



## Modeling Reservoir, Vector, Spatial and Human Behavioral Risk of Lyme Disease in Fragmented Ecospaces within Built Environments

Ecological factors, such as climate change, increasing animal reservoir populations, fragmentation of ecological spaces, and expansion of suburban and peri-urban human populations, are resulting in the overlap of significant numbers of people and tick populations carrying human pathogens in the Northeastern United States. Our knowledge of the dynamic interaction between infected tick populations and humans in fractured ecospaces within built environments is minimal, and the lack of such knowledge leaves public health authorities and professionals at a disadvantage when