Sherry A. Leis

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EDUCATION

Master of Plant and Soil Science-Oklahoma State University (2004)
 Department of Range Ecology and Management

Bachelor of Science-Beloit College, Beloit, Wisconsin.
 Majors: Environmental Biology and Anthropology (1991-1995).

WORK EXPERIENCE

National Park Service-Republic, MO (2016-present) June 26. Plant Ecologist/Fire Ecologist, GS-11

Responsible for long-term plant community monitoring in 15 National Parks in the Midwest region. Including field operations, data processing, and report production. Oversees fire effects monitoring in seven of those parks including field work, fire operations, data processing, reporting, maintain fire histories, and fire planning.

Missouri State University—Springfield, MO (2012-2016) Fire Science Program Leader

- Lead the Great Plains Fire Science Exchange including budget analysis, program guidance and development, collaborate with regional partners include Board of Directors, coordinate events, edit publications, lead webinars, coordinate with other program staff. Submit grant proposals and complete annual reporting.
- Oversee fire effects monitoring program for Heartland Inventory and Monitoring Network at 7 National Parks including fireline duty, data collection, analysis, and reporting. Consultation on related issues with HLTN staff and park managers. Supervise lead monitor. Relate vegetation data to fire effects data. Monitoring includes plant identification, fuels assessment, fire behavior, fire weather, post burn severity and mapping.
- Maintain fire history/occurrence geodatabase.
- Submitted refunding grant proposals.
- Collaborate with HTLN and NPS staff.
- Work with students to complete fire ecology outreach products, and provide fire ecology expertise to university as requested.

Missouri State University—Springfield, MO (2007-2012) Fire Ecologist

- Design and implement fire effects monitoring for Heartland Inventory and Monitoring Network including plant identification, fuels assessment, fire behavior, fire weather, post burn severity and mapping.
- Participate in prescribed fires.
- Collect, analyze, and report monitoring data for fire effects.
- Collaborate with team ecologists.
- Work with park managers to develop fire related management goals.

- Work with students to complete fire ecology outreach products.
- Supervise fire effects monitors.

Missouri Department of Conservation—Clinton, MO (2004-2007) Grassland Botanist

- Served as the interface between science, grassland managers, and policy makers.
- Designed and conducted grassland management driven research projects.
- Collected plant composition and structure data, analyzed data, and wrote reports.
- Supervised field crew (1-5 people).
- Participated in prescribed fires and wildfire suppression

Oklahoma State University—Stillwater, Oklahoma (2002-2004) Research Assistant

- Designed and conducted research relating to military disturbance in mixed grass prairie including plant identification, small mammal trapping, and soils assessments.
- Supervised field assistant.
- Assisted with botanical sampling and prescribed fires for rangeland research projects.

The Institute of Ecosystems Studies--Millbrook, NY (2000-2002) Research Assistant to Dr. Gene E. Likens, Director

- Research duties: analyzed water samples using: Gas Chromatograph, Alpkem, IC, ICP, Orion 940/960 autotitrator, and field pH and conductance meters, map and sample Hubbard Brook streams
- Clerical duties: Created and managed databases, designed slides for presentations.

Aldo Leopold Foundation--Baraboo, WI (2000) Restoration Assistant

- Led two prairie restorations.
- Coordinated crew work schedules.
- Conducted botanical sampling in prairie and woodland sites.
- Participated in 35 prescribed burns.

Ellwood H. May Environmental Park—Sheboygan, WI (1999-2000; volunteer 1998-1999); Environmental Educator

- Developed and taught natural science to children and the public.
- Created and maintained exhibits, mapped park trails.
- Worked closely with volunteers to publicize and promote the facility.

Peace Corps--The Gambia, West Africa (1995-1997) Agroforestry Extension Agent

- Identified local flora and learned to speak local language, Mandinka.
- Trained farmers and communities on improved agroforestry practices; grew and transplanted 2000+ trees from nurseries, conducted forest inventories and demarcations.
- Successfully wrote three grant proposals that supported community assessment training and a small business project
- Developed and conducted training programs for children and adults on a variety of topics including nursery management, agroforestry, gardening, and community assessment.

