




Beech Leaf Disease Survey Questions

Title: NH Cottage, Year 2 Resurvey, 7/10/2021

A.	Survey Date	7/10/2021
B.	Survey Location	Behind our cottage
1- 2.	County, State	Carroll County, NH
3.	Size of tree	Whip
4.	How many leaves are on the tree?	95-100%
5.	Of the leaves present, what percentage are normal shape and size without any striping?	95-100%
6.	Of the leaves present, what percentage are normal in shape and size with banding (mild BLD symptoms)?	0%
7.	Of the leaves present, what percentage are shrunk and curled? (heavy BLD symptoms)	0%
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, shrunk and curled.	0273 
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.	0267 
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.	<input type="checkbox"/> Scale insects <input checked="" type="checkbox"/> Cankers or cracks <input type="checkbox"/> Nectria fruiting bodies <input type="checkbox"/> No signs of BBD
11.	Do the leaves show insect damage from mites?	Yes
12.	Is there necrotic tissue?	No
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?	No
16.	Is the tree fruiting?	No
17.	Enter any additional notes you would like. Be as detailed as possible.	(See bottom of page.)
19.	Optional: Submit a photo of other symptoms you see	0272 

17. This Year 2 resurvey was conducted on 7/10/2021. The Initial Survey was conducted during the prior year on 6/27/2020.

The resurvey covered parts of 2 parcels. One had been logged more recently (but >30 years) and is dominated by beech. The other has a mixture of mature white pine, hemlock, beech, and striped maple. No one tree was representative of the population, whose numbers dropped off exponentially from the sprouts to the "huggers". Answers in this survey are a composite of the population. No BLD was seen anywhere. >90% of the larger trees have BBD cankers. 50-75% of the smaller trees have BBD cankers.

Many of the smaller trees had leaf mites on the lower branches – the worst case photo shows this. The worst case photo may have the usual mites plus eriophyid mites, as well as beech anthracnose, caused by the fungus *Discula umbrinella*; lots going on here in this photo. While necrosis is visible in this photo, I said "No" above, because it was so rare. Other trees bore these symptoms, but this was the most extreme example observed.

The optional photo was a tie for worst case, but it was even less typical. Zooming in on the photo, it appears that there may be many aphids along the side veins, as well as near the center vein. While aphids may be visible in this photo, I said "No" above, because it was so rare.

The representative photo was chosen because all of the leaves have some blemishes. While most leaves seen were healthy, the number of blemishes I saw in this particular survey was the highest I'd seen in my brief experience. Many could have been surface feeding by leaf hoppers. Leaves higher above the ground tended to be healthier.

[NOTE: I found out well after I had submitted my 2020 report AND its correction that the single small tree with extensive leaf galls for which I had submitted optional photos is not beech, but witch hazel. Oops.]

The pin placement on the map is estimated. The geotags from my GPS-equipped camera indicate the following coordinates:

Worst case photo: 43.6837N, -71.0077W,

Representative photo: 43.6842N, -71.0083W,

Optional photo of possible aphids: 43.6837N, -71.0077W.