Lauren L. Sullivan

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Education

2009-2014	Ph.D. Ecology and Evolutionary Biology, Iowa State University Minor in Statistics *Co-Major Advisors: Brent Danielson, W. Stan Harpole*
2007	B.S. with High Honors, Biology and Environmental Science, University of Michigan *Advisor: Deborah Goldberg*

Positions Held

2022-pres.	Assistant Professor; Michigan State University - Department of Plant Biology, and W. K. Kellogg Biological Station
2019-2022	Assistant Professor; University of Missouri - Division of Biological Sciences
2015-2018	Postdoctoral Researcher; University of Minnesota - Dept. of Ecology, Evolution & Behavior *Supervisor: Allison Shaw*
2008-2009	Lead Research Technician; The Corridor Project, Savannah River Site, SC *Supervisors: Lars Brudvig, Ellen Damschen, Nick Haddad, Doug Levey, Josh Tewksbury*
2007-2008	Research Technician, Archbold Biological Station; Lake Placid, FL *Supervisors: Eric Menges and Carl Weekley*

Publications

Google Scholar
Total Citations: 3459
h-index: 21

†undergraduate mentee; ‡graduate mentee; *indicates equal author contribution

2023

Wang, B., **Sullivan, L. L.**, and Wood, J. D. (2023). Modeling the role of turbulence in wind dispersal of seeds. *Ecological Modelling*, 486(110503)

Sullivan, L. L. and Shaw, A. K. (2023). Take me for a ride: herbivores can facilitate plant re-invasions. *Ecology*, 10(e4132)

Beckman, N. G. and **Sullivan, L. L.** (2023). The causes and consequences of seed dispersal. *Annual Review in Ecology, Evolution and Systematics*, 54(1):403–427

Eskelinen, A., Bahanomde, H., Bakker, J., Borer, E. T., Caldiera, M., Firn, J., Harpole, W. S., Jessen‡, M.-T., Jia, M., Krause, A. P., Nogueira, C., Peri, P. L., Seabloom, E. W., Schroeder†, K., Tognetti, P., Yasui, S.-L. E., Olde Venterink, H., Virtanen, R., and **Sullivan, L. L.** (2023). Herbivory and nutrients shape grassland soil seed banks. *Nature Communications*, 14(3949)

Borer, E. T., MacDougall, A., Stevens, C. J., **Sullivan, L. L.**, Wilfhart, P., and Seabloom, E. W. (2023). Writing a massively multi-authored paper – overcoming barriers to meaningful authorship for all. *Methods in Ecology and Evolution*, 14:1432–1442

Bakker, J., Price, J., Henning, J., Batzer, E., Ohlert, T., Wainwright, C., Adler, P. B., .., **Sullivan, L. L.**, ..., and Wardle, G. (2023). Compositional variation in grassland plant communities. *Ecosphere*, 14(e4542)

Wilfhart, P. A., Seabloom, E. W., Bakker, J. D., ..., **Sullivan, L. L.**, ..., and Borer, E. T. (2023). Nothing lasts forever: Dominant species decline under rapid environmental change in global grasslands. *Journal of Ecology*, 111:2472–2482

DeSiervo, M. H., **Sullivan, L. L.**, Kahan†, L. M., Seabloom, E. W., and Shoemaker, L. G. (2023). Disturbance alters transience but nutrients determine equilibria during grassland succession with multiple global change drivers. *Ecology Letters*, 26:1132–1144

Budd‡, K., Gunn‡, J. C., **Sullivan, L. L.**, and Eggert, L. S. (2023). Identification of conservation priority units in the asian elephant, *Elephas maximus*. *Conservation Genetics*, 24:827–837

Miller‡, Z. J., O'Brien‡, C., Canfield, C., and **Sullivan, L. L.** (2023). Show-me resilience: Assessing and reconciling expert perceptions of climate resilience in rural missouri. *Environmental Management*, 72:771–784

Dee, L. E., Ferraro, P. J., Severen, C., Kimmel, K., Byrnes, J., Clark, A. T., Raynaud, X., Reich, P. B., Wright, A. J., Arnillas, C. A., Davies, K. F., MacDoughall, A., Mori, A., Smith, M. D., Adler, P. B., ..., **Sullivan, L. L.**, ..., and Loreau, M. (2023). Increases in grassland biodiversity in 11 countries decrease average ecosystem productivity. *Nature Communications*, 14(2607)

Allbee†, S., Rogers, H. S., and **Sullivan, L. L.** (2023). The effect of dispersal, herbivory, and competition on plant community assembly. *Ecology*, 104(e3859)

Lynn‡, A., **Sullivan, L. L.**, and Galen, C. (2023). The cost of self-promotion: Ecological and demographic implications of the mentor effect in natural plant populations. *New Phytologist*, 237:1418–1431