ABSTRACTS AND PUBLICATIONS

- Annis G., M. DeBacker, D. Diamond, L. Elliott, A. Garringer, P. Hanberry, K. James, R. Lee, S. Leis, M. Morey, D. Pursell, and C. Young. 2011. George Washington Carver National Monument natural resource condition assessment. Natural Resource Report NPS/HTLN/NRR—2011/425. National Park Service, Fort Collins, Colorado.
- Briggler, M.L., B.E. Jamison, and S.A. Leis. 2017. Effects of Patch-burn Grazing on Vegetative Composition of Tallgrass Prairie Remnants in Missouri. Natural Areas Journal 37(3): *in press*.
- Cole, B., S. Leis. 2011. Fire Report for George Washington Carver National Monument. 2010.
- Fuhlendorf, S.D., S.A. Leis, and J. Weir. 2014. Encroachment of *Juniperus* species as a socio-ecological problem on private rangelands. 99th Annual Meeting August 10-15, 2014, Sacramento, CA
- Fuhlendorf, S.D., R. Moranz, and S. Leis. 2008. Is Patch Burning A Silver Bullet for Conservation of Rangelands? Challenges, Opportunities and Future Directions. Joint meeting of the Society for Range Management and the America Forage and Grassland Council, Louisville, KY January 26-31.
- Gaetani, M. S., K. Cook, and S. A. Leis. 2010. Fire effects on wildlife in tallgrass prairie. Natural Resource Report NPS/HTLN/NRR—2010/193. National Park Service, Fort Collins, Colorado.
- Leis, S. A. 2022. Network scale fire atlas supports land management in national parks. Natural Resource Report NPS/HTLN/NRR—2022/2480. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/2295
- Leis SA. 2022. Vegetation community monitoring trends in restored tallgrass prairie at Wilson's Creek National Battlefield: 2008–2020. Natural Resource Report. NPS/HTLN/NRR—2022/2368. National Park Service. Fort Collins, Colorado. https://doi.org/10.36967/nrr-2293117
- Leis S.A. 2020. Vegetation monitoring in goat prairies at Effigy Mounds National Monument. Natural Resource Report. NPS/HTLN/NRR—2020/2120. National Park Service. Fort Collins, Colorado
- Leis SA. 2019. Vegetation monitoring at Homestead National Monument of America, Nebraska: 1998–2017. Natural Resource Report. NPS/HTLN/NRR—2019/1989. National Park Service. Fort Collins, Colorado.
- Leis SA. 2018. Vegetation community monitoring at Pea Ridge National Military Park, Arkansas: 2007–2016. Natural Resource Report. NPS/HTLN/NRR—2018/1614. National Park Service. Fort Collins, Colorado.

- Leis, S. A. 2016. Vegetation community monitoring at Lincoln Boyhood National Memorial, Indiana: 2011-2015. Natural Resource Data Series NPS/HTLN/NRDS—2016/1073. National Park Service, Fort Collins, Colorado.
- Leis, S. A. 2015. George Washington Carver National Monument woody plant monitoring status report. Natural Resource Data Series NPS/HTLN/NRDS—2015/776. National Park Service, Fort Collins, Colorado.
- Leis, S. A. 2015. Prescribed fire monitoring report: Homestead National Monument of America, 2014 (NFPORS ID3325472). Natural Resource Data Series NPS/HOME/NRDS—2015/745. National Park Service, Fort Collins, Colorado.
- Leis, S. A. 2014. Determining live fuel moisture in junipers (Juniperus spp.) Great Plains Fire Science Exchange Factsheet 2014-13
- Leis, S. A. 2013. Fuels management in the Great Plains. Great Plains Fire Science Exchange Factsheet 2013-28.
- Leis, S. A. 2012. Prescribed fire monitoring report: George Washington Carver National Monument, 2012 (IQCS fire number: 00000222797, NFPORS number: 3317828, -29, -32, -34). Natural Resource Data Series NPS/HTLN/NRDS—2012/328. National Park Service, Fort Collins, Colorado.
- Leis, S. A. 2011. Playing with fire in Missouri. *Midwest Region Fire Ecology* 2:1-2. (newsletter) January.
- Leis, S. 2011. Prescribed fire monitoring report: Fort Scott National Historic Site (IQCS fire number: 193889). Natural Resource Data Series NPS/HTLN/NRDS—2011/190. National Park Service, Fort Collins, Colorado.
- Leis, S. A. 2010. Fire Ecology Weighs in on Natural Resource Condition Assessments. *Rx Effects* 1(9): 5.
- Leis, S. A. 2009. Fire effects in the U.S. Central Grasslands: Integrating long-term monitoring with fire effects. Fourth international congress on fire ecology and management: Fire as a global process. Savannah, GA, USA.
- Leis, Sherry. 2009. Unlocking the secrets of Mead's milkweed recovery. *Petal Pusher* 24:4-5.
- Leis, S. 2008. A quick look at *Triosteum angustifolium*, yellow flowered horse gentian. Petal Pusher Fall 2008.
- Leis, S. 2008. Filling the "Donut Hole": Fire ecology in the Central Grasslands. Rx Effects. National Park Service, Fire Effects Monitoring Program, Omaha Summer, 2008:1, 4.
- Leis, S. A. 2008. Prescribed fire resource kit for grassland parks in the Central Grasslands, U.S.: information resources for prescribed fire planning. Natural Resource Report NPS/HTLN/NRR—2008/027. National Park Service, Fort Collins, Colorado.

