




Beech Leaf Disease Survey Questions

Title: Vernon S. Walker WMA, Year 2 Resurvey, 8/5/2022

A.	Survey Date	8/5/2022
B.	Survey Location: Vernon S. Walker WMA entrance trail	Newfield, ME
1- 2.	County, State	York County, ME
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 shrunken 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, shrunken and curled.	3273 
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.	3289 
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 checked="" 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?	Yes
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	3292 

17. This Year 2 resurvey was conducted on 8/5/2022 along the trail at the publicly accessible Vernon S. Walker Wildlife Management Area of the Maine Dept. of Inland Fisheries & Wildlife. The initial survey was conducted on 8/8/2021. The road frontage and the survey start are located near GPS coordinates 43.6484N, -70.8654W on Route 11 in Newfield, ME. The furthest extent of the survey was circa GPS coordinates 43.6423N, -70.8698W. I did NOT survey the entire trail to the scenic mountaintop, covering probably less than half the distance, mostly in rolling terrain, but starting the climb. I got further than during the initial survey in about the same time spent, since the property characterization was already completed.

Property is a mixed forest. Some areas are dominated by white pine and hemlock. Next most dominant are oak and maple species. Fifth most dominant are American beech trees (*Fagus grandifolia*), scattered throughout, except in the heavily conifer dominated areas. The beech trees gained more prominence with increasing elevation.

One hundred or more trees were surveyed from the trail. The vast majority were sprouts or whips, with several rulers up to about 8 inches in diameter.

No one tree was representative of the population. Answers in this survey are a composite of the population. No BLD was seen anywhere. Fewer mite signs were observed than last year, in fact, they were less common than I usually see. Occasional erineum gall damage was evident. The vast majority of leaves seen were healthy.

Leaves with rolling along the margins from aphids that cause yellowing and a cracked glass appearance were commonly seen. The majority of trees had at least one such leaf, with many trees having several. This contrasted with last year, when only one tree was seen that had 1-2 leaves so infected. The worst case photo shows this leaf affliction, with possibly an additional infection by wooly beech aphids.

The optional photo shows leaf wrinkling that resembles BLD, but without the dark banding. My guess is wooly beech aphids.

I saw tiny white clusters on the bark that I took to be beech scale insects. I saw this on many of the few large trees, always among abundant liverworts growing on the bark. Some other large trees had obvious BBD cankers.

The pin placement is the estimated location of the roadside sign for the property. The geotags from my GPS-equipped camera indicate the following coordinates:

Worst case photo: 43.6432N, -70.8657W,

Representative photo: 43.6432N, -70.8660W,

Optional photo: 43.6432N, -70.8660W.