2022 McGuire*‡, R. M., Hayashi*‡, K. T., Yan*‡, X., Caritá Vaz‡, M., Cinoğlu‡, D., Cowen‡, M. C., Martínez-Blancas‡, A., **Sullivan, L. L.**, Vazquez-Morales, S., and Kandlikar, G. S. (2022). Ecoevoapps: Interactive apps for teaching theoretical models in ecology and evolutionary biology. *Ecology & Evolution*, 12(e9556)

Virtanen, R., Bakker, J. D., Jessen, M.-T., **Sullivan, L. L.**, Harpole, W. S., and Eskelinen, A. (2022). Is the bryophyte soil diaspore bank buffered against nutrient enrichment and grazing exclusion? *Plant and Soil*, 477:487–499

Miller[‡], Z. J., Lynn[‡], A., Oster[†], C., Piotter[†], E., Wallace[†], M., **Sullivan, L. L.**, and Galen, C. (2022). Unintended consequences: Lethal specimen collection accelerates with conservation concern. *American Entomologist*, 68(3):48–55

2021 **Sullivan, L. L.**, Michalska-Smith, M. J., Sperry[†], K. P., Moeller, D. A., and Shaw, A. K. (2021). Consequences of ignoring dispersal variation in network models for landscape connectivity. *Conservation Biology*, 35(3):944–954

2020 Shoemaker*, L. G., **Sullivan*, L. L.**, Donohue, I., Cabral, J. S., Williams, R. J., Mayfield, M. ., and ... Abbott, K. C. (2020). Integrating stochasticity into community ecology. *Ecology*, 101(2):e02922

Muthukrishnan, R., **Sullivan, L. L.**, Shaw, A. K., and Forester, J. (2020). Trait plasticity alters the range of possible coexistence conditions in a competition-colonization trade-off. *Ecology Letters*, 23:791–799

2019 Firn, J., McGree, J., Harvey, E., Flores-Moreno, H., Schutz, M., Buckley, Y. M., Borer, E., Seabloom, E. W., La Pierre, K. J., MacDougall, A. M., Prober, S. M., Stevens, C. J., **Sullivan, L. L.**, Porter, E., Ladouceur, E., Allen, C., Moromizato, K. H., Morgan, J. W., Harpole, W. S., Hautier, Y., Eisenhauer, N., Wright, J., ... Wragg, P., and Risch, A. C. (2019). Leaf nutrient concentrations, but not specific leaf area, increase rapidly and predictably in response to eutrophication. *Nature Ecology and Evolution*, 3:400–406

Snell, R. S., Beckman, N. G., Fricke, E., Loiselle, B. A., Carvalho, C. S., Jones, L. R., Lichti, N. I., Lustenhouwer, N., Schreiber, S., Strickland, C., **Sullivan, L. L.**, Cavazos, B. R., Giladi, I., Hastings, A., Holbrook, K., Jongejans, E., Kogan, O., Montano-Centellas, F., Rudolph, J., Rogers, H. S., Zwolak, R., and Schupp, E. (2019). The consequences of intraspecific variation in seed dispersal for recruitment, populations and communities. *AoB Plants*, 11:plz016

Sperry[†], K., Hilfer[†], H., Lane, I., Petersen, J., and **Sullivan, L. L.** (2019a). Grassland diversity and movement traits alter native species spillover from remnant prairies. *Journal of Applied Ecology*, 56:2216–2224

Sperry[†], K. P., Shaw, A. K., and **Sullivan, L. L.** (2019b). Apps can help bridge restoration science and restoration practice. *Restoration Ecology*, 27(5):934–937

2018 **Sullivan*, L. L.**, Clark*, A. T., Tilman, D., and Shaw, A. K. (2018b). Mechanistically-derived dispersal kernels explain species-level patterns of recruitment and succession. *Ecology*, 99(11):2415–2420

Sullivan*, L. L., Ballen*, C. J., and Cotner, S. (2018a). Small group gender ratios impact biology class performance and peer evaluations. *PLOS ONE*, 13(4):e0195129

Anderson, T. M., Griffith, D. M., Grace, J. B., and Lind, E M ... **Sullivan, L. L.** ... Borer, E. B. (2018). Herbivory and eutrophication mediate grassland plant nutrient responses across a global climatic gradient. *Ecology*, 99(4):822–831

Frater, P. N., Borer, E. T., Fay, P. A., Jin, V., Knaeble, B., Seabloom, E. W., **Sullivan, L. L.**, Wedin, D., and Harpole, W. S. (2018). Nutrients and environment influence arbuscular mycorrhizal colonization both independently and interactively in *Schizachyrium scoparium*. *Plant and Soil*, 425(1-2):493–506