- Leis, S.A. 2008. Use of Heterogeneity-Based Grassland Management Techniques for Improved *Wildlife Habitat: What Does It Look Like?* Joint meeting of the Society for Range Management and the America Forage and Grassland Council, Louisville, KY January 26-31.
- Leis, S.A. 1995. Lichens as Pollution Sponges. Beloit Biologist 31:40-48.
- Leis S. and Baldwin C. 2021. Eating While the Eating's Good: How Fire Creates a Magnet for Grazing Animals. Front. Young Minds. 9:622451. doi: 10.3389/frym.2021.622451
- Leis, S. A., C. E. Blocksome, D. Twidwell, S.D. Fuhlendorf, J.M. Briggs, L.D. Sanders. 2017. Juniper invasions in grasslands: research needs and intervention strategies. Rangelands 39:64-72 http://dx.doi.org/10.1016/j.rala.2017.03.002.
- Leis, S. A. and C. Blocksome. 2014. Understanding the problem with junipers in the Great Plains. Society for Range Management 67th Annual International Meeting Orlando, Florida February 8-13, 2014.
- Leis, S. and C. Blocksome. 2013. Bridging the information gap between land management and fire science: Great Plains Fire Science Exchange. Society for Range Management Annual meeting Oklahoma City February 4-8, 2012. (abstract)
- Leis S.A., M.D. DeBacker, L. W. Morrison, G. A. Rowell, J. L. Haack. 2022. Vegetation community monitoring protocol for the Heartland Inventory and Monitoring Network: Narrative, Version 4.0. Natural Resource Report. NPS/HTLN/NRR—2022/2477. National Park Service. Fort Collins, Colorado. https://doi.org/10.36967/2294948
- Leis, S., D.M. Engle, R. Harr, and T. Becerra. 2011. Great Plains Fire Science Exchange Planning Consortium. Grasslands in a Global Context Symposium. Manhattan, KS September 12-14, 2011 (poster).
- Leis, S.A., D.M. Engle, S.D. Fuhlendorf, D. Leslie Jr. J. S. Fehmi. 2003. Plant community response to military training at Fort Sill, Oklahoma. 5th biennial symposium of multivariate methods in ecology. Stillwater, Oklahoma.
- Leis, S.A., D.M. Engle, D.M. Leslie Jr., J.S. Fehmi. 2005. Effects of Short- and Long-term Disturbance on Vegetation and Soils Resulting from Military Maneuvers in Mixed Prairie. *Environmental Management* 36: 849 861.
- Leis, S.A., D.M. Engle, D.M. Leslie, Jr. and J.S. Fehmi. 2004. Mixed-grass prairie response to a gradient of anthropogenic soil disturbance. 89th annual Ecological Society of America meeting. Portland, Oregon, August 2004.
- Leis, S.A., D.M. Engle, D. Leslie Jr., J. Kretzer, J.S. Fehmi. 2003. Comparison of Vegetation Sampling Procedures in a Disturbed Mixed-Grass Prairie. *Proceedings of the Oklahoma Academy of Sciences* 83: 7-15.
- Leis, S.A., D.M. Engle, D. Leslie Jr., J. Kretzer, J.S. Fehmi. 2003. Impacts of Military Training on Mixed-grass Prairie at Fort Sill, Oklahoma. ITAM Meeting, Fort Bliss Texas, August 2003.

