

# Cary Institute selects Fishkill site for tick-borne disease study

by Kristine Coulter

FISHKILL—The Cary Institute of Ecosystem Studies in Millbrook is using Honess Mountain in Fishkill as one of the sites for its tick-borne disease study in Dutchess County.

“Dutchess County is basically ground zero for Lyme disease,” said Ron Blass, attorney for the town of Fishkill and partner of Van DeWater & Van DeWater law firm, at a recent town board meeting.

“Tick-borne diseases, including Lyme disease, represent an unfortunate risk for many when it comes to the use and enjoyment of the outdoors within scenic Dutchess County,” said Fishkill Supervisor Joan Pagonis in a release.

Cary Institute Senior Scientist Richard Ostfeld, Ph.D, said, “We designed our study to find good predictors of the abundance of infected ticks throughout Dutchess County. We know that huge variation exists—some areas are hot spots with lots of ticks and many of them infected with tick-borne pathogens and others are cold spots with few.”

Ostfeld added that “no one has yet been able to figure out what aspects of the surrounding landscape affect tick numbers and infection.”

He said researchers know that some animals, such as the white-footed mice, host and boost tick numbers and infection. Opossums and squirrels are among the animals that regulate the number of ticks, stated Ostfeld. The landscape also may affect a particular spot and which animal hosts are there, he said.

The collection of ticks on Honess Mountain is already under way, said Ostfeld.

“We have about a dozen people working full-time on this project,” he said.

The whole process can take up to a year once all the data is collected, explained Ostfeld.

“Our process is to carefully and fully analyze our data before submitting a manuscript (or more than one) to scientific journals,” said Ostfeld. “When the papers have undergone peer review and are accepted for publication, we are then free to announce our results.”

Ostfeld, responding as to why Fishkill was picked for the study, said, “We chose almost 200 sites distributed throughout the entire county. We need a lot of sites to account for huge variation in numbers of ticks and in landscape context. Sites were chosen randomly within different categories.”

The Institute has sites in urban, suburban, rural and other types of landscapes, but the exact sites were chosen at random, he said.

“Knowing whether we can predict tick hotspots and coldspots will be enormously useful for reducing the incidence of Lyme disease and other tick-borne diseases in our county and elsewhere. We’ll know what areas to avoid, where we might want to mitigate with tick-reduction devices or heavily self protect, and whether it’s safer to be in the woods,” remarked Ostfeld. “We can inform health-care providers about environmental risk in their practice areas.”

Ostfeld continued that perhaps “we’ll be able to advise local groups on how to manage our landscapes to reduce risk.”

The license agreement services and req-



Justin Gero, project assistant, of the Cary Institute research team is seen saving ticks. Photo by Pamela Freeman

uisite insurance used by the Institute were donated by Van DeWater & Van DeWater.