Galic, N., **Sullivan, L. L.**, Grimm, V., and Forbes, V. E. (2018). When things don't add up: quantifying impacts of multiple stressors from individual metabolism to ecosystem processing. *Ecology Letters*, 21:568–577

2017 Harpole, W. S., **Sullivan, L. L.**, Lind, E. M., Firn, J., Adler, P. B., Borer, E. T., Chase, J., Fay, P. A., Hautier, Y., Hillebrand, H., MacDougall, A. S., and Seabloom, E. W. ... Stevens, C. J. (2017). Out of the shadows: multiple nutrient limitations drive relationships among biomass, light and plant diversity. *Functional Ecology*, 31:1839–1846

Sullivan, L. L., Li, B., Miller, T. E. X., Neubert, M. G., and Shaw, A. K. (2017). Density dependence in demography and dispersal generates fluctuating invasion speeds. *Proceedings of the National Academy of Sciences*, 114(19):5053–5058

2016 Harpole, W. S., **Sullivan, L. L.**, Lind, E. M., Firn, J., Adler, P. B., Borer, E. T., Chase, J., Fay, P. A., Hautier, Y., Hillebrand, H., MacDougall, A. S., Seabloom, E. W., and Williams, R. ... Wragg, P. D. (2016). Addition of multiple limiting resources reduces grassland diversity. *Nature*, 537(7618):93–96

Flores-Moreno, H., Reich, P., Lind, E. M., **Sullivan, L. L.**, Seabloom, E. W., Yahdjian, L., MacDougall, A., and Reichmann, L. ... Borer, E. T. (2016). Climate modifies response of non-native and native species richness to nutrient enrichment. *Philosophical Transactions B*, 371:20150273

Sullivan, L. L., Danielson, B. J., and Harpole, W. S. (2016). Mammalian herbivores alter the population growth and spatial establishment of an early-establishing grassland species. *PLOS ONE*, 11(2):e0147715

2015 Seabloom, E. W., Borer, E. T., Buckley, Y. M., Cleland, E. E., Davies, K. F., Firn, J., Harpole, W. S., Hautier, Y., Lind, E. M., MacDougall, A. S., Orrock, J. L., and Prober, S. M. ... **Sullivan, L. L.** ... Yang, L. (2015). Plant species' origin predicts dominance and response to nutrient enrichment and herbivores in global grasslands. *Nature Communications*, 6:7710

Sitters, J., Atkinson, C. L., Guelzow, N., Kelly, P., and **Sullivan, L. L.** (2015). Spatial stoichiometry: cross-ecosystem material flows and their impact on recipient ecosystems and organisms. *Oikos*, 124(7):920–930

2014 Haddad, N. M., Brudvig, L. A., Damschen, E. I., Evans, D. M., Johnson, B. L., Levey, D. J., Orrock, J. L., Resasco, J., **Sullivan, L. L.**, Tewksbury, J. J., Wagner, S. A., and Weldon, A. J. (2014). Potential negative ecological effects of corridors. *Conservation Biology*, 28(5):1178–1187

Borer, E. T., Seabloom, E. W., Gruner, D. S., Harpole, W. S., Hillebrand, H., and Lind, E M ... **Sullivan, L. L.** ... Yang, L. (2014). Herbivores and nutrients control grassland plant diversity via light limitation. *Nature*, 508(7497):517–20

2013 Seabloom, E. W., Borer, E. T., Buckley, Y., Cleland, E. E., Davies, K., Firn, J., Harpole, W. S., Hautier, Y., Lind, E., Macdougall, A., Orrock, J. L., and Prober, S. M. ... **Sullivan, L. L.** ... Yang, L. (2013). Predicting invasion in grassland ecosystems: Is exotic dominance the real embarrassment of richness? *Global Change Biology*, 19(12):3677–3687

Schafer, J. L., **Sullivan, L. L.**, Weekley, C. W., and Menges, E. S. (2013). Effects of habitat and time-since-fire on recruitment, survival, and reproduction of Paronychia chartacea ssp. chartacea, a short-lived Florida scrub endemic herb. *The Journal of the Torrey Botanical Society*, 140(2):181–195

2011	Adler, P. B., Seabloom, E. W., Borer, E. T., Hillebrand, H., Hautier, Y., Hector, A., Harpole, W. S., O'Halloran, L. R., and Grace, J. B. ... **Sullivan, L. L.** ... Yang, L. H. (2011). Productivity is a poor predictor of plant species richness. *Science*, 333:1750–1753
	Sullivan*, L. L., Johnson*, B. L., Brudvig, L. A., and Haddad, N. M. (2011). Can dispersal mode predict corridor effects on plant parasites? *Ecology*, 92(8):1559–64
2010	**Sullivan, L. L.**, Wildova, R., Goldberg, D., and Vogel, C. (2010). Growth of three cattail (*Typha*) taxa in response to elevated CO_2. *Plant Ecology*, 207:121–129