- Leis, S. A. and J. S. Greene. 2017. From working group to community of practice: the patch burn-grazing community. Natural Areas Journal 37:128-137.
- Leis, S. A. and M. R. Hicks. 2023. New Vegetation Monitoring Field Tools Improve Plot Demarcation Consistency. Natural Areas Journal 43: 83-86.
- Leis, S. A. and S. E. Hinman. 2015. Prescribed fire monitoring report: Pipestone National Monument, 2014. Natural Resource Data Series NPS/HTLN/NRDS—2015/802. National Park Service, Fort Collins, Colorado.
- Leis, S. A. and S. E. Hinman. 2015. Prescribed fire monitoring report: Tallgrass Prairie National Preserve 2014 (IQCS fire number 285382, 285383, 266782, 285677). Natural Resource Report NPS/HTLN/NRR—2015/1025. National Park Service, Fort Collins, Colorado.
- Leis, S. A., and K. James. 2008. Effects of multiple intense disturbances at Manley Woods, Wilson's Creek National Battlefield. Natural Resource Technical Report NPS/HTLN/NRTR—2008/123. National Park Service, Fort Collins, Colorado.
- Leis, S., K. James, and B. Cole 2011. Effects of multiple intense disturbances at Manley Woods, Wilson's Creek National Battlefield. 4th Fire in Eastern Oak Forests Conference, May 17-19, 2011, University Plaza Hotel, Springfield, Missouri.
- Leis, SA, Jamison, BE, Murray, N. 2007. Effects of patchburn grazing in the tallgrass prairie of Missouri. Society for Range Management 60th Annual Meeting. February 11-16, 2007. Reno, Nevada.
- Leis, S. and C. Kopek. 2012. Prescribed fire monitoring report: Tallgrass Prairie National Preserve (IQCS fire number: 194570, 194571). Natural Resource Data Series NPS/HTLN/NRDS—2012/227. National Park Service, Fort Collins, Colorado.
- Leis, S. A. and C. M. Kopek. 2011. Prescribed fire monitoring report: George Washington Carver National Monument, 2011 (IQCS fire number: 210511, NFPORS number: 3317769, 3317778, 3317773). Natural Resource Data Series NPS/HTLN/NRDS—2011/205. National Park Service, Fort Collins, Colorado.
- Leis, S. A. and C.M. Kopek 2011. Prescribed fire monitoring report: Homestead National Monument of America, 2011 (IQCS fire number: 208175). Natural Resource Data Series NPS/HOME/NRDS—2011/206. National Park Service, Fort Collins, Colorado.
- Leis, S. A. and C.M. Kopek. 2011. Prescribed fire monitoring report: Wilsons Creek National Battlefield, 2011 (IQCS fire number: 210512, NFPORS number: 3318224, 3318225). Natural Resource Data Series NPS/WICR/NRDS—2011/213. National Park Service, Fort Collins, Colorado.
- Leis, S. and C. Kopek. 2012. Prescribed fire monitoring report: Tallgrass Prairie National Preserve (IQCS fire number: 194570, 194571). Natural Resource Data Series NPS/HTLN/NRDS—2012/227. National Park Service, Fort Collins, Colorado.

