Beech Leaf Disease

Another Invasive Species Ready to Dramatically Degrade our Forests

Our forests are still reeling from the recent loss of ash trees due to Emerald Ash Borer and many of us are also being impacted by the dangers of falling limbs and branches. This joins past serious insults to our trees from severe invasive pest and pathogen impacts from impacting elms, chestnuts, hemlocks, oaks, and others over the last century.

Unfortunately, we have some more very bad news – <u>Beech Leaf Disease</u> may be taking all of our American Beech Trees in the near future.

The disease is caused by an invasive nematode and has been in the state for several years - severe damage has already been observed across northern New Jersey, and it appears that infected trees are nearly dead after 3-5 years. Unfortunately, the disease was observed in the Hopewell Valley in the summer of 2023.

Is there anything that we can do to stop this catastrophe?

Experimental trials are underway, with the hopes of stemming impacts on individual trees in landscapes and arboreta, but experts agree that large-scale treatment in natural areas is not feasible -- many forests will be forever altered with negative implications for a suite of native plants and animals.

This is especially sad for FoHVOS and its long-time supporters that recall our triumphant inaugural land protection project in 1987 at Curlis Lake Woods, which harbors a gorgeous stand of beech.

Can individual landowners protect their trees?

We have talked with state experts to determine the current science. <u>Bartlett Tree Experts</u> are leading the research efforts in New Jersey, but other well-qualified companies that offer their services to landowners are essentially conducting their own informal research (e.g., <u>SavATree</u>). Here is a quick technical summary – all current treatments are aimed at improving tree health to reduce infection severity, as opposed to treatments that directly kill the invasive nematodes.

IMPORTANT NOTE: THERE ARE CURRENTLY NO GUARANTEED TREATMENTS ALL METHODS ARE EXPERIMENTAL

- 1. <u>Polyphosphite 30 Root Drench</u>: Some preliminary effectiveness on trees < 5" diameter.
- 2. <u>Broadform (Fluopyram) Foliar Application</u>: Preliminarily showing high efficacy, but immensely difficult to spray all leaves on large trees.
- 3. <u>Arbotect-20S Root Injection</u>: Received emergency approval in NJ and appears potentially effective, but there is very limited data available, research is ongoing.
- 4. <u>Bark Spray with phosphorous-based fungicide (e.g., Agri-Fos, Reliant)</u>: There have not been any trials with this treatment, but anecdotal observations suggest that bark sprays are not effective by themselves. Bark spray may be more effective in combination with Arbotect-20S Root Drench.

FoHVOS is exploring the possibility of requesting 'bulk treatment discounts' by pooling individual landowners into larger orders -- if you have interest in treating trees on your property, please reach out to Mike at mvanclef@fohvos.org.