

Center for Environmental Research, Education and Outreach Seminar 2023 Environment & Health Series

How does climate restrict blacklegged ticks? Experimental tests of our collective wisdom

Dr. Jesse Brunner, School of Biological Sciences, WSU

Tues., Sept 26, 2023 | 4:10 pm | Paccar 202

or register for connection info at:

https://wsu.zoom.us/meeting/register/tJlkfu2tqDMuG9yvvwT2psXiqNMm5uwr06Uk



Ticks spend most of their life off of hosts, in the environment subject to freezing cold, extreme heat, and desiccation. Their range and abundance *must* be restricted by climatic conditions. While this is often assumed, there have been few large-scale tests to examine precisely *how* conditions affect tick survival and life cycles. Moreover, some pieces of this story do not hold up well to scrutiny.

Jesse Brunner will present the results of several studies and experiments to understand the role of climate in shaping tick ecology.

Dr. Brunner studies the ecology of infectious disease. He is particularly interested in the relative importance of factors that influence disease transmission such as host community composition, environmental conditions, and heterogeneity in susceptibility. His research focuses on the transmission dynamics and ecology of amphibian pathogens, especially ranaviruses, as well as understanding the ecology of ticks and tick-borne disease in small mammal communities in a changing climate.