- Leis, S.A., J. Kretzer, E. Webb. 2004. Fort Sill devises innovative long-term research method that minimizes training disruptions. *U.S. Army Environmental Center, Central region environmental newsletter*.1:3.
- Leis, S.A., J. Kretzer, E. Webb. 2003. Fort Sill ITAM finds an innovative method to mark research plots. *The Bridge*. 22:6-7.
- Leis, SA, DM Leslie, Jr., DM Engle, and JS Fehmi. 2008. Small mammals as indicators of long and short-term disturbance. *Environmental Monitoring and Assessment* 137:75-84.
- Leis, SA, DM Leslie, Jr., DM Engle, and JS Fehmi. 2006. Small mammal response to longand short-term disturbance in a mixed prairie: a different footprint. Society for Range Management 59th Annual Meeting. February 11-17 February 2006 Vancouver, British Columbia.
- Leis, S. A., and L. W. Morrison. 2024. Long-term trends in prairie vegetation at three national parks: 1998–2022. Natural Resource Report NPS/HTLN/NRR—2024/2623. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/2302359
- Leis, S. A., and L. W. Morrison. 2022. Plant community trends at Tallgrass Prairie National Preserve: 1998–2018. Natural Resource Report NPS/HTLN/NRR—2022/2463. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/2294512
- Leis, S. A., and L. W. Morrison. 2020. Prairie vegetation monitoring at Pipestone National Monument: 1998–2017. Natural Resource Report NPS/HTLN/NRR—2020/2056. National Park Service, Fort Collins, Colorado.
- Leis, S. A., and L. W. Morrison. 2018. Long-term trends in vegetation and management intensity: Tallgrass Prairie National Preserve 1995–2014. Natural Resource Report NPS/HTLN/NRR—2018/1582. National Park Service, Fort Collins, Colorado.
- Leis, S. A., L. W. Morrison, J. L. Haack, M. S. Gaetani. 2011. Fire ecology monitoring protocol for the Heartland Inventory and Monitoring Network. Natural Resource Report NPS/HTLN/NRR—2011/294. National Park Service, Fort Collins, Colorado.
- Leis, S. A. and L. W. Morrison. 2011. Field test of digital photography biomass estimation technique in tallgrass prairie. Rangeland Ecology and Management 64:99-103.
- Leis, S.A. and L. Morrison. 2011. Field test of digital photography biomass estimation technique in tallgrass prairie. Society for Range Management, Transcending borders: landscapes & legends. Billings, Montana February 5-11.
- Leis, S.A., L.W. Morrison, and M.D. DeBacker. 2013. Spatiotemporal Variation in Vegetation Structure Resulting from Pyric-Herbivory. *The prairie naturalist*: 45:13-20.
- Leis, S. A., L. W. Morrison, J. L. Haack, M. S. Gaetani. 2011. Fire ecology monitoring protocol for the Heartland Inventory and Monitoring Network. Natural Resource Report NPS/HTLN/NRR—2011/294. National Park Service, Fort Collins, Colorado.

- Leis, S.A., D.G. Peitz and K.M. James. 2009. Trajectory of Avian Habitat Structure in a Grassland with Recent Reductions in Fire Return Interval and Stocking Rate. Society for Range Management 62nd Annual Meeting February 8-12, 2009, Albuquerque, New Mexico.
- Leis, S. A., and M. S. Short. 2023. Vegetation community monitoring at Pea Ridge National Military Park, Arkansas: 2007–2021. Natural Resource Report NPS/HTLN/NRR—2023/2526. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/2299454.
- Leis, S. A., and M. F. Short. George Washington Carver National Monument plant community report: 2004–2020. Natural Resource Report NPS/HTLN/NRR—2021/2334. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/nrr-2288500.
- Leis, S. A., and M. F. Short. 2019. Woodland succession after multiple intense disturbances: Manley Woods, 1998–2017. Natural Resource Report NPS/HTLN/NRR—2019/1919. National Park Service, Fort Collins, Colorado.
- Leis, S. and D. Twidwell. 2013. Moving toward an era of management decisions based on sound science. Society for Range Management Annual meeting Oklahoma City February 4-8, 2012. (abstract).
- Leis SA and Young CC. 2018. Prairie plant community monitoring at Herbert Hoover National Historic Site, Iowa: 2004–2017. Natural Resource Report. NPS/HTLN/NRR—2018/1807. National Park Service. Fort Collins, Colorado.
- Morrison, L.W., S. A. Leis, M.D. DeBacker. 2023. Observer error in grassland vegetation surveys: effects on species diversity metrics and species—abundance relationships, *Journal of Plant Ecology* 16(4) rtad002, https://doi.org/10.1093/jpe/rtad002
- Morrison LW, Leis SA, DeBacker MD. 2020. Interobserver error in grassland vegetation surveys: sources and implications. J Plant Ecol 13:641–648. https://doi.org/10.1093/jpe/rtaa051
- Morrison, L.W., Leis, S.A., Short, M.F. & DeBacker, M.D. 2024. A spatiotemporal comparison of interobserver error in vegetation sampling. Journal of Vegetation Science, 35, e13286. Available from: https://doi.org/10.1111/jvs.13286
- Scholtz, R., S.D. Fuhlendorf, S.A. Leis, J.J. Picotte, D. Twidwell. 2018. Quantifying variance across spatial scales as part of fire regime classifications. Ecosphere 9(7):e02343. 10.1002/ecs2.2343.
- Short MF and Leis SA. 2022. Vegetation monitoring in the Manley Woods unit at Wilson's Creek National Battlefield: 1998–2020. Natural Resource Report. NPS/HTLN/NRR—2022/2391. National Park Service. Fort Collins, Colorado. https://doi.org/10.36967/nrr-2293615
- Smith, A., D. Swanson, and S. Leis. 2008. The fire ecology of Ozark National Scenic Riverways. Natural Resource Report NPS/HTLN/NRR- 2008/031. National Park Service, Fort Collins, Colorado.

