

Abrianna J. Soule

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EDUCATION

University of Michigan

2021* – present

Ecology and Evolutionary Biology (PhD student)

Advisor: Dr. Marjorie Weber

*Weber lab moved from Michigan State University in August 2022.

University of Michigan

2014 – 2018

Ecology and Evolutionary Biology (B.S., High Honors), Minors in Environment and Gender & Health

Advisor: Dr. Mark Hunter

PUBLICATIONS

In prep:

Soule, A. J., Lindroth, R. L., Weber, M. G. (*in prep*). Testing for tradeoffs in defense investment strategies across latitude: A case study in trembling aspen (*Populus tremuloides*).

Published / in press:

Forrister, D. L., Endara, M. J., **Soule, A. J.**, Younkin, G. C., Mills, A. G., Lokvam, J., Dexter, K. G., Pennington, R. T., Kidner, C. A., Nicholls, J. A., Loiseau, O., Kursar, T. A., Coley, P. D. (2022). Diversity and Divergence: Evolution of defense chemistry in the tropical tree genus *Inga*. *New Phytologist*, 237, 631-642. doi: 10.1111/nph.18554

Walker, T. W. N., Alexander, J. M., Allard, P-M., Baines, O., Baldy, V., Bardgett, R. D., Capdevilax, P., Coley, P. D., van Damm, N. M., David, B., Defosse, E., Ernst, M., Fernandez, C., Forrister, D. L., Gargallo-Garriga, A., Jassey, V., Marr, S., Neumann, S., Pellissier, L., Peñuelas, J., Peters, K., Rasmann, S., Roessner, U., Salguero-Gómez, R., Sardans, J., Schrod, F., Schuman, M. C., **Soule, A. J.**, Sun, X., Uthen, H., Weckwerth, W., & Wolfender, J-L. (2022). Functional Traits 2.0: The power of the metabolome for ecology. *Journal of Ecology*, 110, 4-20. doi: 10.1111/1365-2745.13826

Endara, M. J., **Soule, A. J.**, Forrister, D. L., Dexter, K. G., Pennington, R. T., Nicholls, J. A., Loiseau, O. & Coley, P. D. (2021). The role of plant secondary metabolites in shaping regional and local plant community assembly. *Journal of Ecology*, 110, 34-45. doi: 10.1111/1365-2745.13646

Soule, A. J., Decker, L. E., & Hunter, M. D. (2020). Effects of diet and temperature on monarch butterfly wing morphology and flight ability. *Journal of Insect Conservation*, 24, 961-975. doi: 10.1007/s10841-020-00267-7

Coley, P. D., Endara, M. J., Ghabash, G., Kidner, C. A., Nicholls, J. A., Pennington, R. T., Mills, A. G., **Soule, A. J.**, Lemes, M. R., Stone, G. N., & Kursar, T. A. (2019). Macroevolutionary patterns in overexpression of tyrosine: An anti-herbivore defence in a speciose tropical tree genus, *Inga* (Fabaceae). *Journal of Ecology*, 107(4), 1620-1632. doi: 10.1111/1365-2745.13208

Decker, L. E., **Soule, A. J.**, de Roode, J. C., & Hunter, M. D. (2019). Phytochemical changes in milkweed induced by elevated CO2 alter wing morphology but not toxin sequestration in monarch butterflies. *Functional Ecology*, 33(3), 411-421. doi: 10.1111/1365-2435.13270

OTHER RESEARCH EXPERIENCE

University of Utah

Laboratory Technician 2018 – 2021
PI: Drs. Phyllis Coley and Thomas Kursar

University of Michigan
Research Assistant 2015 – 2018
PI: Dr. Mark Hunter

SCHOLARSHIPS, FELLOWSHIPS, HONORS & AWARDS

Rackham Graduate Student Research Grant - \$1500	2023
Dr. Nancy William Walls Award for Field Research - \$2007	2023
NSF Graduate Research Fellowship - \$146000 (3 year stipend + tuition)	2023
EEB Graduate Research Supplies Funding - \$250	2023
Rackham Conference Travel Grant - \$900	2022
EEB Conference Travel Funding - \$400	2022
BSA Graduate Student Research Award - \$1500	2022
Triemer Plant Biology Graduate Summer Fellowship - \$7500	2022
Paul Taylor Plant Biology Endowment - \$1000	2022
NSF Graduate Research Fellowship - Honorable Mention	2021
KBS LTER Graduate Fellowship - \$7200	2021
CNS Recruiting Fellowship -\$50000 (1 year stipend + tuition)	2021
Plant Sciences Supplemental Scholarship - \$2500	2021
James B. Angell Scholar	2018
LSA University Honors	2014,2016,2017,2018

TEACHING

Human & Animal Physiology Lab (BIO 226)

Primary Instructor 2023
Coordinating Instructor: Dr. James Casey

Introduction to Statistical Model Building in R (EEB 303)

Grader 2023
Instructor: Dr. Gideon Bradburd

POSTERS & PRESENTATIONS

“Is there a latitudinal gradient in biotic interactions on trembling aspen (*Populus tremuloides*)?” (2023). *Plant-Herbivore Gordon Research Conference*. Poster.

“Fight or flight? The influence of a changing climate on the defense and fitness of monarch butterflies.” (2022). *MSU Ecology, Evolution, and Behavior Colloquium*. Virtual Talk.

“Combined effects of soil deposition and below-ground mutualism on plant defensive chemistry.” (2021). *KBS LTER Graduate Fellows Symposium*. Virtual Lightning Talk.

“Resilience in plants and the community: Engaging with people in prisons and life-skills programs.” (2020). *Ecological Society of America*. Virtual Lightning Talk.

REVIEWS

Ecological Entomology, April 2023
Evolution, March 2023
Ecological Entomology, November 2022
Ecology and Evolution, August 2021
Science, November 2020

SERVICE & OUTREACH

Graduate Researchers in Ecology and Evolutionary Biology (GREEB) <i>Community Organizer</i>	<i>2023 – present</i>
Graduate Employee Organization (GEO) <i>Member</i>	<i>2022 – present</i>
STEM Ambassadors Program (STEMAP) <i>Ambassador / Cohort Member</i>	<i>2020</i>
Michigan Association for Women in Science (AWIS) <i>Mentor for Young Scientists' Expo</i>	<i>2017 – 2018</i>
Zeta Omega Eta (ZOH) <i>Philanthropy Chair</i>	<i>2016 – 2018</i>
DIVERSITY, EQUITY, INCLUSION, & JUSTICE	
bl/O Prison Seminar Program <i>Founder / Lead Facilitator</i>	<i>2023 – present</i>
UofM STEM at Macomb Correctional Facility <i>Educator</i>	<i>2022 – present</i>
Diversity, Equity, and Inclusion (DEI) Committee <i>Graduate Student Representative</i>	<i>2021 – 2022</i>
American Civil Liberties Union (ACLU) <i>Volunteer</i>	<i>2019</i>
Initiative to bring Science Programs to the Incarcerated (INSPIRE) <i>Presenter</i>	<i>2019 – 2020</i>