montana chapter of The Wildlife Society, Great Falls, MT.

Mitchell, A.*, **A. R. Litt,** A. Falk, and F. Smith. 2012. A sea of grass: Decreased plant and arthropod richness with Old World bluestem grasses. Contributed paper, Annual meeting of the Montana chapter of the Society for Conservation Biology, Bozeman, MT.

Ayala-A, F.*, J. A. Ortega-S, T. E. Fulbright, G. A. Rasmussen, D. L. Drawe, D. R. Synatzke, and **A. R. Litt**. 2011. Effect of a wildfire on old aerated and prescribed burned sites: Vegetation diversity and exotic grasses. Contributed poster, Annual meeting of the Society for Range Management, Billings, MT.

Ayala-A, F.*, J. A. Ortega-S, T. E. Fulbright, G. A. Rasmussen, D. L. Drawe, D. R. Synatzke, and **A. R. Litt**. 2011. Long-term effects of aeration and fire on invasion of exotic grasses in mixed-brush plant communities. Contributed presentation, Annual meeting of the Society for Range Management, Billings, MT.

Ayala-A, F.*, J. A. Ortega-S, T. E. Fulbright, G. A. Rasmussen, D. L. Drawe, D. R. Synatzke, and **A. R. Litt**. 2011. Long-term effects of aeration and fire on invasion of exotic grasses in mixed-brush plant communities. Contributed presentation, Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX.

Bielfelt, B. J.*, **A. R. Litt**, F. C. Bryant, L. A. Brennan, and T. Langschied. 2011. A native plant becomes invasive: Wintering birds respond to increased *Heteropogon contortus*. Contributed paper, Annual meeting of the American Ornithologist's Union, Jacksonville, FL.

Bielfelt, B. J.*, **A. R. Litt**, F. C. Bryant, L. A. Brennan, and T. Langschied. 2011. Are wintering grounds for grassland birds threatened by a native invasive grass? Contributed paper, Annual meeting of the Cooper Ornithological Society, Kearney, NB.

Bielfelt, B. J.*, **A. R. Litt**, F. C. Bryant, L. A. Brennan, and T. Langschied. 2011. Does a native invasive grass affect breeding birds in grasslands? Contributed poster, Annual meeting of the Cooper Ornithological Society, Kearney, NB.

Bielfelt, B. J.*, **A. R. Litt**, F. C. Bryant, L. A. Brennan, and T. Langschied. 2011. Understanding a native invader: Implications of tanglehead (*Heteropogon contortus*) on plants and birds in desert grasslands. Contributed paper, Annual meeting of the Ecological Society of America, Austin, TX.

Cord, E. E.*, **A. R. Litt**, T. E. Fulbright, and G. L. Schuster. 2011. Changes in abundance and diversity in an arthropod community with invasive grasses. Contributed paper, Annual meeting of the Ecological Society of America, Austin, TX.

Cord, E. E.*, **A. R. Litt**, T. E. Fulbright, and G. L. Schuster. 2011. Changes in arthropod abundance and diversity with invasive grasses. Cottam competition entry, Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX. ***Received third place award – Cottam (student presentation) competition.***

Cord, E. E.*, **A. R. Litt**, T. E. Fulbright, and G. L. Schuster. 2011. Effects of invasive grasses on vegetation

structure and composition. Contributed poster, Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX.

DeVerteuil, M.*, W. P. Kuvlesky, **A. R. Litt**, L. A. Brennan, J. F. Gallagher, and D. P. Walker. 2011. Impacts of wildfire on avian communities of South Texas. Cottam competition entry, Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX.

DeVerteuil, M.*, W. P. Kuvlesky, **A. R. Litt**, L. A. Brennan, J. F. Gallagher, and D. P. Walker. 2011. Impacts of wildfire on avian communities of South Texas. Contributed paper, Annual meeting of the Cooper Ornithological Society, Kearney, NB.

Garrison, T. A.**, B. J. Bielfelt*, and **A. R. Litt**. 2011. Avian associations with mesquite motte characteristics. Contributed poster (undergraduate), Annual meeting of The Wildlife Society, Kona, HI.

Garrison, T. A.**, B. J. Bielfelt*, and **A. R. Litt**. 2011. Avian associations with mesquite motte characteristics. Contributed poster (undergraduate), Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX.

Litt, A. R. 2011. Complex demographic responses of a small mammal to a plant invasion. Departmental seminar, Department of Ecology, MSU.

