

Ticks Thrive in the Japanese Barberry Thickets Overtaking Local Woodlands

Take a walk in many wooded areas of East Haddam and you will likely encounter masses of a woody, thorny understory shrub in a nearly impenetrable lime-green thicket. These masses are Japanese barberry (*Berberis thunbergii*), a non-native woody shrub. Originally introduced as a landscape plant, it has become a nightmare in woodlands in many states. Now, years of research has linked Japanese barberry to high tick populations - the very ticks that carry Lyme disease.

We've learned, from the work of Jeffrey Ward and Scott Williams at the Connecticut Agricultural Experiment Station, that Japanese barberry thickets are tick breeding grounds. Ward and Williams collected data from test plots free of Japanese barberry and from plots where the shrub is uncontrolled and controlled. After six years of measuring the populations of uninfected and Lyme-infected mice ticks in these plots, they found tick populations, and specifically ticks carrying the Lyme disease bacterial spirochete (*Borrelia burgdorferi*), much higher in plots containing Japanese barberry.

Japanese barberry creates a perfect micro-climate for mice and ticks. By leafing out in the spring earlier than native shrubs, barberry thickets hold humidity at the soil level where larval ticks thrive, and also shelter mice and other small mammals that serve as vital hosts in a tick's life-cycle. Overall, Williams reports 80 more Lyme-infected ticks per acre in uncontrolled versus controlled Japanese barberry plots and 30 more Lyme-infected ticks per acre in controlled Japanese barberry plots

compared with plots where no Japanese barberry grows.

Japanese barberry has spread with such a vengeance that it is now listed as an invasive in Connecticut and 16 other states. Birds feed on the shrubs' prolific red berries and help distribute undigested seeds to other locales. Deer also feed on these berries but don't browse the actual shrub enough to keep it in check. Once Japanese barberry takes hold it is difficult to eradicate but, "barberry management results in a 60% reduction in infected tick density," Williams explains.

Williams, Ward and colleague, Tom Worthley at University of Connecticut's College of Agriculture and Natural Resources explain the control methods that work best in [The Japanese Barberry control Methods reference guide for Foresters and Professional Woodland Managers](#). They also share control methods and information on the Japanese barberry/tick link in a three-part You Tube video series, Japanese Barberry, Controlling This Public Health Risk
By Joene Hendry

Visit our website for more information and links about this topic.



Typical Japanese Barberry growth in an understory of a forest.

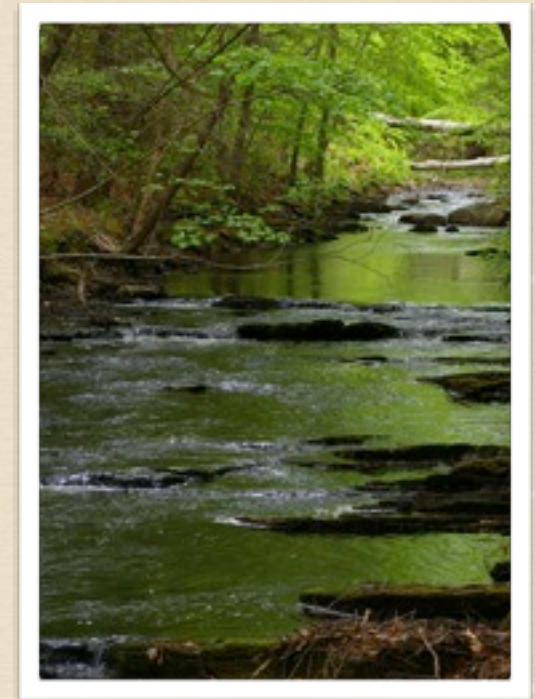


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EAST HADDAM LAND TRUST NEWSLETTER



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EAST HADDAM LAND TRUST

MEET YOUR DIRECTORS

Rob Smith returns to the Board after the requisite term limit conditions were met. Rob graduated with a degree in forestry from the University of New Hampshire and served his entire career managing various state parks and open spaces for the Department of Environmental Protection. He retired as Assistant Director of State Parks. He has been a resident of East Haddam since 1984. Rob served on both the East Haddam and Lyme ambulances for over two decades. He has been actively involved with the EHLT for about twenty years. In January, he was again elected to be President of the BOD of the EHLT.