Publications In Progress - Reprints available upon request

In Rev.	Stephen‡, C. A., Drees, D. G., Ladner, J. H., and **Sullivan, L. L.** Fire effects on plant communities in ozark woodlands and glades. *Fire Ecology (In Revision)*
	Wynne‡, K. C., Parker-Smith‡, M. J., Eyerly†, E. M., and **Sullivan, L. L.** Quantifying seed rain patterns in a remnant and a chronosequence of restored tallgrass prairies in north central missouri. *Journal of Applied Ecology (In Review)*
	Lord‡, S., Veum, K. S., **Sullivan, L. L.**, Anderson, S. H., Acosta-Martinez, V., and Clark, K. Ancient prairies as a reference for soil organic carbon and microbial community health. *Applied Soil Ecology (In Review)*
	Sullivan, L. L., Portlas†, Z. M., Jaeger†, K. M., Mercedes†, M., and Hamilton, J. A. Climate and habitat continuity interact to alter contemporary dispersal potential. *Ecology and Evolution (in Review)*

Popular Articles

3. **Sullivan, L. L.** (2023). Seed dispersal: Deciding when to move. *eLife - Insights*, 12(e85477) link

2. Coles, N. A., Hamlin, J. K., **Sullivan, L. L.**, Parker, T. H., and Altschul, D. (2022). Build up big-team science. *Nature - Comment*, 601:505–507 link

1. Frater, P. N. and **Sullivan, L. L.** (2018). A short guide to working remotely. *Science - Working Life*, 362(6419) link

Grants and Fellowships

Current

2022-2024	US Department of Agriculture Non-Assistance Cooperative Agreement ($68,000) *Acquisition of Ecological Measurements in the Central Mississippi River Basin LTAR Site.* Lead-PI: **L. L. Sullivan**
2021-2023	US Forest Service ($179,942)

Effects of Bison During Prairie Restoration
Lead-PI: **L. L. Sullivan**

Past

2021-2023 US Forest Service ($398,461)
Monitoring prairie restoration in conjunction with active bison grazing on Midewin National Tallgrass Prairie
Lead-PIs: **L. L. Sullivan** & M. Byrne

2022-2023 Joint Fire Science Program, Bureau of Land Management - DECLINED ($24,802)
Effects of prescribed fire over 20 years on the ground flora and stand structure of three Missouri Ozark community types in the Current River Watershed
Lead-PI: C. Stephen[‡], Co-PI: **L. L. Sullivan**

2020-2021 Prairie Forks Conservation Area Research Grant ($10,024)
The consequences of post-dispersal seed predation for rare, common and exotic species survival in remnant and restored prairies.
Lead-PI: **L. L. Sullivan**

2020-2021 Prairie Forks Conservation Area Research Grant ($10,558)
Assessing soil seed banks in north-central Missouri remnant prairies and a chronosequence of restored prairies.
Lead-PI: K. Wynne, Co-PI: **L. L. Sullivan**

2019-2022 US Department of Agriculture Non-Assistance Cooperative Agreement. ($362,932)
Acquisition of Ecological Measurements in the Central Mississippi River Basin LTAR Site.
Lead-PI: **L. L. Sullivan**

2019-2020 Prairie Forks Conservation Area Research Grant ($10,009)
Quantifying patterns of seed rain between remnant and restored prairies, and how they change with restoration age
Lead-PI: **L. L. Sullivan**

2016-2020 Minnesota Environment and Natural Resources Trust Fund ($556,000)
Measuring prairie habitat connectivity: pollen and seed dispersal
Lead-PI: **L. L. Sullivan**, Co-PIs: A. K. Shaw and D. Moeller

2016 University of Minnesota, Institute on the Environment Mini Grant ($3000)
Early career cross disciplinary science communication group
Lead-PI: L. Sloat, Co-PIs: L. Dee, S. Castle, L. Cline, C. Rosenfeld, L. Samberg, and **L. L. Sullivan**

2016 University of Minnesota, Institute on the Environment Mini Grant ($3000)
Characterizing the distribution of plants and associated pollinators in a fragmented landscape
Lead-PI: D. Cariveau, Co-PIs: I. Lane, **L. L. Sullivan**, and A. K. Shaw

2012-2014 NSF; Doctoral Dissertation Improvement Grant ($14,935)
Integrating STEM approaches to understand the dispersal of grassland plants
PI: W. S. Harpole, Co-PI: **L. L. Sullivan**

2011-2013 Toyota & National Audubon Society; TogetherGreen Conservation Leaders ($10,000)
Restoring creative perspectives of native landscapes
PI: **L. L. Sullivan**

