

**Estimating the Ash Tree Population in the Whiting Road Nature Preserve:
Anticipating the Possible Effect of the Emerald Ash Tree Borer**



Introduction

A large portion of the Whiting Road Nature Preserve (WRNP) is located on land had been cleared and used for agriculture. A 1930 aerial photograph¹ (Figure 1) reveals large areas of fields and orchards and a small residual wooded area. Today, cleared areas are regrown over with a mix of trees and bushes. The bushes are mostly unwanted alien invasive species: Autumn Olive, shrub honeysuckle, Multiflora Rose, Oriental Bittersweet.....

The predominant tree species in the area of regrowth appears to be Ash. Given the recent incursion the Emerald Ash Borer², an alien invasive insect, this is a matter of concern. We are told that borer damage will to death of the ash trees. This would, in turn affect the tree-like character of the woods in the eastern part of WRNP.

Figure 1. Aerial photograph (1930) of Whiting Road Nature Preserve when it was farmed (courtesy of Webster Historical Museum).



¹ Aerial photographs may also be found on-line courtesy of Monroe County.
http://mappingmonroe.monroecounty.gov/Html5Viewer2/index.html?configBase=http://mappingmonroe.monroecounty.gov/Geocortex/Essentials/REST/sites/Monroe_County_Historic_Photo_Viewer/viewers/Monroe_County_Historic_Photo_Interactive_Map1/virtualdirectory/Resources/Config/Default

² <http://nyis.info/?action=eab>

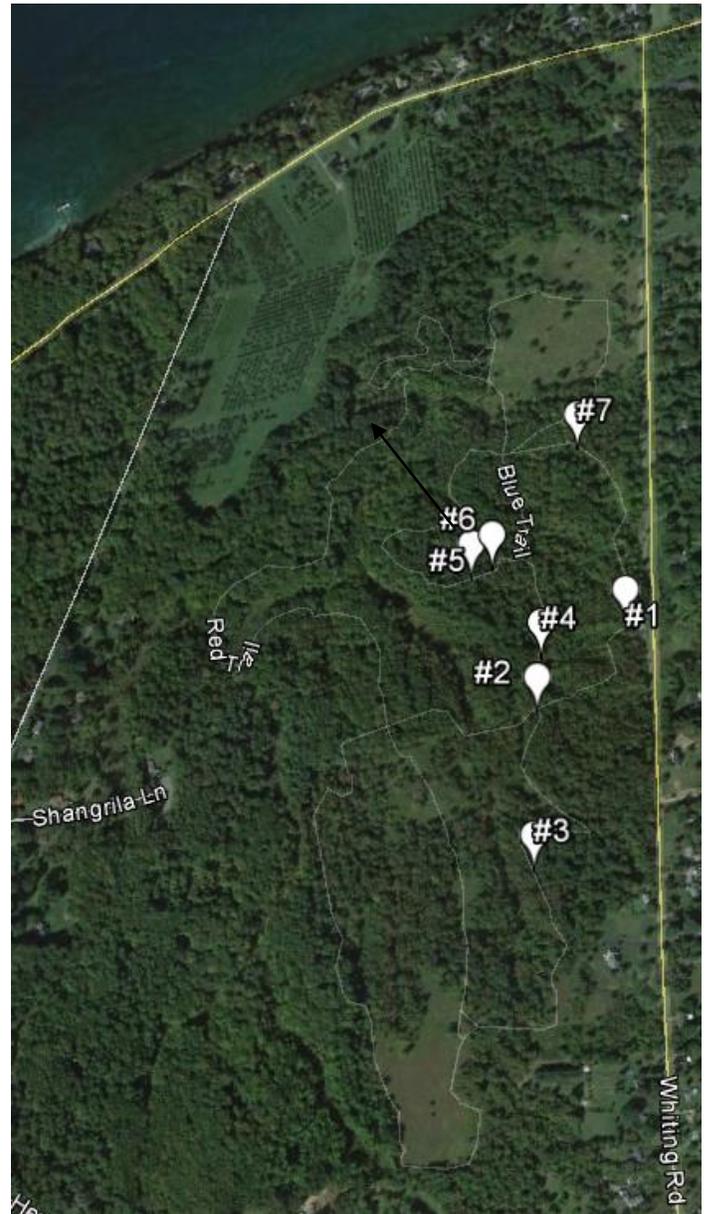
On June 26, 2014 the Habitat Preservation Committee of Friends of Webster Trails conducted a survey of trees in the eastern part of WRNP. The survey was designed to answer the question: **‘What is the contribution of ash trees to the population of trees in the eastern portion WRNP?’**

Method

Sample size: We marked out 7 areas each containing 625 square feet. When undergrowth allowed, these were squares 25 feet on a side. If the undergrowth (Multiflora Rose) was too thick, we laid out two 6 foot corridors along 50 feet of trail.

Sample location: We chose sites in the area of WRNP where growth had occurred after previous clearing for agriculture. We spread out the sites so that they would be representative of the general area. The locations are noted in Map 1.

Tree counting: We counted the trees³ that were at least 6 inches in diameter at chest height: the total number of trees and the number that were ash species. Ash trees were identified by their distinctive compound leaves. As an aside, an ash tree with a 6-inch diameter is estimated to be 30 years old⁴.



Map 1. Sites sampled

³ Other tree species were: Sassafras, Black Cherry and a Birch

⁴ <http://mdc.mo.gov/your-property/your-trees-and-woods/backyard-tree-care/how-old-tree>

Results and Discussion

Our findings are shown in Table 1.

Table 1.

Site	Tree Total	Ash	Ash percentage	GPS coordinates	Site Dimensions
#1	11	11	100	43 14 48.83 77 28 08.91	25' x 25'
#2	5	5	100	43 14 44.14 77 28 15.44	25' x 25'
#3	10	9	90	43 14 44.14 77 28 15.44	(50' x 6') + (50' x 6')
#4	14	4	28	43 14 47.04 77 28 15.14	(50' x 6') + (50' x 6')
#5	8	8	100	43 14 51.21 77 28 20.23	25' x 25'
#6	5	4	80	43 14 51.33 77 28 20.20	25' x 25'
#7	17	10	59	43 14 58.33 77 28 12.28	(50' x 6') + (50' x 6')

In three sample plots, (1, 2 & 5), ash were the only trees present. In two sites, ash represented 80 and 90 per cent of the tree coverage. A third site was 59 per cent ash. Only in site #4 were ash trees not dominant.

These results indicate that ash trees represent a dominant portion of the tree species in the wooded portion of the eastern side of WRNP. If the Emerald Ash Borer kills these trees the wooded appearance of the eastern portion of Whiting Road Nature Preserve will be radically affected.