

Town of West Newbury Ash Tree Inventory Update | 2023



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Town of West Newbury - Ash Tree Inventory Update 2023

INTRODUCTION

In July 2022, the Town of West Newbury, Massachusetts retained Bartlett Tree Experts to perform a survey of ash trees along the roadways throughout the town. As a result of the 2022 Ash Tree Survey, 177 ash trees were identified as suitable for Emerald Ash Borer (EAB) treatment.

All 177 ash trees were treated by systemic injection in June 2023. Unfortunately, many ash trees in the region are in decline due to EAB. Realistically, all ash trees in the area that are left untreated will ultimately die. EAB, combined with the previous several years of drought, and particularly harsh cold weather during winter 2023 has caused a large portion of the 177 ash trees to be in notable decline.

Our assignment for this report is to re-inventory the 177 specific ash trees and to make a determination of whether or not it is recommended to perform a systemic stem injection to suppress Emerald Ash Borer, in Spring 2024. Team member Kat Cummings visited the site in September 2023 to conduct the inventory.

There are only two conditions that we evaluated for:

- 1) Determine if the ash is a candidate for treatment, or;
- 2) Determine if the ash is a candidate for removal.

All ash that are left untreated are considered removals. Further, no trees were assessed for risk — strictly whether or not it is advisable to treat certain trees for EAB. All 177 trees were evaluated, and only the most viable ash trees are recommended for treatment.

Specifically, the inventory included:

- observing 177 trees that were determined to be suitable for ash treatment during the July 2022 inventory. These trees were previously identified with a Tree ID number (Tree ID numbers ranging from 1 to 483);
- recommending EAB treatment to appropriate trees.

The methods and procedures we used to make the above determinations and recommendations are detailed in the following sections.

GOALS & OBJECTIVES

An effective inventory update report communicates clear goals and the specific objectives designed to carry out those goals. We intend "goal" to mean the overall aim or result we expect to achieve for the client in producing the inventory update. The objectives are the specific actions taken or recommended to support goal completion. The table below describes each goal and its corresponding objective(s).

GOALS & OBJECTIVES

GOAL	OBJECTIVES TO ACCOMPLISH GOAL
Update the ash tree inventory (per numbers agreed) throughout the Town of West Newbury.	<ul style="list-style-type: none"> • Trees were inventoried using Trimble® Geo GPSr hardware and ArborScope™ Inventory Management Tools, collect data such as tree name, location, and size.. • Tree ID numbers were to each tree inventoried.
Provide mechanism for managing inventory, recommendations, and related budget planning.	<ul style="list-style-type: none"> • Provide map or maps of the inventoried trees to assist the client in managing property areas. • Submit a comprehensive report that documents and organizes findings and provides other resources to assist the client in efficient use of the information.
Maximize client understanding and implementation of the update report.	<ul style="list-style-type: none"> • Include in report specific explanations and visuals related to plan recommendations. • Make periodic contact with client to follow up and answer any questions about the management plan's contents.
Maximize immediate and long-term tree health and aesthetics.	Implement a plant-health-care program that uses <ul style="list-style-type: none"> • Emerald Ash Borer (EAB) treatments for identified trees in the 2024 growing season
Manage immediate and long-term maintenance needs associated with trees in high-use areas.	Implement recommended tree removals <ul style="list-style-type: none"> • all trees that are determined to be unsuitable for EAB treatments are recommended for removal

DATA COLLECTION & TREE INSPECTION METHODOLOGY

In conducting the inventory, we used specialized equipment and software and followed specific procedures to determine tree characteristics and recommendations. The following explanation will assist the reader in interpreting the findings of this report.

Data Collection Equipment & Attribute Data

The Inventory Team used Trimble® Geo GPSr hardware units, TerraSync® and GPS Pathfinder® Office GIS software, and Bartlett Tree Experts' ArborScope™ web-based management system to inventory the trees. The attribute data we collected on site are listed below.

