2018 Upstate Institute Summer Field School Fellowship

Title: Tick Surveillance across Madison County
Community Partner: Environmental Health, Madison County Department of Health

A GIS and field work project that will further the county’s tick surveillance efforts

Project Description:
The New York State Department of Health is enhancing and expanding its tick surveillance and education efforts to safeguard New Yorkers from tick-borne diseases such as Lyme disease. The stepped-up efforts come as the state confronts a growing number of ticks, tick-borne diseases, and an increase in the geographic distribution of ticks. Madison County is organizing a similarly enhanced effort to survey ticks in the area, and to do so will have a Fellow help to enhance their tick surveillance capabilities by identifying sites harboring higher tick populations and providing productive test results.

After being trained on proper collection methods and safety procedures, the Field School Fellow will conduct field surveys to identify sites in Madison County supporting significant populations of nymphal stage ticks. Tick collection sites will be selected based on criteria that includes having public access and off road parking, and all sites evaluated will be mapped along with supporting data indicating tick prevalence, including date of assessment, number of ticks collected, number of nymphal ticks collected and time period of collection to establish a tick collection rate for site. This research will help to identify productive sites, which the New York State Department of Health’s Vector Surveillance Unit will use to conduct surveillance that would include testing for tick-borne pathogens.

In addition to this field work, the Fellow will engage in outreach activities intended to educate the public on the potential risks of encountering ticks and how to reduce the risk of exposure to ticks. This outreach will target various children’s camps, municipal park programs, the Great Swamp Conservancy, the Madison County Fair, other community events and to interested partners. The Fellow will use educational materials from the New York State Department of Health along with maps highlight general areas within Madison County found to exhibit high densities of ticks. It may also be possible to partner with several veterinarian clinics that track incidences of pets being treated for tick borne disease.

About the Community Partner:
The mission of the Environmental Health division of the Madison County Department of Health is to enhance the quality of life in Madison County, by implementation of effective and efficient environmental health programs to protect the public health, safety and the environment.

Required Skills:
A Fellow will need to have GIS skills and a science background to conduct this work.

Logistics:
This is a full-time paid research position (35 hours per week) to last approximately 10 weeks, conducted under the joint supervision of the Upstate Institute and the Department of Health. Supervision will be provided by Geoffrey Snyder, director of Environmental Health at the Madison County Health Department, with training provided by Dr. JoAnne Oliver, research scientist with the state Vector Surveillance Unit. This project will need to begin in early June to allow for sufficient tick collection time. The outreach component of this project will take place from early July through early August.

Field School Fellows receive a research stipend of $4500 plus reimbursement for any costs associated
with transportation for this project. A car is not required for this project, but may be helpful. A Fellow will need a U.S. drivers’ license to complete this work.