ABBEY R. YATSKO

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EDUCATION

Ph.D. in Biology (Advisor: Dr. Amy Zanne)

University of Miami | Miami, FL

Aug 2021 - pres.

Ph.D. in Biology (Advisor: Dr. Amy Zanne)

George Washington University | Washington, DC

Aug 2020 - Jul 2021

B.S. in Environmental and Sustainability Science (Advisor: Dr. Marc Goebel)

Cornell University | Ithaca, NY

Aug 2016 - May 2020

PROFESSIONAL EXPERIENCE

NSF INTERN Lidar Research Scientist

ArborMeta | Byron Bay, NSW

Jun 2024 – pres.

Research Scientist

Cayuga Lake Watershed Network | Ithaca, NY

May - Aug 2020

Honors Thesis Student

Goebel Lab, Cornell University | Ithaca, NY

Aug 2019 – May 2020

NSF REU Intern

Zanne Lab, George Washington University | Washington, DC & Cairns, QLD

Aug 2019 – May 2020

Research Assistant

Goebel Lab, Cornell University | Ithaca, NY

Aug 2018 – May 2020

GRANTS & AWARDS

NSF INTERN GRFP supplement: Forests through space and time: linking historical and lidar-based ecological forest plot datasets to understand ecosystem dynamics, \$24,336 USD (2024-2025)

University of Miami GAFAC research award, \$500 USD (2023)

Ecological Society of Australia travel grant, \$250 AUD (2023)

University of Miami Biology travel fund, \$789 USD (2021, 2023)

University of Miami Kriloff fund, \$689 USD (2021, 2023)

University of Miami Vasiloudes Molecular Biology Research Fund: Characterizing methanotrophic communities in termite mounds to understand drivers of methane flux in the Australian savanna, \$500 USD (2023)

University of Miami Kushlan Graduate Research Support Fund: Using seasonal variation in methane flux from Australian savanna termite mounds to estimate annual termite contribution to global methane budgets, \$500 USD (2023)

University of Miami Biology Graduate Student Symposium 2nd place talk (2023)

Washington Biologists Field Club Research Award: If a tree rots in the forest: Linking deadwood decay to greenhouse gas emissions, **\$4,997 USD** (2021)

Cosmos Club Foundation Scholarship: If a tree rots in the forest: Linking deadwood decay to greenhouse gas emissions, \$4,500 USD (2021)

NSF Graduate Research Fellowship: The role of invertebrates in influencing deadwood carbon fluxes throughout the decay process, \$138,000 USD (2020)

George Washington University CCAS Distinguished Fellowship, \$40,590 USD (2020)

NSF Research Experience for Undergraduates Fellow, \$5,000 USD (2019)

PUBLICATIONS

Law, S. J., Allison, S. D., Davies, A. B., Flores-Moreno, H., Wijas, B. J., **Yatsko, A. R.**, Zhou, Y., Zanne, A. E., & Eggleton, P. (2024). The challenge of estimating global termite methane emissions. *Global Change Biology*, 00, e17390. https://doi.org/10.1111/gcb.17390

Calvert, J., Yatsko, A. R., Bresgi, J., Cheesman, A. W., Cook, K., Crowe, J., Gambold, I., Jones, C., O'Connor, L., Peter, T., Russell-Smith, P., Taylor, E., Trigger, B., Wijas, B., & Zanne, A. E. (2024). Modelling internal stem damage in savanna trees: Error in aboveground biomass with terrestrial laser scanning and allometry. *Methods in Ecology and Evolution*, 00, 1–14. https://doi.org/10.1111/2041210X.14375

Wijas, B. J., Flores-Moreno, H., Allison, S. D., Rodriguez, L. C., Cheesman, A. W., Cernusak, L. A., Clement, R., Cornwell, W. K., Duan, E. S., Eggleton, P., Rosenfield, M. V., **Yatsko, A. R.**, & Zanne, A. E. (2024). Drivers of wood decay in tropical ecosystems: Termites versus microbes along spatial, temporal and experimental precipitation gradients. *Functional Ecology*, 38,546–559. https://doi.org/10.1111/1365-2435.14494

Flores-Moreno, H., **Yatsko, A. R.**, Cheeseman, A., Allison, S., Cernusak, L., Cheney, R., Clement, R., Cooper, W., Eggleton, P., Jensen, R., Rosenfield, M., Zanne, A. (2024). Shifts in internal stem damage along a tropical precipitation gradient and implications for forest biomass estimation. *New Phytologist* 241(3): 1047-1061. https://doi.org/10.1111/nph.19417.

