

Symphony Park Beech Tree Removal

Goodbye, Symphony Park Beech Tree.

We love this tree too, but it is dying. ❤️

The majestic Copper Beech (*Fagus sylvatica*) tree is dying. The tree has many dead branches. The base of the trunk is also decaying, and the trunk of this tree is being colonized by a fungus called mossy maze polypore (*Cerrena unicolor*). The presence of this fungus on the tree indicates imminent death and there is no type of management that can save it. This fungus is common throughout the environment but it is not a very good colonizer of healthy trees. Thus, there is no concern for healthy trees nearby.



Because of the trunk and root decay and the large dead branches which could fall on people or property, this tree is now dangerous. **It is being scheduled for removal at the end of 2020 or early 2021.**

Please take the time to say your goodbye to this beloved tree by writing it a love letter. You can leave your letter in the plastic box provided next to the tree, and/or you can send your love letter to trees@somervillema.gov. We hope to honor this tree by creating a work of art out of the stump. We will also plant a new tree in the park after this tree is removed. Due to the large size of this tree we will not be able to replant in the same spot. We will do our best to plant a new tree nearby.



Cerrena unicolor fungus colonizing Copper Beech tree at Symphony Park

Timeline of Activity

(see attached documentation for more details)

MAY 2019

1. Contract Arborist and City Urban Foresters inspect tree. The canopy is in decline and there are signs of root and trunk decay, including a fungus on the trunk.

AUGUST 2019

2. A sample of the fungus is collected and sent to the UMass Extension Lab for analysis. The fungus is identified as *Cerrena unicolor*.
3. City Urban Foresters work with consultant to perform tomography on the tree. Tomography is type of analysis that tests for the amount of decay inside the trunk of the tree (see https://www.isaarbor.com/event/s/schedule/resources/167/Gocke_Tomography.pdf for more information). The analysis reveals significant decay around the outside of the tree, primarily on the side of the trunk where the *Cerrena unicolor* fungus is.





JUNE 2020

4. Consultant Arborist inspects the tree and finds the tree in severe decline. The tree also has significant decay at ground level.

NOVEMBER 2020

5. Removal notice sign posted on tree (November 2nd, 2020), to give community time to say goodbye to the tree and write love letters to tree.

END OF 2020/ EARLY 2021

6. Tree to be removed. A tall stump will be left in order to create artwork from the tree.

WINTER/SPRING 2021

7. Find local artist to make artwork from tree stump.

SPRING 2021

8. Plant a new tree near the old tree, as possible. (Remember this tree has deep, established roots.) Species to be determined in conjunction with Urban Forestry Committee.



SITE REVIEW

HORTICULTURAL TECHNOLOGIES INCORPORATED

P.O. Box 436 Clinton, MA 01510-0436

(978) 368-1900 Fax: (978) 368-1905

George Ackerson, Consulting Arborist

www.HortTeclnc.com

CLIENT: City of Somerville

DATE: May 7, 2019

LOCATION: Symphony Park
Pearl St. & Florence St.

ATTN: Steve MacEachern

PURPLE EUROPEAN BEECH

As a result of a 311 tree inspection on Florence Street on May 3, 2019, we noticed an issue with the large Purple beech tree in Symphony Park. Vanessa, Malik and I stopped to inspect the tree.

What we observed was a tree in decline:

- 25% of the canopy had large deadwood and one large dead limb hanging in the tree.
- A large area of the trunk had numerous fungus brackets. (White growths on the trunk)
- Exfoliating dead bark from the buttress roots¹ on two side of the trunk.
- Many sections of dead bark lying on the ground indicating other dead limbs may have fallen and been picked up prior to our visit.



All the above conditions are usually due to the loss of major roots. The loss could result from soil compaction, chemical injury, excavation of roots too close to the trunk or draught/flooding. I identified the fungal brackets at the fruiting bodies of a white sap rot fungus called

¹ Buttress roots: roots at the trunk base that help support the tree and equalize mechanical stress: trunk flare



Schizophyllum commune or Split gill fungus. (Luley, 2005. Wood Decay Fungi) According to Luley, this fungus can be a slow sap rot and cambium killer on weakened trees with no treatment.

Over time, it will continue to spread and weaken the trunk support

The loss of live root flare is an indication of a large dead root. Decay is usually present on the underside of the root and not detected without hand digging, resistance drilling or tomography².



It is my opinion, that if the entire tree does not fail, it will continue to die back and drop large dead limbs over the next few years. My recommendation has not change from the 2015 report. This tree should be removed.

All photographs were supplied by Venessa Boukili.

² Tomography: the use of multiple sensors placed around a trunk, limb or root to record sound or magnetic waves travelling through the wood, with measurements resulting in a picture of internal density characteristics. Typically used in arboriculture to measure the extent of decay in trees.



DIAGNOSTIC REPORT

Sample#	201900686
Field ID	2019-0670
Host	European Beech
Received Date	8/1/2019
County	Worcester
State	MA

Submitter:

George Ackerson
Horticultural Technologies, Inc.
P.O. Box 436

Clinton MA 01510

Phone Fax Email
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Diagnosis and Recommendations

Host/Habitat	European Beech (<i>Fagus sylvatica</i>)
List of Diagnosis/ID(s)	
Cerrena unicolor	
Cerrena unicolor	

Final Report

Diagnosis: *Cerrena unicolor*, known as the mossy maze polypore.

Description: *Cerrena* is a common and widely distributed fungus in the region, encountered most often on dying and dead hardwoods in forest settings. The fungus is a documented pathogen, but is believed to be a weak one at best, only able to colonize trees in serious decline. *Cerrena* attacks the sapwood and bark where it quickly spreads to consume remaining carbohydrates. It produces a prolific number of small, overlapping, shelf-like fruiting bodies. These are often cream-colored to tan with zonate rings of growth. Over time they become green-colored with the growth of algae. Despite the name, very few actually support moss growth. The pore layer is maze-like or toothed and may be tan to grey in color. Its presence on a tree usually indicates imminent death and management is not warranted. Due to its ubiquitous nature and weak pathogenicity, there should be little concern for nearby trees if they are robust and in good health.

UMass Extension Plant Diagnostic Clinic
 #3 French Hall
 230 Stockbridge Road
 Amherst MA 01003
 Telephone : (413)545-2826 Fax : (413)545-4385

Diagnosed By :
 Nicholas Brazee (nbrazee@umass.edu)
 Completed Date: 8/9/2019

Sample#
201900686



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George Ackerson, Consulting Arborist
www.HortTecInc.com

CLIENT: City of Somerville, DPW

DATE: June 21, 2020

LOCATION: Symphony Park
Pearl and Florence St.

ATTN: Mark Lawhorn
Vanessa Boukili

I reviewed the large European beech tree on June 18, 2020. I was requested to inspect the tree prior to conducting a tomography test to determine the safety risk.



Currently, the tree is in decline with reduced foliage throughout the crown area. The leaves are smaller than normal in 70% of the crown, for this time of year. The heat and draught through August will accelerate the decline in health.

The base of the trunk at the root flare has 60% decay around the circumference. The decay is progressing up the trunk approximately 6-feet on the south side of the tree.

The tree is in severe decline and could be unstable at the ground level.

I recommend the tree be removed and a new tree planted.