- botanical name and regional common name according to local ISA Chapter Tree Species List
- tree location based on GPS coordinate system
- tree ID number
- diameter at breast height (**DBH**)
- Emerald Ash Borer treatment recommendations

Limitations of Tree Risk Assessments

All ash tree assessments were performed from the ground. This tree inventory was not a tree risk assessment. As such, no trees were assessed for risk in accordance with industry standards, nor are there any tree risk ratings or risk mitigation recommendations provided within this report.

Emerald Ash Borer (EAB) Treatment

Trees were observed only for the purpose of determining which trees are appropriate for EAB systemic trunk injection treatments during the 2024 growing season. Many of the ash trees have declined throughout the area. Emerald Ash Borer (EAB) is the primary cause of ash tree mortality in West Newbury. In addition to EAB pressure, ash trees also are threatened by other stresses and environmental conditions such as drought and winter injury. When combined with the evident EAB problem in West Newbury, these environmental factors have a synergistic effect on the overall tree decline in the area.

At this time, a total of 89 trees are recommended for treatment in 2024. The 88 other trees were determined to be in too poor of a condition to respond adequately to treatment. These trees are recommended to be removed, now. Certain pests and diseases may not have been visible at the time of this past inventory. Environmental factors may also impact tree condition. Continued monitoring is recommended.

