

SHELTER ISLAND AND FIRE ISLAND DEER AND TICK CONTROL STUDY

Monthly Update
July - August 2009

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A reminder that our semi-annual report covering project activities to April, 2009 has been posted to the Shelter Island Town website (<http://www.shelterislandtown.us/Gallery/Forms/133.pdf>). Also, we have been adding material to the Cornell project website at <http://wildlifecontrol.info/TickStudy/Pages/default.aspx>. Suggestions on content are welcome.

4-Posters and Ticks

All 4-Posters have been operating for about four months on Shelter Island (60 devices) and Fire Island (8 units) and continue to be functioning well. Corn consumption has increased continually at most locations, with some sharp increases noted in several Mashomack units. Camera surveys concluded the increase was due primarily to deer feeding.

Tick data have been entered; a summary was provided at the Town Board meeting on August 18 showing apparent relative (to North Haven, the control site) declines in lone star nymphs and adults in the North study area of Shelter Island, nymphs in the South study area and adult males and nymphs in the Fire Island study area. Declines were also seen in blacklegged (deer) tick nymphs in all three study areas. A few additional sites, not included last year, were sampled this year. Lone star larvae were not found in sampling on Shelter Island this year, although they were found on North Haven; peak period of activity is typically later in summer. Adult lone stars have been declining although nymphs continue to be found. Deer tick adults are not found in summer; nymphs have been declining although larvae should still be found.

Deer Research

Investigation of Permethrin Residues

The NYSDEC, NYSDOH, and Cornell worked together to finalize the sampling protocol that will be used for the permethrin residue sampling during 2009. We established goals including collecting samples from 3 deer from Shelter Island during July and August to provide residue information prior to the 2009 deer season, 10 deer from Shelter Island during October through December, and 6 deer from North Haven during October through December. The enhanced permethrin residue sampling protocol for 2009 can be viewed on our project website (<http://wildlifecontrol.info/TickStudy/Pages/default.aspx>).

The 3 deer from Shelter Island were harvested for pre-hunting season permethrin residue sampling during late July and early August 2009. These samples were submitted to the Cornell Animal Health Diagnostic Center during early August and analytical results are anticipated by the end of September.

Project Website & Completion of Summer Internship

We have been working on our project website. To date, we have included a lot of information on ticks and tick-borne diseases. The site is still under construction and continually improved, but please visit for more project information. We anticipate adding information very soon regarding collared deer movements.

Our Cornell intern, Lura Salm, completed her internship and a small project using ArcGIS to investigate the movements of marked (ear tagged) deer. Information about her project and her internship will be posted on our website very soon.

Temporary Wildlife Research Assistant for Hire

We are currently looking to employ a temporary wildlife research assistant. We anticipate hiring this employee during our busy fall season from late September through early December. This position may have the potential to be extended if funding is available. Please visit our 4-Poster Deer & Tick Control Project webpage (Employment Opportunities) for more information:
<http://wildlifecontrol.info/TickStudy/Pages/default.aspx>.

Work In Progress

As always, monthly camera surveys are being conducted and the movements of collared deer are regularly tracked. We are continually monitoring deer and wildlife use of 4-Poster devices and evaluating the impact device use may have on deer movement. We will begin updating our project website (listed above) with interesting information regarding deer movement soon. Please visit the website for updates and to learn more about the movements of collared deer on Shelter Island and North Haven, New York.

We will be conducting a camera survey on Fire Island during August to obtain some valuable information about deer use of 4-Poster devices. Although wildlife research is a large component of the 4-Poster project on Shelter Island and North Haven, it is not a provision of the 4-Poster project on Fire Island. Demanding research schedules have hindered us from conducting any 'extra' wildlife research activities on Fire Island but camera surveys do have the potential to provide some very interesting and valuable information. As time allows, we will try to obtain information regarding deer and non-target wildlife use of 4-Poster devices on Fire Island in addition to our regular research activities on Shelter Island and North Haven.



Deer or blacklegged tick adult female, April 2009



Lone star tick larvae and nymph, June 2008



Tick sampling, June 2009