Law, S., Flores-Moreno, H., Cheesman, A. W., Clement, R.C., Rosenfield, M., Yatsko, A. R., Cernusak, L. A., Dalling, J., Canam, T., Abo Iqsaysa, I., Duan, E., Allison, S. D., Eggleton, P., Zanne, A. E. (2023). Wood traits explain microbial but not termite-driven decay in Australian tropical rainforest and savanna. *Journal of Ecology* 111:982–993. https://doi.org/10.1111/1365-2745.14090

Clement, R. A., Flores-Moreno, H., Cernusak, L. A., Cheesman, A. W., **Yatsko, A. R.**, Allison, S. D., Eggleton, P., Zanne, A. E. (2021). Assessing the Australian Termite Diversity Anomaly: How Habitat and Rainfall Affect Termite Assemblages. *Frontiers in Ecology and Evolution* 9, 273. https://doi.org/10.3389/fevo.2021.657444

PUBLICATIONS IN REVIEW

Yatsko, A. R., Wijas, B. J., Calvert, J., Cheesman, A. W., Cook, K., Gambold, I., Jones, C., Russell-Smith, P., Zanne, A.E. (2023). Why are trees hollow? Termites, microbes, and tree internal stem damage in a tropical savanna.

Calvert, J., Davidson, G., Peter, T., Taylor, E., Taylor, L., Yatsko, A. R., Cook, K. Progress in woody biomass measurement for savanna inventory.

PUBLICATIONS IN PREPARATION

Yatsko, A. R., Wijas. B. J., Jones, C., Zanne, A. E. Termite mounds and methane emissions: a study of species, structure, and seasons.

Yatsko, A. R., Flores-Moreno, H., Fitzgerald, M., Zanne, A. E. Rotten to the core? How internal stem damage varies vertically in savanna trees and is influenced by tree species, traits and external damage pressures.

Calvert, J., Peter, T., Taylor, L., Yatsko, A. R., Cook, K. Woody aboveground biomass mapping and validation in semi-arid rangeland with multi-scale LiDAR, satellite imagery and machine learning.

SCIENCE COMMUNICATION

Australian Wildlife Conservancy feature: Research at Brooklyn Wildlife Sanctuary sheds light on termites' methane emissions (link: http://tinyurl.com/3dct7xc7)

University of Miami DEI committee: Graduate school and career pathways guest presenter, Coral Gables, FL

University of Miami BioReach: Termite Talk guest presenter, Ponce de Leon Middle School, Coral Gables, FL

SPARK Festival Inhabited Ipswich: The Carbon Store: Gas Exchange art installation (link:

http://tinyurl.com/4p28ryc7), Ipswich, QLD

Miami Herald interview: As climate gets hotter, the termites get hungrier, UM-led study finds (link:

http://tinyurl.com/5cw4w9hz)

Fairchild Botanic Garden: Fairchild Challenge judge panel, Coral Gables, FL

Cayuga Watershed Network publication: Lakeside Living in a Changing Climate Handbook (link:

http://tinyurl.com/4esuwtxc), Ithaca, NY

SCIENTIFIC PRESENTATIONS

Savanna Science Network Meeting (contributing: 1, coauthor: 2)

Ecological Society of Australia Annual Meeting (contributing: 1)

Entomological Society of America Annual Meeting (contributing: 1, coauthor: 1)

Ecological Society of America Annual Meeting (contributing: 1)

American Geophysical Union (contributing: 1, coauthor: 2)

University of Miami Biology Graduate Student Symposium (contributing: 3, coauthor: 1)

TERN Science Symposium (contributing: 1, coauthor: 1)

Climate Resilience Academy Symposium (contributing: 1)

Graduate Climate Conference (contributing: 1)

TEACHING EXPERIENCE

Graduate Teaching Assistant, Graduate Seminar: Analyses in R (University of Miami, 2022)

Graduate Teaching Assistant, Animal Behavior (George Washington University, 2021)

Graduate Teaching Assistant, General Ecology (George Washington University, 2021)

Undergraduate Teaching Assistant, Applied Population Ecology (Cornell University, 2020)

Undergraduate Teaching Assistant, Introductory Field Biology (Cornell University, 2020)

PEER REVIEW

Academic Journals: Ecology Letters (1), Biogeosciences (1), Ecology (1)