2011-2013 Iowa DOT; Living Roadway Trust Fund Grant Program ($12,620)
Oakridge reconstruction project: Research experimentation and educational outreach

	Lead-PI: **L. L. Sullivan**; Co-PI's: E. Bach, B. Mortensen, W. S. Harpole, K. Hofmockel
2011-2012	Iowa Native Plants Society; small grants program ($500) *Effects of diversity on the prairie experience* Lead-PI: E. Bach; Co-PI's: B. Mortensen, **L. L. Sullivan**, W. S. Harpole, K. Hofmockel
2010-2013	NSF; Graduate Research Fellowship *Seed dispersal and life history strategy effects on spatial coexistence* PI: **L. L. Sullivan**
2009-2013	Iowa State University; Plant Sciences Institute Fellowship - declined 2 years
2009	Iowa State University; Ecology and Evolutionary Biology Fellowship - declined
2005	University of Michigan; UMBS-TNC grant ($1000) *Growth and photosynthesis of three cattail (Typha) taxa in response to elevated CO_2* Lead-PI: **L. L. Sullivan**; Co-PI's: D. E. Goldberg, R. Wildova

Honors and Awards

2022	Research Advisory Committee High Value Research Award for work on Pollinator Habitat along Highway Right of Ways - Missouri Department of Transportation
2017	College of Biological Sciences Impactful Research Award for Postdoctoral Scientists - University of Minnesota
2007	Phi Beta Kappa - University of Michigan
2002-2007	University Honors (6 semesters) - University of Michigan
2006	Alumni War Memorial Award - The School of Natural Resources, University of Michigan
2003-2004	James B. Angell Scholar - University of Michigan

Selected Presentations

Invited Seminars

2024	*The Causes and Consequences of Dispersal for Grassland Plant Communities* University of Guelph Biology Departmental Seminar - Guelph, ON
2023	*Causes and consequences of dispersal for grassland plant communities* University of Wyoming Botany Departmental Seminar - Laramie, WY
2023	*Causes and consequences of dispersal for grassland plant communities* Utah State University Biology Departmental Seminar - Logan, UT
2022	*The role of seed dispersal for prairie dynamics* Missouri Master Naturalists Monthly Meeting - Virtual
2022	*Ecological causes and consequences of dispersal in restored and native grasslands* Case Western Reserve University Biology Departmental Seminar, Graduate Student Invited Speaker - Virtual
2021	*Ecological causes and consequences of dispersal in restored and native grasslands* University of Missouri, Saint Louis Biology Departmental Seminar - Virtual
2021	*Invited Panelist for Session: Big Team Science* Metascience Conference - Virtual

2021 *Ecological Causes and Consequences of dispersal in restored and native grasslands* Wright State University Biology Departmental Seminar - Virtual

2021 *How "growing up" in collaborative science networks shapes your views on how science can be done.* Ecological Society of America Conference (Organized Inspire Session: Building Belonging in Ecology: Networks as Connectors; Networks as Disruptors) - Virtual

2020 *The importance of dispersal for ecological restoration.* Missouri S&T and Southern Illinois University, Edwardsville Joint Biology Departmental Seminar - Virtual

2020 *Natural seed dispersal can promote diversity ingrassland restorations when safe sites are available* Seed Dispersal in the Anthropocene: 7^{th} Frugivore and Seed Dispersal Conference (Organized Sympoisum: Applications of frugivory and seed dispersal ecology for tropical forest restoration) - Uttarakhand, India

2019 *Plants on the move: Ecological causes and consequences of dispersal.* Kansas State University Biology Departmental Seminar- Manhattan, KS

2019 *Plants on the move: Ecological causes and consequences of dispersal.* Iowa State University EEB Departmental Seminar- Ames, IA

2018 *Landscape context promotes plant species spillover that can increase diversity in restored prairies.* Ecological Society of America Conference (Organized Oral Session: Examining the Role of Spatial Variation in Maintaining Plant Community Diversity) - New Orleans, LA

2017 *Resource-driven variation in plant dispersal traits and potential movement.* Ecological Society of America Conference (Organized Oral Session: Individual variation in dispersal) - Portland, OR

2016 *Resource-mediated dispersal and plant coexistence.* iDiv Seminar Series - Leipzig, Germany

Causes and consequences of grassland plant dispersal. Carleton College Biology Department Seminar - Northfield, MN

2014 *Stoichiometric influence on the life-history structure and dispersal ability of grassland plant communities.* University of Minnesota EvolTwin group - Saint Paul, MN

2014 *Herbivores influence both dispersal distance and establishment of an annual legume (Chamaecrista fasciculata) in a tallgrass prairie restoration.* Iowa Chapter of the Wildlife Society - Ames, IA