Litt, A. R. 2011. Nonnative plants function as an ecological trap for a native mammal. Contributed paper, Annual meeting of The Wildlife Society, Kona, HI.

Redd, K.*, M. DeVerteuil*, W. P. Kuvlesky, **A. R. Litt**, and D. P. Walker. 2011. Impacts of wildfire on vegetation in a mixed-brush community in South Texas. Contributed poster (undergraduate), Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX.

Sands, J. P.*, L. A. Brennan, **A. R. Litt**, S. J. DeMaso, and B. Wilson. 2011. Detecting trends for birds in the Gulf Coast Joint Venture with Breeding Bird Survey and Christmas Bird Count data. Contributed poster, Annual meeting of the Southeastern Working Group of Partners in Flight, Lexington, KY.

Witecha, M. J.*, **A. R. Litt**, T. E. Fulbright, S. M. Cooper, and D. P. Walker. 2011. Effects of high-intensity wildfire on small mammal abundance and species richness. Contributed paper, Annual meeting of the American Society of Mammalogists, Portland, OR.

Witecha, M. J.*, **A. R. Litt**, T. E. Fulbright, S. M. Cooper, and D. P. Walker. 2011. Effects of high-intensity wildfire on small mammal abundance and species richness. Contributed paper, Annual meeting of the Texas Society of Mammalogists, Junction, TX.

Witecha, M. J.*, **A. R. Litt**, T. E. Fulbright, S. M. Cooper, and D. P. Walker. 2011. Effects of wildfire on small mammal communities. Cottam competition entry, Annual meeting of the Texas Chapter of The Wildlife Society, San Antonio, TX.

Cord, E. E.*, **A. R. Litt**, T. E. Fulbright, and G. L. Schuster. 2010. Effects of invasive grasses on arthropod abundance and diversity. Contributed paper, First Annual Javelina Research Symposium, Kingsville, TX. ***Received President's Award (top award) for Oral Presentation.***

Cord, E. E.*, **A. R. Litt**, T. E. Fulbright, and G. L. Schuster. 2010. Effects of invasive grasses on arthropod abundance and diversity. Contributed poster, Texas A&M AgriLife Conference, College Station, TX.

Cord, E. E.*, **A. R. Litt**, T. E. Fulbright, and G. L. Schuster. 2010. Effects of invasive grasses on arthropod abundance and diversity. Contributed paper, Annual meeting of Texas Chapter of The Wildlife Society, Galveston, TX.

De Verteuil, M. L.*, W. P. Kuvlesky, L. A. Brennan, **A. R. Litt**, J. F. Gallagher, and M. Richardson. 2010. Effects of wildfire on avian community of south Texas. Contributed paper, Annual meeting of Texas Chapter of The Wildlife Society, Galveston, TX.

De Verteuil, M. L.*, W. P. Kuvlesky, L. A. Brennan, **A. R. Litt**, J. F. Gallagher, and M. Richardson. 2010. Effects of wildfire on avian community of south Texas. Contributed paper, First Annual Javelina Research Symposium, Kingsville, TX.

Korn, J. M.*, M. E. Tewes, L. I. Grassman, J. H. Young, and **A. R. Litt**. 2010. Modeling seasonal changes in rodent abundance with varying population demographics. Contributed paper, First Annual Javelina Research Symposium, Kingsville, TX.

Korn, J. M.*, M. E. Tewes, L. I. Grassman, J. H. Young, and **A. R. Litt**. 2010. Modeling seasonal changes in rodent abundance with varying population demographics. Contributed paper, Annual meeting of the Texas Chapter of The Wildlife Society, Galveston, TX.

Litt, A. R., and R. J. Steidl. 2010. Factors influencing richness of fauna in grasslands. Contributed poster, Annual meeting of The Wildlife Society, Snowbird, UT.

Moore, S. F.*, T. E. Fulbright, L. A. Brennan, F. Hernandez, and **A. R. Litt**. 2010. Effects of guineagrass on northern bobwhite habitat selection. Contributed paper, Annual meeting of The Wildlife Society, Snowbird, UT.

Moore, S. F.*, T. E. Fulbright, L. A. Brennan, F. Hernandez, and **A. R. Litt**. 2010. Effects of guineagrass on northern bobwhite nesting habitat. Contributed paper, Annual meeting of the Texas Chapter of The Wildlife Society, Galveston, TX.

