

Beech Leaf Disease in Rhode Island

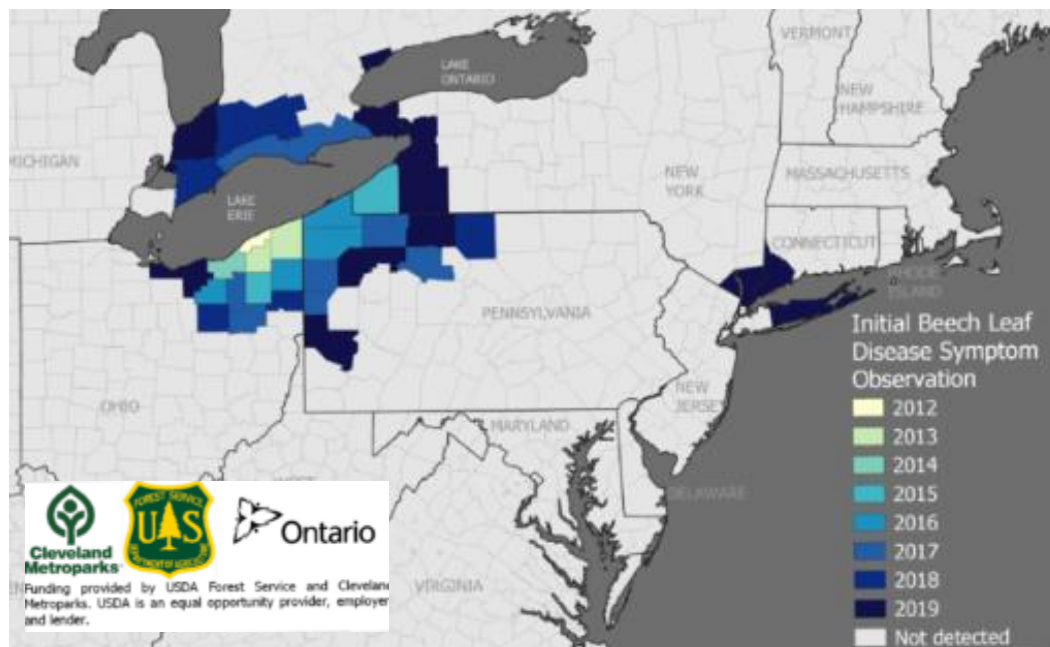
Beech Leaf Disease (BLD) was found in southwestern Rhode Island in June 2020, and in coastal MA. First identified on American beech (*Fagus grandifolia*) in Ohio in 2012, it has been found in Pennsylvania, New York, Connecticut, and Ontario, Canada. The disease affects the leaves and, after several years, can be severe enough to cause tree decline and mortality.

The disease was recently confirmed as being caused by a nematode, *Litylenchus crenatae mccannii*. Currently, there is no defined treatment as nematodes are difficult to control in the forest environment. Research is underway to identify possible treatments for landscape trees.

BLD mainly affects American beech, however it has been found on European (*Fagus sylvatica*) and Oriental beech (*Fagus orientalis*), as well as Ohio nursery stock.



All ages and size of beech are affected, although the rate of decline can vary based on tree size. In larger trees, disease progression is slower, beginning in the lower branches of the tree and moving upward. The disease also appears to spread faster between beech trees that are growing in clone clusters, as it is able to spread through their connected root systems. Most mortality occurs in saplings within 2-5 years. Where established, BLD mortality of sapling-sized trees can reach more than 90%.



www.dontmovefirewood.org/pest_pathogen/beech-leaf-disease/

Symptoms

Early BLD symptoms are dark striping on the leaves, parallel to the leaf veins, best seen by looking upward into the backlit canopy. The striping is caused by thickening of the leaf. Lighter, chlorotic striping may also occur. Both fully mature and very young “emerging” leaves show symptoms. Eventually the affected foliage withers, dries, and yellows. Drastic leaf loss occurs for heavily symptomatic leaves during the growing season, as early as June, but asymptomatic and mildly symptomatic leaves show no or minimal leaf loss. Bud and leaf production are also affected.



Photos: Fern Graves, RIDEM-DFE



Photos: Heather Faubert, URI

What you can do

1. Help prevent the spread of invasive pests, learn more at [Don't Move Firewood](#).
2. While there is no restriction on planting beech trees, do not dig beech trees from the forest to plant elsewhere.
3. Take a photo and report your *Litylenchus* sighting on [iNaturalist.org](#) (do not report using the common name).
4. Report your sighting to DEM's Invasive Species Sighting Report Form: www.dem.ri.gov/programs/agriculture/pests.php

More information:

Ohio DNR: <https://ohiodnr.gov/wps/portal/gov/odnr-core/divisions/division-forestry/related-resource/beechn-leaf-disease>

CT fact sheet: https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Plant_Pathology_and_Ecology/2019/Beech-Leaf-Disease-v2.pdf?la=en

Don't Move Firewood: www.dontmovefirewood.org/pest_pathogen/beechn-leaf-disease/

Look-alike diseases: <https://forestinvasives.ca/Meet-the-Species/Pathogens/Beech-Leaf-Disease#86227-signs--symptoms>