2011 *Plant dispersal and spatial ecology.* Hillebrand and Kleyer lab group - Oldenburg University, Germany

Contributed Presentations

2019 *Plant-herbivore interactions and their influence on plant invasion rate.* Ecological Society of America Conference - Baltimore, MD

2015 *Plant-herbivore interactions and their influence on plant invasion rate.* Ecological Society of America Conference - Baltimore, MD

2014 *The influence of nutrient additions on the dispersal traits of grassland plants.* The Movement Ecology and Dispersal Conference - Aberdeen, Scotland

2013	*Nutrient influence on the life history states of an annual plant community.* Ecological Society of American Conference - Minneapolis, MN
	The influence of nutrient additions on dispersal traits in grassland plants. ISU Ecology and Evolutionary Biology Spring Symposium - Ames, IA
2012	*Dispersal as a deterministic or stochastic process: the influence of nutrient additions on dispersal traits in grassland plants.* Ecological Society of America Conference - Austin, TX
2011	*Top-down and bottom-up effects on plant reproduction in a tallgrass prairie.* Ecological Society of American Conference - Pittsburg, PA
2010	*Parasite dispersal mode predicts connectivity effects.* Ecological Society of American Conference - Albuquerque, NM
2008	*Seed ecology of Paronychia chartacea ssp. chartacea.* Archbold Biological Station Intern Seminar - Lake Placid, FL
2007	*The effects of elevated CO_2 on the invasive potential of cattails: a comparison of Typha taxa.* University of Michigan Honors Student Seminar - Ann Arbor, MI

Mentoring

Current

Dr. Alejandra Martínez-Blancas	Postdoctoral Scholar - March 2023
Dr. Laís Petri	Postdoctoral Scholar - Sept 2023
Dr. Ashish Nerlekar	Postdoctoral Shcolar - Sept 2023
Kate Wynne	PhD Student
Marissa Zaricor	PhD Student
Ethan Rose	PhD Student
Rachel Mickey	Undergraduate Student

Past

Dr. Gaurav Kandlikar	Postdoc through Preparing Future Faculty Program - co-mentor *Current: Faculty at Louisiana State University*
Josh Klostermann	PhD Student *Current: PhD at University of Missouri*
Zack Miller	PhD Student *Current: Missouri TNC Chapter*
Maya Parker-Smith	Masters Student *Current: Lab Manager - UNC Greensboro*
Carrie Stephen	Masters Student *Current: Missouri DNR*
Randal Klatt	Undergraduate Student *Next Step: MSU student*
Shriya Deshmukh	Undergraduate Student *Next Step: Masters in Environmental Engineering*
Katy McWilliams	Undergraduate Student *Next Step: Med School*

Olivia DeClue	Undergraduate Student *Current: MU student*
Vallerie Budrovich-Stack	Undergraduate Student *Next Step: MU student*
Kaitlin Kleiboeker	Undergraduate Student *Next Step: MU student*
Tyler Seabold	Undergraduate Student *Next Step: MU student*
Erica Eyerly	Undergraduate Student *Next Step: MU student*
Danielle Gafford	Undergraduate Student *Next Step: MU student*
Kelsey Jaeger	Undergraduate Student *Next Step: Masters in Genetic Counselling*
Lisette Perez	Undergraduate Student *Next Step: NPS intern*
Savana Presson	Undergraduate Student *Next Step: MU student*
Brandy Williams	Undergraduate Student *Current: Graduate Student at UNL*
Blake Schreck	Undergraduate Student *Current: Dentist*
Elizabeth Lopez	Undergraduate Student *Next Step: Applying for PA school*
Meredith Medley	Undergraduate Student *Next Step: MU student*
Maya Parker-Smith	Undergraduate Student *Current: Joined my lab for graduate school*
Katie Sperry	Postbac technician. *Current: PhD student at Northeastern*
Hayley Hilfer	Postbac technician. *Current: Owns videography business*
Zack Radford	Undergraduate Student and Postbac technician. *Current: PhD student at University of South Carolina*
Jordan Pruszenski	Postbac technician. *Next Step: Alaska Forest Service*

Additional Professional Training

2022	CIMER Mentor-Up Training: 1 day workshop to promote training in inclusive mentorship - LTER network
2019-2021	THRIVE Faculty Learning Community: Bi-weekly pedagogy group for training inclusive STEM teachers - University of Missouri
2017	Workshop: Global grassland nutrient stoichiometry II, Synthesis Center for Biodiversity Research (sDiv) - Leipzig, Germany
2016	Workshop: Stochasticity and species coexistence, Synthesis Center for Biodiversity Research (sDiv) - Leipzig, Germany
	Workshop: Global grassland nutrient stoichiometry, Synthesis Center for Biodiversity Research (sDiv) - Leipzig, Germany
2014	Workshop: Woodstoich III Working Group - Sydney, Australia