Sanders, D. L.*, L. A. Brennan, and **A. R. Litt**. 2010. Evaluating habitat management practices of northern bobwhite quail in south Texas. Contributed poster, Annual meeting of the Texas Chapter of The Wildlife Society, Galveston, TX.

Witecha, M. J.*, **A. R. Litt**, T. E. Fulbright, S. M. Cooper, and M. L. Richardson. 2010. Effects of wildfire on small mammal communities. Contributed paper, First Annual Javelina Research Symposium, Kingsville, TX.

Witecha, M. J.*, **A. R. Litt**, T. E. Fulbright, S. M. Cooper, and M. L. Richardson. 2010. Effects of wildfire on small mammal communities. Contributed paper, Annual meeting of Texas Chapter of The Wildlife Society, Galveston, TX.

Litt, A. R., and R. J. Steidl. 2009. Plant invasions alter demographic fitness of small mammals in grasslands. Contributed paper, Annual meeting of The Wildlife Society, Monterey, CA.

Mazzotti, F. J., M. L. Brien, M. S. Cherkiss, **A. R. Litt**, and K. G. Rice. 2008. Front or Rear, Top or Bottom: Measuring Snout-Vent Length to Determine Condition in Crocodilians. Contributed poster, 19th Working Meeting of the IUCN-SSC Crocodile Specialist Group, Santa Cruz de la Sierra, Bolivia.

Litt, A. R., R. J. Steidl, B. F. Powell, S. L. Mann, and B. R. Noon. 2008. Choosing parameters for large-scale monitoring programs. Contributed paper, Annual meeting of The Wildlife Society, Miami, FL.

Litt, A. R., and R. J. Steidl. 2008. Consequences of restoring fire to ecosystems invaded by nonnative plants. Contributed paper, Fire in the Southwest: Integrating Fire into Management of Changing Ecosystems, Association for Fire Ecology, Tucson, AZ.

Litt, A. R., and R. J. Steidl. 2007. Changes in a small mammal community across a gradient of invasion by nonnative grass. Contributed paper, Annual meeting of The Wildlife Society, Tucson, AZ. ***Awarded Best Student Presentation.***

Litt, A. R., and R. J. Steidl. 2007. Effects of nonnative plants and restoration fires on small mammals. Contributed paper, Annual meeting of the AZ/NM chapters of The Wildlife Society, Albuquerque, NM.

Litt, A. R., and R. J. Steidl. 2006. Restoring ecological drivers in altered ecosystems: effects on small mammal communities. Contributed paper, Annual meeting of The Wildlife Society, Anchorage, AK.

Litt, A. R. 2005. Estimating abundance with sparse capture-recapture data. Departmental seminar, School

of Natural Resources, University of Arizona, Tucson, AZ.

Litt, A. R., and R. J. Steidl. 2005. Generating reliable estimates of abundance with limited capture-recapture data. Contributed paper, Annual meeting of The Wildlife Society, Madison, WI.

Litt, A. R., and R. J. Steidl. 2003. Restoring ecological processes in light of ecological changes. Contributed poster, 3rd International Wildlife Management Congress, Christchurch, New Zealand.

Litt, A. R., and R. J. Steidl. 2002. Effects of nonnative grasses and fire on small mammal populations and communities. Contributed paper, Joint annual meeting of the Ecological Society of America and the Society for Ecological Restoration, Tucson, AZ.

Litt, A. R., and R. J. Steidl. 2002. Effects of nonnative grasses on small mammal populations and communities. Contributed paper, Annual meeting of the AZ/NM Chapters of The Wildlife Society, Safford, AZ.

Provencher, L., **A. R. Litt**, and D. R. Gordon. 2001. Correlates of species richness in northwestern Florida longleaf pine sandhills. Contributed paper, Annual meeting of the Ecological Society of America, Madison, WI.

Gordon, D. R., L. Provencher, **A. R. Litt**, G. W. Tanner, L. A. Brennan, and J. L. Hardesty. 2000. Comparing restoration methods using similarity metrics in Florida longleaf pine sandhills. Contributed paper, Annual meeting of the Ecological Society of America, Snowbird, UT.

Provencher, L., D. R. Gordon, **A. R. Litt**, G. W. Tanner, L. A. Brennan, and J. L. Hardesty. 2000. Testing restoration success in fire-suppressed longleaf pine sandhills of NW Florida. Contributed paper, Annual meeting of the Society for Conservation Biology, Missoula, MT.