- Symstad A.J and S.A. Leis. 2017. Woody Encroachment in Northern Great Plains Grasslands: Perceptions, Actions, and Needs. Natural Areas Journal. 37:118-127.
- Voleti, R. Winter, S. and S. A. Leis. 2014. Patch Burn Grazing Annotated Bibliography. Great Plains Fire Science Exchange synthesis 2014-16.
- Ward, E. S. and S. A. Leis. 2013. Fireline first aid kit recommendations Great Plains Fire Science Exchange Factsheet 2013-27.
- Williams, M.H., S.A. Leis, and P. Christiansen. 2007. Evaluation of fire effects and restoration progress through 21 years of prairie vegetation monitoring at Herbert Hoover National Historic Site, 1982-2005. Natural Resource Technical Report NPS/HTLN/NRTR—2007/052. National Park Service, Fort Collins, Colorado.

SUCCESSFUL PROPOSALS

- Leis, S.A. and T. Bragg. 2014. Great Plains Fire Science Exchange renewal. Joint Fire Science Program. \$400,000. (2 years).
- DeBacker, M. and S.A. Leis. 2014. HTLN Fire effects monitoring. \$97,694.
- Leis, S.A. 2011. Great Plains Fire Science Exchange. Joint Fire Science Program. \$290,077. (2 years).
- DeBacker, M. and S.A. Leis. 2012. HTLN Fire effects monitoring. \$112,752.
- DeBacker, M. and S.A. Leis. 2011. HTLN Fire effects monitoring. \$73,500.
- DeBacker, M. and S.A. Leis. 2010. HTLN Fire effects monitoring. \$240,000.
- Engle, D.M, T. Becerra, R. Harr, Sherry A. Leis. 2010. Great Plains and Midwestern fire-grazing consortium. \$10,242 (1 year planning grant).
- Kathol, E., S.A. Leis, N. Murray 2005. Evaluation of seeding rates for prairie reconstruction using a non-pure seed mix. Missouri Department of Conservation.
- Jamison, B.J., S.A. Leis, and N. Murray. 2004. Assessing the effectiveness of sericea lespedeza (*Lespedeza cuneata*) control methods and impacts on non-target forbs. Missouri Department of Conservation.
- Leis, S.A., B.J. Jamison, N. Murray. 2004. Evaluation of a grazing system for maintaining and improving upland bird habitat. Missouri Department of Conservation.
- Leis, S.A. 2003. *Impacts of Military Training on Mixed-grass Prairie at Fort Sill, Oklahoma*. Department of Plant and Soil Sciences, Oklahoma State University.

PRESENTATIONS

- 13 Presentations about Gambia 1997-present, various locations.
- Leis, S.A. 2002. The American Woodcock. Ecology Saturday, Institute of Ecosystem Studies, Millbrook, New York.
- Leis, SA. 2005. Succession in tallgrass prairie. Missouri Resources Conference. TanTara, Missouri.
- Leis, S.A. 2008. Fire Ecology. Expanding Your Horizons, workshops for students and teachers. Missouri State University, Springfield, Missouri, November 1, 2008.
- Leis, S.A. 2008. Fire Ecology in the Midwestern National Parks. Missouri State University, Ecology for non-majors. Springfield, Missouri.
- Leis, S.A. 2008. Fire Ecology in the Midwestern National Parks. Missouri State University, Geography, Geology, and Planning 600. October, 21, 2008, Springfield, Missouri.
- Leis, S.A. 2008. HTLN Fire Effects program update. Heartland annual meeting. Springfield, MO August 20-22.
- Leis, S.A. 2008. To plow/plant or not to plow/plant. Missouri State University-West Plains, Biology Department Seminar Series. April 7, 2008, West Plains, Missouri.
- Leis, S.A. 2008. Defining succession in the tallgrass prairie. Missouri State University, Conservation Biology class. April 4, 2008, Springfield, Missouri.
- Leis, S.A. 2009. Fire effects in the U.S. Central Grasslands: Integrating long-term monitoring with fire effects. Fourth international congress on fire ecology and management: Fire as a global process. Savannah, GA, USA.
- Leis, S.A. 2010. Fire Ecology amidst lions, giraffes, elephants, and rhinos. Missouri Native Plant Society, Osage Plains chapter November 15, 2010.
- Leis, S.A. 2010. Fire ecology in Midwestern National Parks. Bull Shoals Field Station, MSU Riparian Ecology class July7.
- Leis, S.A. 2010. Heartland Network Fire Effects Monitoring. Heartland Network biennial meeting. Springfield, MO July 20-22.
- Leis, S.A. 2015. Fire Ecology Primer for Missouri Master Naturalist Conference. Springfield, MO.
- Leis, S.A. 2015. (3) The role of time since fire, Using geopdfs, and Fire Science Exchanges Heartland Inventory and Monitoring Network meeting. Republic, MO.
- Leis, S.A. 2023. The prairie forest ecotone: who are we rooting for? 10th Association for Fire Ecology Fire Congress, Monterey, CA.
- Leis, S.A. and C.E. Blocksome. 2015. Great Plains Fire Science Exchange. Patch Burn Grazing Working Group meeting, Pratt, KS.

