

## **SOCIO-ECOLOGICAL DRIVERS FOR EMERGENCE AND OPPORTUNITIES FOR CONTROL OF TICK-BORNE DISEASES IN NORTH AMERICA**

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Tick-borne pathogens continue to emerge in North America, particularly those vectored by the blacklegged tick *Ixodes scapularis*. Human-wildlife interfaces in urban areas constitute a new emergence front. Gradients of habitat fragmentation in urbanized areas provide a unique opportunity to identify connectivity thresholds for the establishment of keystone wildlife species and cascading effects on tick and pathogen establishment and human exposure. Furthermore, thresholds of human exposure (real or perceived) may motivate the adoption of risk-reduction behaviors and environmental control interventions. I will discuss a series of ongoing and planned studies in Northeast US that utilize a social-ecological lens to disentangle the factors driving local emergence and adoption of interventions at multiple spatial scales and levels of organization.