Litt, A. R. 1999. Herpetofaunal responses to longleaf pine sandhill restoration treatments on Eglin Air Force Base, FL. Contributed paper, All Florida Herpetofaunal Conference, Gainesville, FL.

Litt, A. R. 1999. Herpetofaunal responses to longleaf pine sandhill restoration treatments on Eglin Air Force Base, FL. Departmental seminar, Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL.

Litt, A. R. 1998. Herpetofaunal responses to longleaf pine sandhill restoration treatments on Eglin Air Force Base, FL. Contributed poster, Longleaf Alliance Conference, Charleston, SC.

Litt, A. R. 1998. Herpetofaunal responses to longleaf pine sandhill restoration treatments on Eglin Air Force Base, FL. Contributed poster, Natural Resources Forum. University of Florida, Gainesville, FL.

Litt, A. R. 1998. Herpetofaunal responses to longleaf pine sandhill restoration treatments on Eglin Air Force Base, FL. Contributed paper, Joint annual meeting of the Society for the Study of Amphibians and Reptiles, Herpetologist's League, and American Society of Ichthyologists and Herpetologists, Guelph, Ontario, Canada.

Litt, A. R. 1998. Herpetofaunal responses to longleaf pine sandhill restoration treatments on Eglin Air Force Base, FL. Contributed poster, All Florida Herpetofaunal Conference, Gainesville, FL.

Honors, Awards, and Scholarships

- Provost Distinguished Lecturer — MSU, 2026-27
- W. L. McAtee and G. V. Burger Award — The Wildlife Society, 2024
  For outstanding service as an Associate Editor for Journal of Wildlife Management
- James & Mary Ross Provost's Award for Excellence — MSU, 2023
  For excellence in teaching and scholarship
- James & Mary Ross Provost's Award for Excellence — MSU, *nominated*, 2022

For excellence in teaching and scholarship

- Outstanding Teaching Award — College of Letters & Science, MSU, 2022

For teaching excellence in mentoring

- Faculty Award for Excellence — MSU Alumni Foundation, 2021 and 2022

Student nominated

- Faculty Excellence Grant — Office of the Executive Vice President for Academic Affairs and Provost, MSU, $3,114, 2019-20
- Research Enhancement Award — College of Letters & Science, MSU, $600, 2019
- Research Enhancement Award — College of Letters & Science, MSU, $1,000, 2017
- Outstanding Teaching Award — College of Letters & Science, MSU, *nominated* - 2017
- TWS Small Grants Award — Montana chapter of The Wildlife Society, $500, 2016, with Vanna Boccadori, Montana Fish, Wildlife & Parks
- Research Enhancement Award — College of Letters & Science, MSU, $2,155, 2014
- Academic Advising Excellence Award — MSU, *nominated* - 2013
- Faculty Excellence Grant — Office of the Provost and ADVANCE Project TRACS, MSU, $2,050, 2013
- Outstanding Alumnus — School of Natural Resources and the Environment, University of AZ, 2013
- Outstanding Monograph — Litt and Steidl (2011), The Wildlife Society, 2012
- Chancellor's Teaching Excellence Award — Estimation and Analysis of Wildlife Populations (WSCI 6390), Texas A&M University System, 2009
- Presidential Travel Award — TAMUK, $800, 2009
- Outstanding Dissertation — School of Natural Resources, University of AZ, 2007
- Best Student Presentation — AZ/NM Chapters of The Wildlife Society, 2007
- International Wildlife Foundation Scholarship — University of AZ, 2006, $500
- Professional Development Grant — Graduate and Professional Student Council and Institute for the Study of Planet Earth, University of AZ, $2,260, 2006
- Continuing Education Grant — Arizona Chapter of The Wildlife Society, $550, 2006
- Travel Grant — Graduate and Professional Student Council, University of AZ, $500, 2003; $300, 2006

Service Activities

Editor/Reviewer:

