MEMBER PROFILE

JOSIE LINDSEY-ROBBINS

Master of Biology Program, Bowling Green State University

I am studying the effects of increased detritivore abundance on nutrient cycling in agricultural soil, and how we might be able to incorporate detritivore abundance into best management practices for farmers. My work has found that increased detritivore abundance was able to reduce the volume of leachate from agricultural soil by about 31 mL per invertebrate, which can have drastic impacts on freshwater eutrophication processes. Detritivores were also able to significantly increase corn biomass and decrease weed growth, which are two main goals of farmers everywhere.



What inspired you to get into this work?

I originally wanted to study climate change and biological processes under different warming or rainfall scenarios, but living in Northwest Ohio, the community is so connected to Lake Erie. They use it for fishing, boating, drinking water, and industrial businesses. I wanted my research to help not only the ecosystems around me, but the communities that are impacted by the degradation of those ecosystems.

What body of knowledge would you like to build on?

Broadly, I would like to build on the body of knowledge surrounding global change biology and how changes in temperature and precipitation might alter natural processes, ecosystem functioning, and organismal biology. I would like my career to unite research and on-the-ground monitoring or conservation techniques to make a real difference in ecosystem health.

If you could change one thing about the way science is done, what would it be?

I would change the stigma placed around data sharing. There is a huge wealth of data, information, and knowledge that scientists seem to be scared of sharing, especially prior to publication. But these data are usually the most up to date and accurate, so we need to be sharing them worldwide to have greater impacts on environmental policy and management. This really comes into play for species management when we take into consideration species rarity, distribution, range, habitat preference, and more.

How long have you been an IAGLR member and why did you join?

I joined a couple months ago because I was looking for an organization that fit with my thesis research and overall career goals. While IAGLR is focused on the health of the Great Lakes, it also is broadly interested in both aquatic and terrestrial ecology, and how they work together to impact the health of the lakes. I wanted to present my research to an audience that would understand my goals, and possibly be able to incorporate my research into future work.

Where will we find you at the conference?

I am giving a talk on June 12 in the session *Soil Health: Role of Nutrient Losses from Agricultural Sites*. I also plan on attending *Linking Human Well-being, Quality of Life, and Ecosystem Services to Conservation Efforts* on June 11 and *Beyond the Edge of the Field: Mitigating the Impacts of Nutrient Pollution on HABs* on June 13. You can also find me at the student social and the banquet!