## **Beech Leaf Disease Survey Questions**

Α.	Survey Date	6/7/2022
<u>В.</u>	Survey Location: Duck Pond Trail Woods	Westerly, RI
1-	County, State	Washington County, RI
2.		
3.	Size of tree	Hugger (18" diameter)
4.	How many leaves are on the tree?	40% (25-50% in menu)
5.	Of the leaves present, what percentage are normal shape and size without any striping?	10-15% (10-<25% in menu)
6.	Of the leaves present, what percentage are normal in shape and size with banding (mild BLD symptoms)?	65-70% (50-<75% in menu)
7.	Of the leaves present, what percentage are shrunken and curled? (heavy BLD symptoms)	20% (10-<25% in menu)
8.	Take a picture of leaves showing the worst symptoms on the tree. This could be a healthy leaf, a mild symptom leaf with banding, or a heavy symptom leaf that is dark, shrunken and curled.	2979
9.	Take a picture of a leaf that is most representative of the leaves on the tree. This may be a completely healthy leaf or one showing BLD symptoms.	2986
10.	Are there signs of beech bark disease (BBD)? Beech scale insects are tiny white clusters on the bark. Nectria is a small, red fungus that enters through cracks on the bark from scale insects. Cankers or abnormal bark often form as a result of BBD.	<ul> <li>Scale insects</li> <li>Cankers or cracks</li> <li>Nectria fruiting bodies</li> <li>No signs of BBD</li> </ul>
11.	Do the leaves show insect damage from mites?	No
12.	Is there necrotic tissue?	Yes
13.	Is there leaf rolling along the margins from aphids that cause yellowing and a cracked glass appearance?	No
14.	Are there beech blight aphids?	No
15.	Is there bud suspension?	Yes
16.	Is the tree fruiting?	No
17.	Enter any additional <mark>notes</mark> you would like. Be as detailed as possible.	(See bottom of page.)

**Title:** Duck Pond Trail Woods, Year 2 Resurvey, 6/7/2022

19.	Optional: Submit a photo of other symptoms you see	3002

17. This Year 2 resurvey was conducted on 6/7/2022. The Initial Survey was conducted during the prior year on 9/21/2021 on private property in Westerly, RI upon request. The family representative had been concerned about several large beech trees that had died in 2021 after apparently being healthy in 2020. Both years, he provided a tour of a multi-acre area, then left me to do my detailed observations.

My observation was that the site was dramatically affected since last year. Rather than 1-2 dozen leaves in one patch of saplings/whips last year, every single tree was now affected. On saplings, 75-100% of leaves were affected. On larger trees, infected leaves were as little as <5% near the edge of the woods, up to 85-90% on the "hugger" documented here. This is the same "hugger" documented last year, located beside the patch that had 1-2 dozen infected leaves last year.

This hugger had many BBD bark cracks and a few scale insects.

Photos are not of the hugger itself, since the leaves were too high up to photograph properly. The worst case photo was taken in the patch beside the hugger where the first detection was made last year. The optional photo shows necrosis elsewhere.

There were no signs of mites or aphids, but I attribute this to the early spring date and to the fact that there were very few healthy low-elevation leaves not infected with BLD left for them to attack. Some BLD-infected leaves exhibited necrosis and bud suspension was apparent.

Property is a deciduous forest dominated by oaks and maples. There are birch trees and many tall understory shrubs. American beech trees (*Fagus grandifolia*) are scattered throughout. The property abuts the 700 to 900-acre state-owned Woody Hill Management Area.

The pin placement is the roughly estimated location of the large tree with BLD. The geotags from my GPS-equipped camera indicate the following coordinates:

Worst case photo of Beech Leaf Disease (BLD): 41.3564N, -71.7475W,

Representative photo: 41.3562N, -71.7473W,

Optional photo showing necrosis: 41.3565N, -71.7477W.