- *Associate Editor*, Journal of Wildlife Management, 2020-present
- Reviewer for various journals including:
    - American Midland Naturalist
    - Biological Conservation
    - Ecological Applications
    - Ecological Restoration
    - Ecology and Evolution
    - Intermountain Journal of Sciences
    - Journal of Agricultural, Biological, & Environmental Statistics
    - Journal of Arid Environments
    - Journal of Herpetology
    - Journal of Mammalogy
    - Journal of Wildlife Management
    - Nature Education – Knowledge Project
    - Rangeland Ecology & Management
    - Rangelands
    - Restoration Ecology
    - Scientific Reports
    - Southeastern Naturalist
    - Wildlife Research
    - Wildlife Society Bulletin
    - Wildlife Monographs
- *External Reviewer,* Faculty Tenure/Promotion Review, 2022, 2024, 2026
- *Peer reviewer*, USGS
- *Judge*, Student presentations/posters, Annual meeting of Montana Chapter of The Wildlife Society, 2017, 2019-2021, 2025-present
- *Judge*, Student presentations, Annual meeting of The Wildlife Society, 2013-14
- *Reviewer*, Abstracts for the International Wildlife Management Congress, 2012, 2015
- Invited to be *Associate Editor*, Wildlife Society Bulletin, 2011, 2012 – *declined*
- *Reviewer*, Proposals for International Arid Lands Consortium, 2010
- *Reviewer*, Abstracts for the annual meeting of The Wildlife Society, 2008, 2010, 2013

Reviewer (University, College, or Department-level):

- *Reviewer*, Crawford Wildlife Habitat Undergraduate Scholarships, MSU, 2026
- *Internal Reviewer,* Faculty Retention/Tenure/Promotion Review, MSU, 2023
- *Reviewer*, Undergraduate and graduate scholarships, Department of Ecology, MSU, 2012-present
- *Reviewer*, Don C. Quimby Graduate Wildlife Research scholarship (review panel with representatives from Montana Fish, Wildlife, and Parks and two departments at MSU), MSU, 2015

Committee membership, advisor positions:

<u>*Profession*</u>

- *Panelist*, Women in Ecology Panel Discussion, various departments (Plant Sciences, Animal and Rangeland Sciences, Land Resources and Environmental Science, and Ecology), MSU, 2025
- *Member,* Research Committee, Western National Parks, nominated, 3-year term, 2025-present
- *Member,* Aldo Leopold Award Committee, The Wildlife Society, appointed, 3-year term, 2024-present
- *Member,* Diversity Committee, National Association for University Fish and Wildlife Programs, 2023-present
- *Member,* Diversity, Equity, and Inclusion Network, The Wildlife Society, 2023-24
- *Member,* Special Recognition Service Award Committee, The Wildlife Society, appointed, 2023-24

- *Regional Chair (West Region),* National Association for University Fish and Wildlife Programs, nominated, 2023
- *Member*, College and University Education Working Group, The Wildlife Society, 2022-present
- *Member* and *Northwest Section Representative*, Wildlife Publications Award Committee, The Wildlife Society, appointed, 2022-2023
- *Member (representative for MSU),* National Association for University Fish and Wildlife Programs, 2021-present
- *Member*, Inclusion, Diversity, Equity, and Awareness Working Group, The Wildlife Society, 2021-present
- *President*, Montana Chapter of The Wildlife Society, elected to a 3-year term (President-Elect, President, Past President), 2021-2024
- *Member*, Diversity Award Committee, The Wildlife Society, appointed, 2021-2023
- *Panelist*, Population and Community Ecology Program, National Science Foundation, 2020
- *Member*, Caesar Kleberg Research Award Committee, The Wildlife Society, appointed, 2018-2019
- *Member*, Technical Advisory Committee, Spion Kop Wind Farm, appointed, 2016-2019
- *Board Member*, Invasive Species Working Group, The Wildlife Society, elected to 2, 2-year terms, 2013-2017
- *Panelist*, Doctoral Dissertation Improvement Grant, National Science Foundation, 2015
- *Panelist*, Graduate Research Fellowship Program, National Science Foundation, 2015
- *Member*, Honorary Membership and Special Recognition Awards Committee, The Wildlife Society, appointed, 2014-15
- *Executive Committee*, North America Congress for Conservation Biology, Society for Conservation Biology, appointed, 2013-14
- *Chair*, Symposium Subcommittee and Program Committee, The Wildlife Society, appointed, 2013-14
- *Member*, Wildlife Committee, 2013 Envirothon (annual competition for high school students), appointed, 2012-13
- *Member*, Don Rusch Memorial Game Bird Research Scholarship Committee, The Wildlife Society, appointed, 2012
- *Member,* Panel Discussion and Roundtable Committee, The Wildlife Society, appointed, 2012
- *Board Member*, Biometrics Working Group, The Wildlife Society, elected to 2 terms, 2011-13
- *Member,* Program Committee, 4th International Wildlife Management Congress, appointed, 2011-12
- *Member,* Technical Review Committee – Prescribed Fire & Wildlife, The Wildlife Society, appointed, 2010-2016
- *Member,* Subunit Awards Committee, The Wildlife Society, appointed, 2010-12
- *Member*, Domain Science & Education Coordination Committee–Southern Plains, National Ecological Observatory Network (NEON), appointed, 2009-11
- *Member*, Academic Program Review Committee, School of Natural Resources, University of AZ, appointed, 2009
- *Member*, Science & Technical Monitoring Subcommittee, Sonoran Desert Conservation Plan, appointed, 2007

