

GRADUATE EXIT SEMINAR

KRYSTAL POCOCK

Trait differences in a non-native and native Ohio crayfish and the effect on rates of leaf decomposition



As the dominant consumers of leaf litter in streams, crayfish play a critical role in the transformation of energy by breaking down leaf material. Yet the replacement of native crayfish by non-natives can result in the alteration of ecosystem processes. In particular, the non-native rusty crayfish, *Faxonius rusticus*, has been shown to reduce standing leaf litter stocks in streams outside of their native range. Additionally, leaf breakdown rates by crayfish may be species-specific, driven by differences in behavioral traits. Non-native rusty crayfish have begun to competitively displace native sanborn crayfish, *Faxonius sanbornii*, in Ohio. The impact of this species replacement on leaf breakdown is poorly understood. Here, my two main objectives were to 1) determine species-level differences in behavioral and physiological traits in Rusty and Sanborn crayfish, and 2) determine species-level differences in leaf consumption and decomposition rates in a stream dominated by Rusty crayfish and a stream dominated by Sanborn crayfish.

Advisor: Dr. Lauren Pintor

WEDNESDAY, MARCH 24, 2021
12:00 P.M.

Join the seminar via Zoom:

<https://osu.zoom.us/j/93884192630?pwd=dTFzdTVkN3NEcURPS2tzR1hrVzdYQT09>



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