2010-2014	Working Group: Bi-weekly pedagogy group discussing appropriate ways to promote learning in classroom instruction and assessment (LEA/RN) - Iowa State University
2012	Workshop: Enhancing Linkages between Math and Ecology (ELME) - Michigan State University, Kellogg Biological Station
2012	Seminar: Preparing Future Faculty - Iowa State University
2009-pres	Working Group: The Nutrient Network

Teaching

Fall '23	**General Ecology, Lecture** - Michigan State University Will develop and teach a 200 student, 3 credit undergraduate course as primary instructor Will teach in alternate falls
Spr '23	**Statistical Methods in Ecology and Evolution** - Michigan State University Taught 1/2 semester of a 2 semester, 3 credit graduate course series as primary instructor Will teach every spring
2022	**Quantitative Methods in the Life Sciences** - University of Missouri Co-developed and taught 3 credit graduate course as primary instructor
2020-2021	**General Ecology, Lecture and Lab** - University of Missouri Developed and taught 5 credit undergraduate course under pandemic conditions as primary instructor
2020-2022	**Advanced Quantitative Methods in the Life Sciences** - University of Missouri Developed and taught 3 credit graduate course as primary instructor
2014	**BIOL 471 Conservation Biology** - Iowa State University Guest lecturer on careers and opportunities in the field
2012-2013	**ENSCI 202 Sustainability Learning Community Seminar** - Iowa State University Developed and served as primary instructor for a new interdisciplinary living/learning community centered around sustainability
2012	**ENSCI 201 Introduction to Environmental Issues** - Iowa State University Guest lecturer
2011-2013	**Spring Phenology: From snowmelt to finals** - Iowa State University Co-developed and taught undergraduate honors seminar where students made phenological field observations and related them to ecological/evolutionary concepts (taught 3 years)
2011-2012	**BIOL 495 How to get into grad school** - Iowa State University Guest lecturer on career paths and grant applications
2012	**BIOL 211 Introductory Biology** - Iowa State University Guest lecturer

Equity and Outreach

2023	**CMREEC Career Exploration Field Day** - Univ. of Missouri, Bradford Research Farm

Presented on how our ag-related research could be a career to ∼2000 highschool students

2023 **LTAR Field Day** - Kellogg Biological Station, Michigan State University
Presented to the public, farmers and scientists on future work in the KBS LTAR Prairie Strips project

2023 **Prairie Seeds: Gotta catch 'em all** - KBS LTER K-12 Partnerships Program
I presented on my research in an invited seminar in June 2023, and then was invited back to present on how I could make my research into a classroom activity in October 2023.

2023 **BioBlitz** - Kellogg Biological Station, Michigan State University
Led a group of local participants to identify as many species as possible in 3 hours.

2023 **Tips on attending graduate school** - Zoology Club, Michigan State University
I presented on my research and spoke to the club members about careers in science, and how to apply for graduate school.

2023 **Gotta catch 'em all: How I went from a love of Pokemon to a master Prairiemon trainer** - EEB BIPOC SIPC invited speaker
I presented on my research, and also spoke about how to decide if graduate school is right for you, and provided tips and tricks for applying to a group of BIPOC students in an online data science course.

2022 **Missouri Master Naturalist Invited Speaker** - Virtual event
I spoke at the group's monthly meeting about topics of interest including how dispersal plays an important role in prairie restorations and communities.

2021-2022 **Graduate Student Mentor-Mentee Program** - DBS, University of Missouri
Based on requests from BIPOC students, I organize a graduate student mentoring program where incoming graduate students are mentored by older graduate students in the University.

2020-2022 **Graduate Student Inclusion & Equity Reading Group** - DBS, University of Missouri
I co-run a reading group with graduate students where we lead students in reading books about inclusion and equity.

2019 **Show Me Mizzou Day Booth Presenter** - DBS, University of Missouri
Opened my lab to the public and developed activities that demonstrate how we track and capture dispersing seeds. This was part of a program that our division put on titled "Tracking Wildlife in the 21st Century".

2019 **App Summary** - The Nature Conservancy, MN, ND, SD tri-state chapter
Demonstrated the utility of the web-based app we created (Sperry et al. 2019a) to help land managers decide either where to add restorations to increase connectivity in their county in Minnesota, or determine which existing grasslands are key to connectivity in their county and to protect those from tillage accordingly.