Community/Outreach

- *Co-Host*, Today's Voices of Conservation Science podcast, 2018-present
  http://conservationscience.buzzsprout.com/
- *Visiting Scientist,* STEM Expo, Morningstar Elementary School, 2017-2018
- *Judge,* STEM Expo, Longfellow Elementary School, 2017
- *Speaker*, Meeting of the Sacajawea chapter of the Montana Audubon Society, 2016
- *Speaker*, Girls' Adventures in Mathematics, Engineering, and Science, 2014
- *Speaker*, Science Wednesday, USFWS, Red Rock Lakes National Wildlife Refuge, 2014

College/University

- *Featured Speaker*, Writing Retreat, College of Letters & Science, MSU, 2026
- *Member*, Graduate Assistantship Stipend Committee, College of Letters & Science, MSU, 2023
- *Safe Zone Ally*, Safe Zone Program, MSU, 2022
- *Panelist,* Thinking About Teaching, New Faculty Forum, College of Letters & Science, MSU, 2022
- *Reviewer/Panelist*, Undergraduate Scholars Program, MSU, 2011, 2012, 2017-present
- *Member*, Institutional Animal Care and Use Committee, MSU, 2018-2019
- *Member*, University Curriculum and Programs Committee (Representative for the College of Letters & Science, https://www.montana.edu/provost/committees/cpc.html), MSU, 2017-2019
- *Equity Advocate*, MSU, 2013-15, emeritus status, 2015-present
- *Graduate Representative*, Dissertation committees, 2015
- *Member*, Advisory Board, Statistical Consulting Center, MSU, 2014-15
- *Member*, Search Committee, Director of Statistical Consulting, MSU, 2013-14
- *Member*, Women's Faculty Caucus, MSU, 2011-present
- *Member*, Distance Learning Committee, TAMUK, 2010
- *Member*, Honors Council, TAMUK, 2009-10
- *Mentor*, University of AZ, Conservation Biology Internship Program, 2004

Department

- *Director*, Fish and Wildlife Ecology and Management Program, Department of Ecology, MSU, 2021-present, elected to 2, 3-year terms
- *Member*, Curriculum Options Committee, Department of Ecology, MSU, 2024-present
- *Member*, Retention, Tenure, and Promotion Committee, Department of Ecology, MSU, 2017-2019, 2024-2025
- *Chair*, Search Committee, Applied Quantitative Ecologist, MSU, 2024
- *Chair*, Retention, Tenure, and Promotion Committee, Department of Ecology, MSU, 2023
- *Member*, Search Committee, Large Mammal Ecologist, MSU, 2021-22
- *Member*, Facilities Improvement Committee, Department of Ecology, MSU, 2017-2019
- *Member*, Graduate Student Recruitment Committee, Department of Ecology, MSU, 2018
- *Member*, Search Committee, Academic Coordinator, MSU, 2018
- *Member*, Search Committee, Department Head, MSU, 2016-17

- *Member*, Executive Committee, Department of Ecology, MSU, 2015
- *Member*, Search Committee, Aquatic Ecologist, MSU, 2014-15
- *Member*, Executive Committee/Promotion and Tenure, Department of Ecology, MSU, 2011-13
- *Member,* Faculty Search Committee, Restoration Ecologist, TAMUK, 2010
- *Co-Advisor*, Wildlife & Animal Science Graduate Student Organization, TAMUK, 2009-10
- *Department Representative*, Graduate Student Council, University of FL, 1998