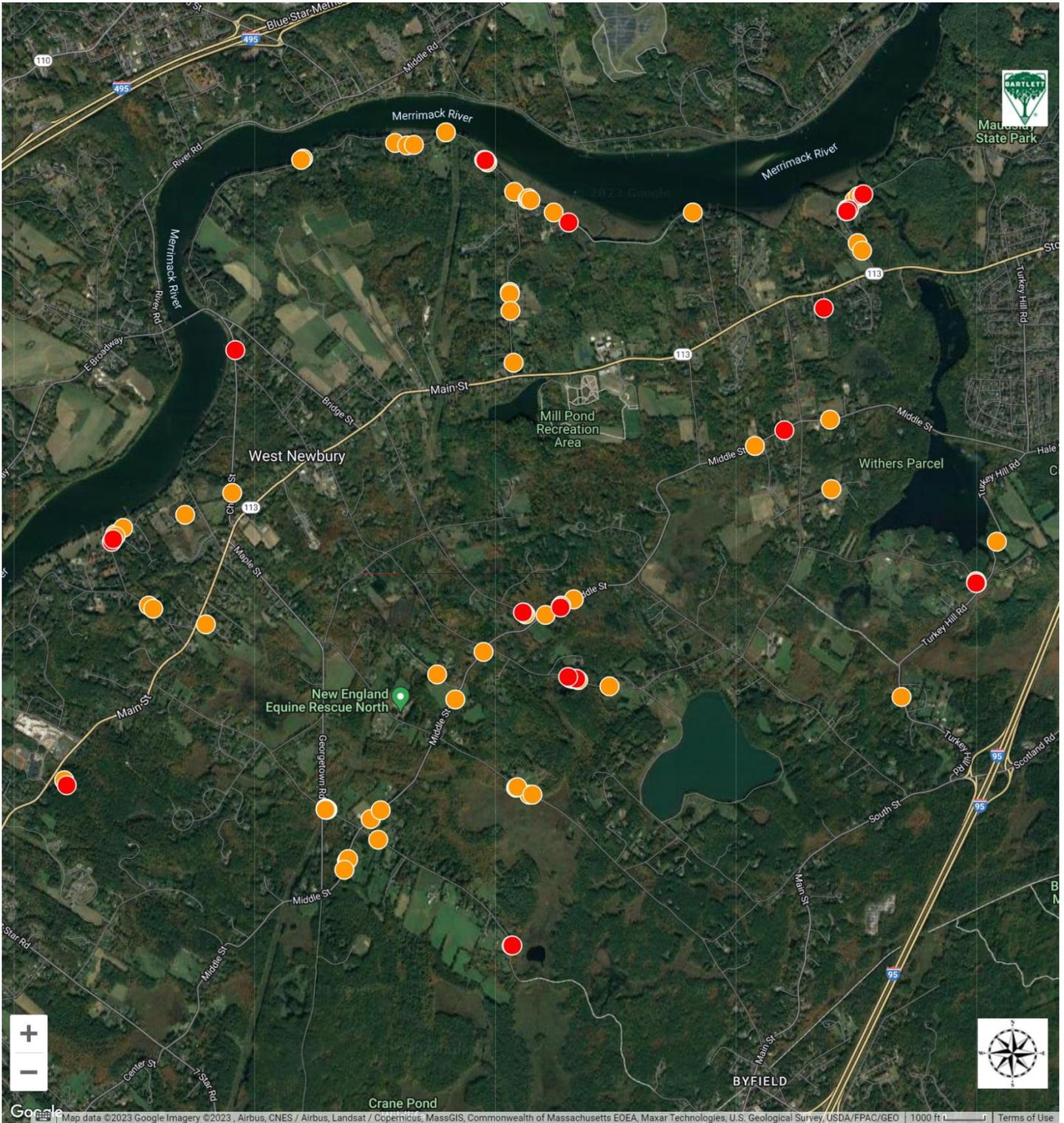
ASH TREES RECOMMENDED FOR EAB TREATMENT

Tree ID	Common Name
1	Ash-White
3	Ash-White
9	Ash-White
11	Ash-White
14	Ash-White
15	Ash-White
16	Ash-White
21	Ash-White
22	Ash-White
34	Ash-White
35	Ash-Green
53	Ash-Green
58	Ash-Green
89	Ash-Green
90	Ash-Green
101	Ash-Green
109	Ash-Green
115	Ash-White
116	Ash-White
121	Ash-Green
122	Ash-Green
125	Ash-Green
131	Ash-Green
137	Ash-White
142	Ash-White
143	Ash-White
144	Ash-White
149	Ash-White
153	Ash-Green
155	Ash-Green

Tree ID	Common Name
162	Ash-Green
163	Ash-Green
174	Ash-Green
179	Ash-Green
180	Ash-Green
191	Ash-Green
194	Ash-Green
196	Ash-Green
199	Ash-White
202	Ash-White
208	Ash-White
209	Ash-White
211	Ash-White
212	Ash-White
213	Ash-White
214	Ash-White
215	Ash-White
236	Ash-White
245	Ash-White
250	Ash-White
259	Ash-White
260	Ash-White
261	Ash-White
272	Ash-White
278	Ash-White
279	Ash-White
280	Ash-White
281	Ash-White
287	Ash-White
296	Ash-White

Tree ID	Common Name
300	Ash-White
333	Ash-White
334	Ash-White
340	Ash-White
351	Ash-White
353	Ash-White
357	Ash-White
364	Ash-White
366	Ash-White
368	Ash-White
369	Ash-Green
384	Ash-White
385	Ash-White
386	Ash-White
387	Ash-White
388	Ash-White
393	Ash-White
395	Ash-White
399	Ash-White
400	Ash-White
412	Ash-White
413	Ash-White
414	Ash-White
415	Ash-White
420	Ash-White
432	Ash-White
434	Ash-White
467	Ash-White
468	Ash-White

INVENTORIED TREES BY TREES RECOMMENDED FOR EAB TREATMENT



Ash Tree Canopy Condition Rating: ● 1 ● 2

ENTIRE INVENTORY



ENTIRE INVENTORY (177 Trees)