2015-2017 **GeraniaMania** - Anoka Middle School for the Arts and Sciences
Developed and implemented a research project for 7^{th} grade students investigating how fertilizer addition influenced geranium growth. The students ran their experiment for two months, and over the course of five in-class days I helped explain the scientific method, helped them develop hypotheses, graph their data and conclude findings. *(3 years)*

2016 **Scientific and Natural Areas Manager Outreach Event** - Prairie Dispersal Project
Spoke to Northwest Minnesota Scientific and Natural Areas (SNA) Managers about our Prairie Dispersal Project occurring on Bluestem Prairie Scientific and Natural Area

2015-2016 **75 min. scientific investigation** - Cedar Creek Ecosystem Science Reserve
Developed and implemented a 75 min. scientific investigation of how height at seed release influenced seed dispersal distance with 7^{th} grade students. Students developed a research question and hypotheses, planned an experimental test, collected data, graphed and interpreted results. *(2 years)*

2012-2014 **Neighborhood Restoration Ecology Education Q&A Night** - Ames, IA

Presented to the Ames area residents about our restoration ecology project and its ecological/educational significance. We allowed the audience a chance to ask questions about the project to keep these stakeholders informed.

2013 **Interdisciplinary Landscape Design** - Iowa State University
Worked with an undergraduate Landscape Design Studio to interlace their vision for combining science and the arts with the scientific and conservation goals of our local restoration ecology research site in Ames, IA to develop feasible site plans for a publicly accessible research park.

2012 **Encouraging Ecology in Introductory English** - Iowa State University
Presented to undergraduate English students on the history and importance of native prairie in Iowa. Students then helped with prairie planting or experimental setup related to our restoration ecology research project. Students also prepared proposals for how different stakeholders with different perspectives (e.g.: agrarian, recreationist, conservationist, etc) could use the restored prairie.

2012 **Science Education Lunch** - Ames Middle School Talented and Gifted Lunch
Presented to 7^{th} and 8^{th} grade honors science students at lunch on seed dispersal and Charles Darwin's ecological experiments.

2012 **Prairie Planting Event** - Iowa State University
Worked with Iowa State undergraduates and Ames community members to hand-seed a 4-acre experimental prairie.

2012 **Growing Prairies and Developing Scientists** - ISU Biological Sciences Club
Presented on current restoration ecology research and provided advice on how to get to graduate school.

2011-2012 **Science Night** - Edwards Elementary School
Designed interactive activities for elementary students about seed dispersal.

2010 **Continuing Education Training for Iowa Science Teachers** - Des Moines, IA
Presented current research to local Iowa science teachers in an effort to encourage knowledge and interest in plants.

2009 **Program for Women in Science and Engineering Career Fair** - Iowa State University
Designed an activity to teach middle school girls about restoration ecology and promoted careers for women in restoration science.

2006 **Environmental Alternative Spring Break Leader** - University of Michigan
Co-led a group of 12 undergraduates to North Carolina where we restored land by planting 10,000 native Longleaf Pine trees. Prepared weekly presentations prior to the trip to educate participants on ecological and natural resource issues including: invasive species and ecological restoration.

Education Evaluation

2016-2017 **Honeybees, Pollination and Our Food: Program Evaluation**
In collaboration with the Bell Museum of Minnesota and the Saint Paul Public School System, I evaluated student learning as a result of a museum-based program where 5th grade students learned about pollinators and their role for sustaining humans. I also conducted post-program surveys of teacher's impressions of the program *(2 years)*

2015-2017 **Cedar Creek Ecosystem Science Reserve: Program Evaluation**
Provided statistical expertise to extract quantitative data from drawings of ecosystems before and after a program visit to Cedar Creek Ecosystem Science Reserve to determine if and how student learning improved

Academic and Institutional Service

Scientific Review

Rev. for: *Biological Conservation, Biological Invasions, Ecological Applications, Ecology, Ecology and Evolution, Ecology Letters, Ecosphere, eLife, Environmental Practice, Functional Ecology, Heliyon, Journal of Ecology, Journal of Plant Ecology, Landscape Ecology, Molecular Ecology, Plant Ecology, Plant Environment Interactions, PLOS ONE, Perspectives in Plant Ecology Evolution and Systematics, PNAS, ProcB, Restoration Ecology, Scientific Reports*

University Service

2024-pres.	Data Colloquium - EEB Program, Michigan State University
2023	Fall Retreat Planning Committee - Plant Biology, Michigan State University
2023-pres.	Diversity Equity and Inclusion Committee - EEB Program, Michigan State University
2019-2022	Graduate Education Committee Member - University of Missouri
2019-2022.	Tucker Prairie Committee Member - University of Missouri
2020-2021	Integrative Biology Faculty Search Committee Member - University of Missouri
2017-2018	Organized EEB postdoc-invited seminar speaker (3 visits) - University of Minnesota
2016-2017	Organized EEB seminar speaker (2 visits) - University of Minnesota
2011-2012	President of Graduate Student Association - Iowa State University
2010-2011	Vice President and Social Chair of Graduate Student Association - Iowa State University

Last updated: February 25, 2024