



Updates from the Trail: August 2023

A Forest Threatened: Beech Leaf Disease found on BCT Property

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This past June, as I walked along the Children's Vernal Pool trail through its sprawling Beech grove, I was shocked by the canopy above. Dark stripes marred the typically green-yellow leaves—many appeared scorched, curled, and rubbery. This grove had been thriving mere weeks prior, and the alarming change left me wondering: what disease could devastate a forest so rapidly?

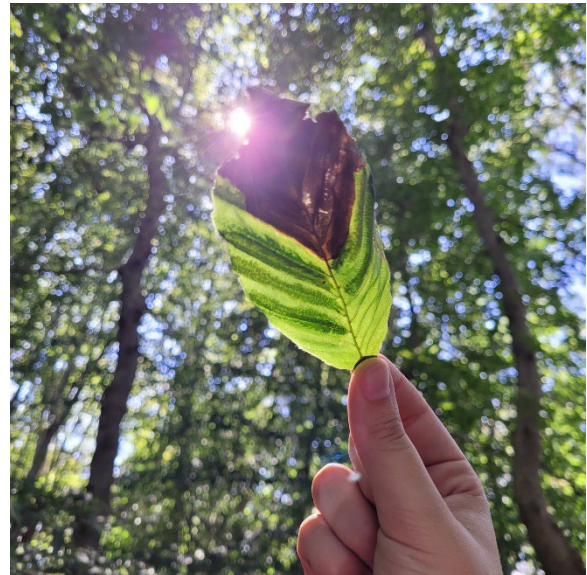
American Beech trees are prized for their beauty and ecological value, as they offer sustenance and shelter to over 40 species of birds and mammals. However, they are threatened by a disease known as Beech Leaf Disease (BLD). First found in Ohio in 2012, BLD has spread to 10 states and 1 Canadian province, leading to substantial harm in Beech populations. In June 2020, BLD was first reported in Massachusetts.



Infected Beech canopy on BCT's vernal pool trail.

Early symptoms of BLD appear as dark stripes among leaf veins, visible when gazing up at the canopy on sunny days. In advanced stages, leaves become cupped and wilted. This hinders photosynthesis and energy storage, ultimately leading to tree mortality. When a forest becomes infected, BLD endangers water filtration and carbon sequestration.

What could be causing this disease? Scientists believe the culprit is the *lithlenchus crenatae mccannii* nematode, a microscopic worm that feeds on and burrows into leaf and bud tissue. Recent studies hypothesize that disease development can only occur when the worm is present, in addition to a bacterial or fungal microbe, but that theory is yet to be proven.



An infected leaf showing dark stripes, crinkled edges, and burned tips characteristic of a BLD infection.

So, what can we do to help prevent the demise of our beech forests? You can contribute to monitoring efforts by reporting diseased beech trees to the State at the link below when you encounter a diseased tree. The simple act of not touching or removing organic material (leaves, soil, wood) can also be vital to preventing the spread of this disease.

BLD poses a threat to the health of beech trees across Cape Cod, including several BCT properties. By understanding the cause of and how to prevent its spread, we can help to safeguard the natural beauty and ecological importance of beech trees for generations to come.

[REPORT BLD HERE](#)