

# **SHELTER ISLAND AND FIRE ISLAND DEER AND TICK CONTROL STUDY**

Monthly Update  
October - November 2009

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Photo: Peter Priolo 2009

Our October 2009 Progress Report was completed and submitted on time last month and provides a comprehensive summary of the past two year's work of the 4-Poster Study. Additionally, we prepared an informative 4-Poster Study poster for educational uses; both can be viewed on our study website (<http://wildlifecontrol.info/TickStudy/Pages/Study%20Reports%20and%20Posters.aspx>). As the deployment season winds down, we would like to thank all those who have worked with us over the past year to make the work possible.

### *4-Posters and Ticks*

Devices have continued to function well, with relatively little squirrel or other chewing damage this past quarter. 20 units are visited once a week at Mashomack and 40 units are serviced twice a week throughout the rest of the Island. Cornell's Program Assistant, Jen Stress, checks every device once a week to verify condition, treatment status and needs for repair or cleaning. In late September and early October several units were relocated to nearby their original sites to accommodate hunters. Corn consumption declined sharply from a high of about 13,000 lbs/week in mid-September to around 5,000 lbs in mid-October, likely due to preference for acorns. Corn consumption has remained relatively low into early November.

Blacklegged (deer) tick adults are active around this time and will be until temperatures drop to below 40F, so devices will continue to be maintained in the field for another month, after which they'll be retrieved, cleaned and stored until spring. More detailed data from June tick sampling is reported in our Progress Report, showing overall declines in tick numbers including on North Haven ('control' site), but declines have been much greater in nearly all areas on Shelter Island.

All devices on Fire Island have been maintained at least weekly, although some units at Robert Moses Park have needed doubling due to consumption. In fall most of the units at Fire Island National Seashore, which have had especially heavy attention, have needed additional visits to avoid running out of corn. Associate Entomologist Lea Loizos has been making periodic visits to Fire Island to check on the units there. Wildlife damage (chewing, holes) has been far less common on Fire Island compared with Shelter Island.

### *Deer Research*

#### **Investigation of Permethrin Residues**

Permethrin residue sampling from deer harvested on Shelter Island and North Haven began October 1, 2009. To date, we have collected samples from 3 deer on North Haven and 4 deer on Shelter Island. The 4 deer sampled from Shelter Island have been observed using 4-Poster devices during monthly trail camera surveys. Additional deer have been sampled on Shelter Island (17 total deer) but not all of these deer have not been identified using 4-Poster devices and are not priorities for analysis. We will collect samples until December 15<sup>th</sup>; our goal is to sample a total of 6 deer on North Haven and 10 deer on Shelter Island.

We'd like to remind everyone that the enhanced permethrin residue sampling protocol for 2009 can be viewed on our project website. Additionally, a safe handling factsheet is available for deer hunters at the Town Hall, the Shelter Island Police Department, and on our project webpage (<http://wildlifecontrol.info/TickStudy/Pages/PermethrinResidueInvestigations.aspx>).

#### **Monthly Progress**

We have approached the final month of trail camera surveys on Shelter Island and Fire Island during 2009. We use the surveys to evaluate use of 4-Poster devices by deer and other wildlife. Trail camera surveys will resume in March or April 2010.