- Leis, S.A. 2015, 2014. Fire in the Great Plains and why you should learn about it. Lecture for conservation biology at MSU. Alexander Waite instructor.
- Leis, S.A. 2015, 2014. Fire effects in glades. Lecture for Forestry class at MSU. Tim Stanton instructor.
- Leis, S.A. and C.E. Blocksome. 2014. The heart of fire in the Great Plains: Private landscapes, prescribed burning, and collaborative fire communities. Association for Fire Ecology Congress, San Antonio, TX.
- Leis, S.A. and C.E. Blocksome. 2013. Moving toward an era of management decisions based on sound science. America's grassland Conference, Manhattan, KS.
- Leis, S.A. and B. Cole 2010. Fire ecologists see black. Expanding Your Horizons, workshops for students and teachers. Missouri State University, Springfield, Missouri, November 6, 2010.
- Leis, S.A., D.M. Engle, T. Becerra. 2012. Development of Great Plains Fire Science Exchange Planning Consortium. 65th Society for Range Management Annual meeting, Spokane, WA. (poster).
- Leis, S.A., D.M. Engle, D. Leslie Jr., J. Kretzer, J.S. Fehmi. 2003. Impacts of Military Training on Mixed-grass Prairie at Fort Sill, Oklahoma. ITAM Meeting, Fort Bliss Texas, August 2003.
- Leis, S.A., D.M. Engle, S.D. Fuhlendorf, D. Leslie Jr. J. S. Fehmi. 2003. Plant community response to military training at Fort Sill, Oklahoma. 5th biennial symposium of multivariate methods in ecology. Stillwater, Oklahoma.
- Leis, S.A., D.M. Engle D.M. Leslie, Jr., J.S. Fehmi, J. Kretzer, E. Webb. 2002. Military Disturbance in mixed-grass prairie at Fort Sill, Oklahoma 19 Nov 2002. Coordinating Committee meeting of the Oklahoma Cooperative Fish and Wildlife Research Unit, Stillwater, Oklahoma.
- Leis, S.A., D.M. Engle D.M. Leslie, Jr., J.S. Fehmi, J. Kretzer, E. Webb. 2003. Effects of military training on grasslands at Fort Sill, Oklahoma. 92nd Annual Oklahoma Academy of Science Technical Meeting. Chickasha, Oklahoma.
- Leis, S., K. James, and B. Cole 2011. Effects of multiple intense disturbances at Manley Woods, Wilson's Creek National Battlefield. 4th Fire in Eastern Oak Forests Conference, May 17-19, 2011, University Plaza Hotel, Springfield, Missouri.
- Leis, S.A., B.J. Jamison, N. Murray. 2004 and 2005. Evaluation of a grazing system for maintaining and improving upland bird habitat. Missouri Department of Conservation (2 proposal reviews, 1 public meeting, and Missouri Natural Resources Conference).
- Leis, S.A. and L. Morrison. 2011. Field test of digital photography biomass estimation technique in tallgrass prairie. Society for Range Management, Transcending borders: landscapes & legends. Billings, Montana February 5-11.
- Leis, S.A. D.G. Peitz and K.M. James. 2009. Trajectory of Avian Habitat Structure in a Grassland With Recent Reductions in Fire Return Interval and Stocking Rate. Society

