COURTNEY SIEGERT

Department of Forestry, Mississippi State University
Phone: (662) 325-7481; Fax: (662) 325-8726; Email: cms977@msstate.edu

EDUCATION

Bachelor of Science	Mathematics	Fairfield University	2007
Master of Science	Geography	University of Delaware	2009
Doctor of Philosophy	Geography	University of Delaware	2013

RESEARCH & PROFESSIONAL EXPERIENCE

2021-present	Undergraduate Program Coordinator, Mississippi State University
2019-present	Associate Professor, Mississippi State University
2013-2019	Assistant Professor, Mississippi State University

CURRENT GRANTS & FUNDING

1. National Science Foundation. *REU Site: Ecology and Management for Resilient Adapted Forests*, Collaborator/Mentor, 2024-2027. **$457,962**.
2. Department of Energy (DE-EE0009280). *PoSIES: Populus in the southeast for integrated ecosystem services*, Co-PI, 2021-2025. **$2,544,895**.
3. USDA Farm Service Agency (FBC21CPT0011805). *Climate change mitigation assessment of Conservation Reserve Program practices with Trees*, Co-PI, 2021-2026. **$2,679,722.**
4. National Fish and Wildlife Foundation. *Novel techniques for restoring shortleaf pine and shortleaf pine-hardwood ecosystems on reclaimed mine sites*. Co-PI, 2020-2024. **$168,688**.
5. USDA NIFA (2018-68005-27636). *Advancing Populus pathways in the southeast*, Co-PI, 2018-2024. **$1,000,000**.

HONORS & AWARDS

- Research Award, College of Forest Resources; MSU, 2022, 2019
- Advising Award, College of Forest Resources; MSU, 2022
- Research Award, Division of Agriculture, Forestry, and Vet. Medicine, MSU, 2020
- Teaching Award, Division of Agriculture, Forestry, and Vet. Medicine, MSU, 2018
- Teaching Award, College of Forest Resources, MSU 2016
- National Finalist, Communication Award: Learning Module, Nation Association of County Agricultural Agents 2016

PUBLICATIONS RELATED TO PROPOSED PROJECT (ORCID: 0000-0001-9804-3858)

1. **Siegert C**, Clay N, Pace K, Vissa S, Hofstetter RW, Leverón O, Riggins JJ. In Press. Bark beetle-driven community and biogeochemical impacts in forest ecosystems: a review. *Annals of the Entomological Society of America* saae009.
2. Renninger J, Kyaw TY, **Siegert CM**, Rousseau RJ. 2024. Water use efficiency, leaf physiology, and productivity of black willow (Salix nigra Marshall) for short rotation bioenergy production in the southern U.S. *Biomass and Bioenergy* 183: 107135.

3. Willis JL, Bragg DC, Cannon JB, Gandhi KJK, Kidd KR, Polinko AD, Puhlick JJ, Saenz D, Sayer MA, Schalk CM, Self AB, **Siegert CM**, Varner JM. 2024. Assessing the potential impact of retaining native off-site tree species in woodland restoration. *Restoration Ecology* e14119.
4. Scavotto N, **Siegert CM**, Alexander HD, Varner JM. 2024. Bark and crown morphology drive differences in rainwater distribution in an upland oak forest. *Forest Ecology and Management* 553: 121642.
5. Clay NA, Thomason JT, Benedetto N, Dutton J, **Siegert CM**, Tang JT, Leverón O, Hofstetter R, Riggins JJ. 2023. Bark beetles initially slow then accelerate carbon cycling mediated in part by insects. *Forest Ecology and Management* 553: 121636.
6. Goldsmith C, Alexander HD, Granger JJ, **Siegert CM**. 2023. Invasive *Microstegium vimineum* (Japanese stiltgrass) hinders growth and biomass of hardwood seedlings regardless of light and moisture treatment. *Forest Ecology and Management* 539: 120984.
7. **Siegert CM**, Ilek A, Wade A, Schweitzer C. 2023. Changes in bark properties and hydrology following prescribed fire. *Hydrological Processes* 37: e14799.
8. Beam CL, **Siegert CM**, Granger JJ, Iglay R. 2022. Evaluation of landowner accessible control methods for japanese stilt grass (*Microstegium vimineum*). Willis JL, Self AB, **Siegert CM**, Eds. 2022. *Proceedings of the 21st Biennial Southern Silvicultural Research Conference*. Gen. Tech. Rep. SRS-268. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 262 p.
9. Kyaw TK, **Siegert CM**, Dash P, Poudel KP, Pitts JJ, Renninger HJ. 2022. Using hyperspectral leaf reflectance to estimate photosynthetic capacity and nitrogen content across eastern cottonwood and hybrid poplar taxa. *PLOS One 17: e0264780*.
10. Alexander HD, **Siegert CM**, Brewer JS, Kreye J, Lashley MA, McDaniel JK, Paulson AK, Renninger HJ, Varner JM. 2021. Mesophication of oak landscapes: evidence, knowledge gaps, and future research. *BioScience* 71:531-542.
11. Ni X, Parajuli PB, Ouyang Y, Dash P, **Siegert C**. 2021. Assessing land use change impact on stream discharge and stream water quality in an agricultural watershed. *Catena* 198: 105055.
12. **Siegert CM**, Suriano ZJ, Leather DJ, Gold AJ, Addy K, Schroth AW, Seybold E, Inamdar S, Levia DF. 2021. Effects of atmospheric circulation on stream chemistry in forested watersheds across the northeastern United States: Part 1. Synoptic-scale forcing. *Journal of Geophysical Research: Atmospheres* 126: e2021JD034546.
13. Suriano ZJ, **Siegert CM**, Leather DJ, Gold AJ, Addy K, Schroth AW, Seybold E, Inamdar S, Levia DF. 2021. Effects of atmospheric circulation on stream chemistry in forested watersheds across the northeastern United States: Part 2. Interannual weather type variability. *Journal of Geophysical Research: Atmospheres* 126: e2021JD034546.