Tree ID	Common Name	Genus	Species	DBH	Treatment Recommended
1	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13	Yes
2	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	No
3	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22	Yes
4	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12,12,12,12,5	No
5	Ash-White	<i>Fraxinus</i>	<i>americana</i>	40	No
9	Ash-White	<i>Fraxinus</i>	<i>americana</i>	17	Yes
11	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	Yes
13	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16,7	No
14	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13,8	Yes
15	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18,11	Yes
16	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22	Yes
21	Ash-White	<i>Fraxinus</i>	<i>americana</i>	14	Yes
22	Ash-White	<i>Fraxinus</i>	<i>americana</i>	20	Yes
30	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22	No
34	Ash-White	<i>Fraxinus</i>	<i>americana</i>	23,18	Yes
35	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	19	Yes
38	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	No
39	Ash-White	<i>Fraxinus</i>	<i>americana</i>	36	No
44	Ash-White	<i>Fraxinus</i>	<i>americana</i>	21	No
49	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	13	No
50	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	17	No
51	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	16	No
53	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	12	Yes
58	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	15	Yes
59	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	13,9	No
69	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	24	No
71	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	18	No
72	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	21	No
75	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	10	No
81	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	28	No
84	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	16	No
89	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	12	Yes
90	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	15	Yes
92	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	16	No
93	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	24	No
94	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	14	No
101	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	33	Yes
103	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	16	No
104	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	21	No
108	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	12	No
109	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	28	Yes
112	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	16,13	No
115	Ash-White	<i>Fraxinus</i>	<i>americana</i>	30	Yes

Tree ID	Common Name	Genus	Species	DBH	Treatment Recommended
116	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
118	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	12	No
121	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	1	Yes
122	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	23	Yes
123	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	21	No
124	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	16	No
125	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	20	Yes
128	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15	No
131	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	22	Yes
137	Ash-White	<i>Fraxinus</i>	<i>americana</i>	34	Yes
138	Ash-White	<i>Fraxinus</i>	<i>americana</i>	31	No
142	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13	Yes
143	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13,12	Yes
144	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	Yes
149	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	Yes
153	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	10	Yes
155	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	18	Yes
159	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	15	No
162	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	23	Yes
163	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	38	Yes
172	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	22	No
173	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	10,6	No
174	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	12	Yes
177	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	26	No
179	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	13	Yes
180	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	14	Yes
181	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	14,10	No
185	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	24	No
190	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	18	No
191	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	11	Yes
194	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	11	Yes
195	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	18	No
196	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	18	Yes
198	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19	No
199	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19	Yes
201	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16,15	No
202	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
204	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13	No
206	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	No
208	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16,16	Yes
209	Ash-White	<i>Fraxinus</i>	<i>americana</i>	24	Yes
211	Ash-White	<i>Fraxinus</i>	<i>americana</i>	24	Yes
212	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
213	Ash-White	<i>Fraxinus</i>	<i>americana</i>	17	Yes
214	Ash-White	<i>Fraxinus</i>	<i>americana</i>	21	Yes
215	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15	Yes

