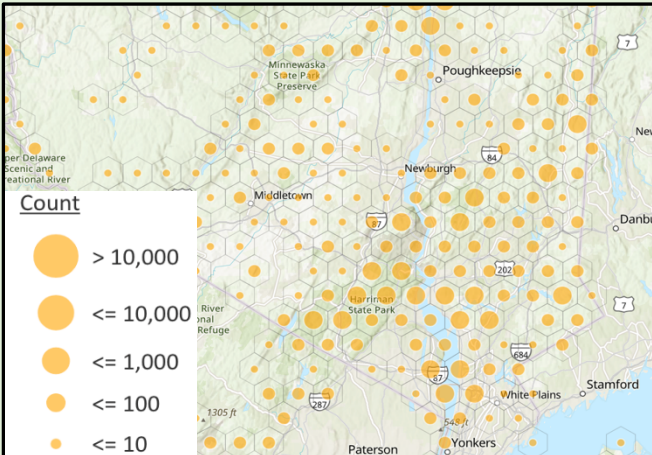
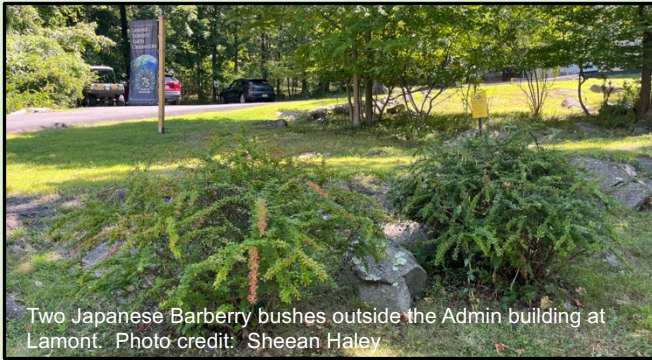


## INVASIVE SPECIES SPOTLIGHT: Japanese Barberry

Japanese Barberry, *Berberis thunbergii*, is a deciduous shrub native to Japan and eastern Asia that has been widely propagated in North America as an ornamental plant. It was likely favored for use as a hedge due to its tolerance for a wide range of growing conditions, visual appeal, and deer resistance. However, it readily escapes cultivation, spreads rapidly – now extant in 38 states - and outcompetes native plants, [altering soil chemistry and increasing the prevalence of tick-borne diseases](#) by harboring white-footed mice. It has been [banned for sale in NY State since 2014\\*](#) but continues to spread. A map of the Hudson Valley below shows the 'Confirmed Present Species Record' counts, available through an iMapInvasives mapping tool devised by the [Lower Hudson Valley PRISMs and the New York Natural Heritage Program](#).

\* some cultivars are exempt



iMapInvasives count prevalence of Japanese Barberry in the Lower Hudson Valley. Note incidence of high counts in areas designated as park land.

## TICK PREVENTION AT LAMONT: Q&A

### 1. Does Lamont spray for ticks or mosquitoes?

No, Lamont does not treat the campus\* with any plant-derived insecticides, synthetic insecticides, or essential oils. Most residential tick/mosquito control companies use insecticides known as pyrethrins, chemicals derived from chrysanthemum flowers that are toxic to insects; or more frequently, pyrethroids, which are synthetic chemicals that mimic pyrethrins. Whether natural or synthetic, these are broad-spectrum insecticides [that are highly toxic to a wide variety of insects](#), not just to ticks and mosquitoes.

\*The Bright Horizons Childcare Center does receive an essential oil treatment around the perimeter of the playgrounds.

### 2. If the area is mowed, does that mean there are fewer ticks?

Possibly. But, it's complicated. Recent studies<sup>1,2</sup> suggest it depends on the nature of the nearby ecotone, or transitional zone, how many tick infestation-supporting plants (e.g., Japanese Barberry – highlighted at left) and animals (e.g., white-tailed deer, white-footed mice) are on campus and in the forest surrounding Lamont, and when mowing occurs.

### 3. We know that there are ticks at Lamont, so how do I protect myself?

The most effective strategies are: avoidance, clothing choices, tick repellents, and checking yourself regularly, and quickly removing any ticks you find. The [Dutchess Co. Dept. of Health](#) has a pretty thorough website on these strategies.

1 – Lee, X., Maxson, G-A., and S. Paskewitz. 2023. Single mowing event does not reduce abundance of *Ixodes scapularis* (Acari:Ixodidae) and *Dermacentor variabilis* (Acari:Ixodidae) on recreational hiking trails. J. Medical Entomology. [doi.org/10.1093/jme/tjac164](https://doi.org/10.1093/jme/tjac164)

2 – Evaluation of landscaping and vegetation management to suppress host-seeking *Ixodes scapularis* (Ixodida:Ixodidae) nymphs on residential properties in Connecticut, USA. Env. Entomology. [doi.org/10.1093/ee/nvae007](https://doi.org/10.1093/ee/nvae007)