- for Range Management 62nd Annual Meeting February 8-12, 2009, Albuquerque, New Mexico.
- Leis, S.A., D. Peitz, K. James, L. Morrison. 2010. Trajectory of avian habitat structure in a grassland with recent reductions in fire return interval and stocking rate. Patch Burn Grazing Working Group annual meeting, Bartlesville, OK October 20-22.
- Leis, S.A. 2017. Fire Ecology Overview. Master Naturalist meeting. Dec. 18, 2017

GRANTS

- DeBacker, M. D. and Leis. 2015. Task Agreement # P10AC00295 Cooperative Agreement: P13AC00772 between National Park Service Heartland Inventory and Monitoring Network and Missouri State University. \$97,694.
- DeBacker, M. D. and Leis. 2012. Task Agreement # J-6064-10-0004 Cooperative Agreement: CAH6000030300 between National Park Service Heartland Inventory and Monitoring Network and Missouri State University. \$112,752.
- DeBacker, M. D. and Leis. 2010. Task Agreement # J-6064-10-0003 Cooperative Agreement: CAH6000030300 between National Park Service Heartland Inventory and Monitoring Network and Missouri State University. 18th month grant for \$78,980.
- DeBacker, M and S.A. Leis. 2009. National Park Service and Missouri State University Task Agreement # J-6064-06-0011 Modification 0002 to Cooperative Agreement: CAH6000030300. July 2008, \$79,298.
- DeBacker, M and S.A. Leis. 2008. National Park Service and Missouri State University Task Agreement # J-6064-06-0011 Modification 0001 to Cooperative Agreement: CAH6000030300. July 2008, \$79,690.
- Engle, D. M., R. Harr, S. A. Leis. 2010. Great Plains and Midwestern Grassland Fire-Grazing Consortium. 2010. Preproposal to Joint Fire Science Program. 1yr for \$10,242.
- Leis, S.A. 2012. Great Plains Fire Science Exchange. Proposal to Joint Fire Science Program. Submitted 2 years for \$290,000.
- Leis, S.A. D.M. Engle, D. Leslie, Jr. August 2001. *Project Update and Support Needs*. Department of Plant and Soil Sciences, Oklahoma State University, \$52,000.
- Leis, SA and A. Mathis. 2007. Public Affairs Committee Grant. \$900.
- Murray, N, SA Leis, BE Jamison. 2005. NRCS Conservation Innovation Grant to support patch burn grazing project. Missouri Department of Conservation, Grasslands Field Station, Clinton Missouri \$70,000.

COMPUTER SKILLS

PC-Ord, Sigma Plot, Arc GIS v.10.x, Microsoft Office 2010 (Excel, Power Point, Word, Publisher, and Access), Reference Manager, Adobe Photoshop and Illustrator, DNR

Garmin, Trimble and Garmin GPS units, SPSS.

HONORS AND AWARDS

- 2024 Inventory and Monitoring Division award for Wellness.
- 2018 Team of the Year (Safety committee at Wilson's Creek National Battlefield).
- 2012 Society for Range Management, Outstanding Young Professional.
- 2008 HTLN Team Award from NPS Inventory and Monitoring National Office.
- 2008 Coneflower badge, Missouri Native Plant Society
- 2004 Master Agronomist Scholarship OSU, \$500
- 2003 George Christie Memorial Scholarship, \$500
- 2002 OSU Incentive award \$1000.
- 1991-1995 National Merit scholarship, Beloit College.
- 1993 Oak Ridge Research Foundation Fellowship.

MEMBERSHIPS AND CERTIFICATIONS

- Association for Fire Ecology, member 2016-present.
- Patch Burn Grazing Working Group 2005-present.
- Society for Range Management 2003-present.

Member Wildlife Habitat and Young Professionals committees Organized symposium for the 2008 meeting Southern Section Comptroller/treasurer 2009-2016 Coauthored successful award nominations for Stevie Collins 2010, and Angie Reid, 2013.

- Ecological Society of America 2002-2006.
- Missouri Native Plant Society 2004-2014.

State Board Member (2006-present), Osage Plains Chapter Vice President (2006-2007), Awards committee 2007-2008, Nominating committee 2008.

- CPR and First Aid current.
- ATV operation, 2005.
- Red Card certified 2004-present.
- FEMO, READ, FFT2 qualified.
- Operational Leadership 2011.