Professional Development

- Certificates and Training Programs
    - Women in Leadership Certificate, Cornell University, 2021
        - 5 course series: Navigating the Double Bind, Negotiation Skills, Using Emotional Intelligence to Drive Results, Giving and Receiving Feedback, Outsmart the Work-Life Balance
    - New Faculty Forum, College of Letters & Science, MSU, 2011-12
    - Transculturation program, TAMUK, 2010
    - New Faculty Investment program, TAMUK, 2010
- Workshops, Webinars, and Short Courses

  Supporting Diversity and Health
    - Diversity Courses
        - Diversity 120 – Implicit Bias & Microaggressions, MSU, 2024
        - Diversity 110 - Intersectionality & Privilege, MSU, 2021
        - Diversity 100 – Exploring Cultural Identity, MSU, 2023
        - Diversity - Mental Health, MSU, 2021
    - Safe Zone Courses
        - Module 3 – Unpacking and Undoing Individual Heterosexism and Transnegativity, MSU, 2022
        - Module 2 - Ally Development, MSU, 2022
        - Module 1 - Awareness and Education, MSU, 2021
    - Indian Education for All, MSU, 2022
    - At-Risk for University and College Faculty and Staff training, Kognito, 2021

  Teaching/Mentoring
    - How to Make Virtual Engagement Easy, Center for Faculty Excellence, MSU, 2021
    - Teaching Online Program, Center for Faculty Excellence, MSU, 2020
    - Researcher Visibility, Center for Faculty Excellence, MSU, 2020
    - Classroom Management, Center for Faculty Excellence, MSU, 2020
    - Effective Research Mentoring, Suzanne Christopher, MSU, 2015
    - Grant Writing Boot Camp 2.0, ADVANCE Project TRACS, MSU, 2015

  Quantitative Skills
    - Fundamentals of Structured Decision Making, 2022
    - Integrated Population Models, Paul Lukacs, 2021

- Bayesian Modeling for Socio-Environmental Data, National Socio-Environmental Synthesis Center (SESYNC), Tom Hobbs, Mary Collins, and Christian Che-Castaldo, 2019 (enrollment by application only, expenses supported by SESYNC)
- Introduction to Spatial Capture-Recapture, Andy Royle and others, 2017
- Estimating resource selection using R, Trent McDonald and Fawn Hornsby, 2014
- Analyses of wildlife spatial behaviors & habitat use with 'Adehabitat' R packages, Clément Calenge and James Sheppard, 2013
- Spatial capture-recapture, Integrated population models, N-mixture models, and Multimodel inference and model averaging, Beth Gardner, Takis Besbeas, Marc Kery, Richard Barker, and others, EURING Analytical Meeting and Workshop, 2013
- Spatial statistics in R, Robin Russell, Mevin Hooten, and others, 2012
- Unmarked: An R package for hierarchical models of species abundance and occurrence, Andy Royle and Richard Chandler, 2012
- Advanced Program MARK, Evan Cooch and others, 2011
- Learn to use R, US Geological Survey, 2010
- Estimation of population change from survey data, US Geological Survey, 2010
- Modeling species distributions, Tom Stohlgren, Ecological Society of America, 2010
- Bayesian survival analysis using WINBUGS, Dennis Heisey and Christine Bunck, 2009
- Model selection and multi-model inference, David Anderson, 2009
- Occupancy estimation using Program Presence, Darryl MacKenzie and others, 2008
- Estimation of population parameters using Program MARK, Gary White, 2008

Other Skills

- Northern long-eared bat acoustics / Evaluating acoustic bat surveys for ESA compliance, Mark Ford, Mike Armstrong, and Vona Kuczynska, 2024

Professional Affiliations

- Society for Advancement of Chicanos/Hispanics & Native Americans in Science, 2023-present
- Native American Fish and Wildlife Society, 2021-present
- Western Bat Working Group, 2016-present
- Montana Bat Working Group, 2016-present
- Society for Ecological Restoration, 2009-present
  - Northwest chapter, 2012-present
- Ecological Society of America, 2004-present
- Society for Conservation Biology, 2004-present
  - Montana chapter, 2012-present
- The Wildlife Society, 2004-present
  - Inclusion, Diversity, Equity and Awareness Working Group, 2020-present
  - Invasive Species Working Group, 2011-present
  - Biometrics Working Group, 2004-present
  - State chapters: Montana, 2011-present; Texas, 2009-10; Arizona/New Mexico, 2004-08
- American Society of Ichthyologists and Herpetologists, 1997-2000

- Herpetologist's League, 1997-2000
- Society for the Study of Amphibians and Reptiles, 1997-2000

References

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