

Ticked-Off: Determining the Presence, Abundance, and Distribution of Potentially Pathogen-carrying Ticks across an Urbanized Landscape in Lynchburg, VA

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Ticks are ectoparasites that pose significant health threats to humans and non-human animals. Different species of ticks are capable of harboring and transmitting a large variety of diseases, such as Lyme disease and alpha-gal. As urbanization continues to disrupt relationships between



ticks and their non-human hosts, the potential for ticks parasitizing humans is increasing. This project aims to determine and officiate what species of ticks are present and most abundant in urban areas throughout Lynchburg. We will employ tick dragging techniques to collect ticks at a variety of city parks and in other publicly accessible areas and will morphometrically identify these ticks in the lab. Once we determine their species, we will conduct bibliographic reviews to determine what

potential disease pathogens these tick species can carry. As part of a collaboration with the Ecological Research as Education Network (EREN), this project serves as a pilot study for a wide-ranging effort to determine tick presence and abundance in urban areas and to share these results with public health agencies so that they can be better prepared to diagnose and treat patients with suspected tick-borne illnesses.