Joene Hendry has spent her 35 years in East Haddam raising children, volunteering, gardening and relishing the natural beauty of the region. She is principal of Gardens & Turf, a small garden design and maintenance business and is an Accredited Organic Land Care Professional. She writes about gardening at www.joenesgarden.com and contributes to Connecticut Gardener magazine. Joene has previously volunteered with East Haddam Ambulance, on multiple education committees, and served on East Haddam's Board of Education. She and her husband, Ralph Chappell, enjoy family time, hiking, kayaking and exploring various landscapes across the U.S.

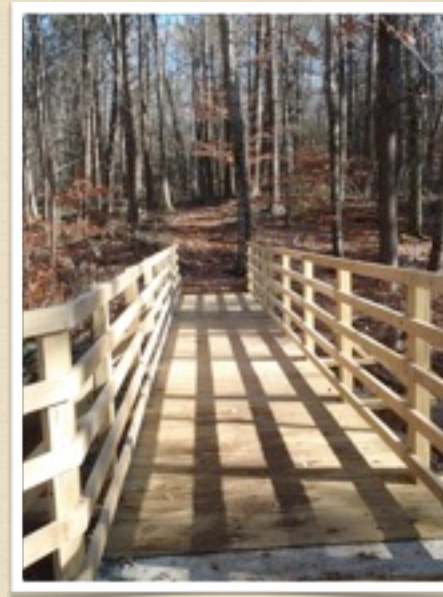
Gail Sharkey has a special appreciation for natural spaces and the creatures they house. She has observed nature and wildlife in the National Parks of Montana, Arizona, Utah Wyoming, Africa, and for the last 15 years, from her home in East Haddam. Along with Rob Smith, she helped document the flora and fauna within the Eightmile River Watershed in preparation for its designation as Wild & Scenic Waterway. She currently keeps an eye on a pair of busy beavers that have taken up residence in a pond behind her home.

Lynn Wilkinson is an avid hiker and gardener who loves the woods and streams of East Haddam. She is concerned about the potential for uncontrolled development and the emerging environmental threat of invasive species. Her first career was building and managing pharmaceutical teams, and she is now focused on living a healthy and engaged life while supporting land preservation in East Haddam.

John Matthew and his wife Cynthia moved here from Norwalk, CT just over 10 years ago. John serves on the East Haddam Planning and Zoning Commission where he has been an advocate for "smart growth" and protection of East Haddam's unique rural character. John has held career positions in a variety of industrial management, research and development, and

technology consulting areas. He has recently retired from his role as founder, President and CEO of Norwalk Industrial Components, a manufacturer of specialty fabricated metal products. He received a BSME from Northeastern University and an MBA from the Wharton School at the University of Pennsylvania. The Board elected John to be the treasurer of your land trust.

Bios on new directors Roy Parker, Jane Anderson and Sarah Thurmond will be included in the summer newsletter.



New bridge over Roaring Brook at Sheepskin Hollow Preserve

Connecticut's State Archaeologist on East Haddam's Rich History

Think about this the next time you hike on an EHLT trail or wander along one of the waterways flowing through town ... chances are you are walking on historic land.

This was the message from Nick Bellantoni, Connecticut's State Archaeologist, as he discussed some of the 106 recorded archaeological sites within East Haddam boundaries. Some of these sites have revealed evidence of Native Americans living, hunting and foraging along the banks of the Connecticut, Salmon, Moodus, and Eightmile Rivers, Roaring Brook, and next to Bashan Lake and Lake Hayward. Of East Haddam's 17 sites on the National Register of Historic Places, four are early (1,000 and 500 AD) Native American archaeological sites.

East Haddam's later history is evident in the historic and industrial districts throughout town. Historic districts include East Haddam on Route 149, Little Haddam on Town Street, Hadlyme, Millington Green, Wickham Road, and the Working Girl's Vacation Society on Mill Road, as well as at Banner Farm and Gillette's Castle. Industrially historic sites include the Johnsonville Mill, the water-powered mills of Moodus, and Beebe's Mill at Devil's Hopyard. Bellantoni sees archaeological sites as a means of understanding how humans, flora, and fauna lived and acted prior to the use of written language. Preserving additional lands throughout East Haddam could very well protect yet, undiscovered pieces of our past.

By Joene Hendry