Tree ID	Common Name	Genus	Species	DBH	Treatment Recommended
216	Ash-White	<i>Fraxinus</i>	<i>americana</i>	14	No
230	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	No
232	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	No
233	Ash-White	<i>Fraxinus</i>	<i>americana</i>	11	No
235	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10,8	No
236	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16	Yes
240	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	No
241	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16	No
244	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22	No
245	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	Yes
247	Ash-White	<i>Fraxinus</i>	<i>americana</i>	31	No
248	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	No
250	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19	Yes
259	Ash-White	<i>Fraxinus</i>	<i>americana</i>	26	Yes
260	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
261	Ash-White	<i>Fraxinus</i>	<i>americana</i>	34	Yes
263	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13	No
264	Ash-White	<i>Fraxinus</i>	<i>americana</i>	35	No
267	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	No
272	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	Yes
273	Ash-White	<i>Fraxinus</i>	<i>americana</i>	11	No
275	Ash-White	<i>Fraxinus</i>	<i>americana</i>	21	No
278	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19,14	Yes
279	Ash-White	<i>Fraxinus</i>	<i>americana</i>	27	Yes
280	Ash-White	<i>Fraxinus</i>	<i>americana</i>	25	Yes
281	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13	Yes
282	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16	No
283	Ash-White	<i>Fraxinus</i>	<i>americana</i>	25	No
285	Ash-White	<i>Fraxinus</i>	<i>americana</i>	30	No
287	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
292	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	No
296	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15	Yes
300	Ash-White	<i>Fraxinus</i>	<i>americana</i>	42	Yes
308	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	13	No
309	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	10	No
312	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	12	No
333	Ash-White	<i>Fraxinus</i>	<i>americana</i>	36	Yes
334	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	Yes
340	Ash-White	<i>Fraxinus</i>	<i>americana</i>	14	Yes
351	Ash-White	<i>Fraxinus</i>	<i>americana</i>	16	Yes
353	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22,17,14	Yes
356	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	No
357	Ash-White	<i>Fraxinus</i>	<i>americana</i>	20	Yes
361	Ash-White	<i>Fraxinus</i>	<i>americana</i>	32	No
362	Ash-White	<i>Fraxinus</i>	<i>americana</i>	30	No
364	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	Yes

Tree ID	Common Name	Genus	Species	DBH	Treatment Recommended
365	Ash-White	<i>Fraxinus</i>	<i>americana</i>	33,30	No
366	Ash-White	<i>Fraxinus</i>	<i>americana</i>	17	Yes
368	Ash-White	<i>Fraxinus</i>	<i>americana</i>	21	Yes
369	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	17	Yes
371	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	No
384	Ash-White	<i>Fraxinus</i>	<i>americana</i>	25,13	Yes
385	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	Yes
386	Ash-White	<i>Fraxinus</i>	<i>americana</i>	21	Yes
387	Ash-White	<i>Fraxinus</i>	<i>americana</i>	20,13	Yes
388	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	Yes
393	Ash-White	<i>Fraxinus</i>	<i>americana</i>	24	Yes
394	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12,10,10	No
395	Ash-White	<i>Fraxinus</i>	<i>americana</i>	11	Yes
396	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	No
398	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15	No
399	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	Yes
400	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	Yes
412	Ash-White	<i>Fraxinus</i>	<i>americana</i>	14,12	Yes
413	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
414	Ash-White	<i>Fraxinus</i>	<i>americana</i>	14	Yes
415	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15	Yes
420	Ash-White	<i>Fraxinus</i>	<i>americana</i>	18	Yes
423	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22	No
424	Ash-White	<i>Fraxinus</i>	<i>americana</i>	13,11	No
425	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	No
426	Ash-White	<i>Fraxinus</i>	<i>americana</i>	33	No
430	Ash-White	<i>Fraxinus</i>	<i>americana</i>	27	No
432	Ash-White	<i>Fraxinus</i>	<i>americana</i>	11	Yes
433	Ash-White	<i>Fraxinus</i>	<i>americana</i>	14	No
434	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19	Yes
452	Ash-White	<i>Fraxinus</i>	<i>americana</i>	20	No
457	Ash-White	<i>Fraxinus</i>	<i>americana</i>	20	No
460	Ash-White	<i>Fraxinus</i>	<i>americana</i>	21	No
462	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12	No
463	Ash-White	<i>Fraxinus</i>	<i>americana</i>	23	No
466	Ash-White	<i>Fraxinus</i>	<i>americana</i>	24	No
467	Ash-White	<i>Fraxinus</i>	<i>americana</i>	12,5,3	Yes
468	Ash-White	<i>Fraxinus</i>	<i>americana</i>	24	Yes
469	Ash-White	<i>Fraxinus</i>	<i>americana</i>	22	No
481	Ash-White	<i>Fraxinus</i>	<i>americana</i>	10	No
482	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19	No
483	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15,14	No