# 2023 Tree Inventory
# Executive Summary

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# Introduction

On October 9, 2023, Certified Arborists from Great Lakes Urban Forestry Management (GLUFM) began collecting data for a comprehensive tree inventory of the parkway trees and select Village owned properties within the municipal boundaries of the Village of Westchester, IL. This inventory resulted in a total count of 6,845 trees and 1,703 planting spaces. This executive summary is a brief statistical overview of the inventory data and will address some of our observations, as well as some potential mitigation measures and other recommendations. GLUFM is pleased to provide its tree inventory and GIS mapping services along with this summary and analysis of the tree population. Westchester is now equipped to use this valuable information to address short term concerns, long term management considerations, and overall planning objectives.

# Collection Parameters

The following is a detailed description of data that was collected for each tree.

**TREE STATUS**
For this inventory, the status field includes whether the site is home to an Active Tree, a Planting Space, or a Stump.

**ADDRESS**
The address was recorded as the numerical address at which a tree is located, based on the observed street address, or the listed street address of the GIS parcel data we have available to us.

**STREET NAME**
The street names conform to the names as listed on street signage. The street name is for the address at which the parcel is listed, regardless of how the buildings on the lot are oriented (if on a corner lot).

**RELATIVE LOCATION (SITE)**
All trees are listed by zone, address, street name, on street name, and the following site prefixes, which determine where exactly on a property the tree is located:

**F** – Front of the property
**R** – On the right side of the property
**L** – On the left side of the property
**B -** In the back of the property
**M -** On a median in the center of a street
**A** – Across from an address

**X and Y**
These are the X and Y coordinates of the tree location, recorded as WGS 84 coordinates coordinate system in decimal degrees.

**SPECIES**
All tree species are listed using common and botanical names and were identified to the species level. Specific cultivars, hybrids, or varieties were not identified.

**STEMS**
The Stems field indicates how many stems diverge below 4.5 feet above the ground.

**DBH**
Trees were measured using DBH (Diameter at Breast Height, 4.5” above ground level), a standard forestry measure of tree diameter, using a forester’s DBH tape. This method of measurement provides the most accurate reading of tree diameter, which can be highly variable depending on the dimension in which it is linearly measured.

**CONDITION**

Condition ratings are based on a normal standard distribution. Much like in academic circles, we expect the greatest number of trees in the average category (3), fewer trees in the good and poor categories (2 and 4, respectively), and the fewest number of trees in the excellent and very poor categories (1 and 5, respectively). Condition is a continuous variable, meaning that anywhere along the curve we supplied, you should be able to estimate the number of trees that are (e.g.) a 2.5 condition, even though condition was only recorded as whole number integers. (see table below)

| | |
|---|---|
| **Condition 1** | **Specimen** – Tree has no observable defects, wounds, diseases, and has textbook perfect form for the species. In addition, since young trees have a tendency to be trouble free and homogenous, a condition 1 tree must by definition be a minimum of 16" DBH. These are legacy trees, and as such are rare. |
| **Condition 2** | **Above Average** – Tree may have a small amount of deadwood, or a very limited number of minor defects. The overall form of the tree must be good, and consistent for the species in question. These trees should also be a minimum of 8" DBH for the reason listed above. Often the difference between condition 2 and 3 is form or growth habit. |
| **Condition 3** | **Average** – Tree has moderate but acceptable amounts of deadwood, wounds, or other defects, but is generally healthy. A wide variety of forms is acceptable for this group, which is meant to define the middle ground around which better or worse trees can be defined and identified. |
| **Condition 4** | **Below Average** – Tree has defects, deadwood, wounds, disease, etc. that have to the potential to cause a need for removal. Very poor form or architecture can put an otherwise healthy tree in this category as well, due to the potential for tree or root failure. |
| **Condition 5** | **Very Poor/ Dead** – Tree must be removed. Physical or Health defects are too far gone for the tree to be reasonably saved. Like condition 1 trees, these are relatively rare, as generally trees that are getting to this level are removed before they can get there. |

**ARBORIST RECOMMENDATION**

Maintenance recommendations are provided to assist in managing the tree population. They are very general guidelines for pruning and care, and we find they are helpful for managing and prioritizing maintenance.

| | |
|---|---|
| **Prune- Cycle** | Tree is in good health, and will require standard pruning or maintenance on a 3-5 year cycle |
| **Prune- Train** | Tree is within the 1-6 inch DBH range and requires structural pruning to establish good architecture |
| **Prune- Priority** | Tree has not been properly pruned during its developmental years, has suffered damage, is overgrown, has low risk deadwood, or for other reasons is in need of pruning sooner than a 3-5 year standard cycle |
| **Prune- Dead Limb** | Specific dead limb(s) not qualifying as moderate or severe deadwood by percentage |
| **Remove- Standard** | Tree must be removed, but does not pose an immediate elevated risk situation; should be removed within 1-3 years |
| **Remove- Low Priority** | Tree is recommended for removal as budget and time allows |
| **Remove- Priority** | Tree poses an elevated risk and should be removed in an expeditious manner |
| **Risk Assessment- Standard** | Level 2 - Standard Risk Assessment is recommended; an assessment without advanced tools or climbers |
| **Risk Assessment- Adavanced** | Level 3 - Advanced Risk Assessment is recommended; an assessment using advanced tools, techniques and/or climbers |
| **Monitor- Annual** | Tree has an structural defect or other significant issue that requires yearly reassessment |
| **Monitor- Long Term** | Tree has an indiscernible defect, or shows signs of developing issues or general decline and requires long term monitoring for further change or decline |
| **Grind Stump** | Stump is visible and should be removed |
| **Maintenance- Other** | Tree requires maintenance not related to pruning or removal. Typically used for situations such as leaning new plants, chemical treatment, mulching, girdling objects, etc |

**RECOMMENDATION REASON**

Reasons for the arborist recommendations above are listed here. This is a limited list but includes the most common observed issues that justify the condition and arborist recommendation for that tree.

| | | |
|---|---|---|
| **Clearance** | | Branches are blocking/ touching Building, Sidewalk, Street, or Sign |
| **Dead** | | Tree is dead or nearly so |
| **Deadwood** | Large Limb | One or more larger dead limbs requiring removal but not moderate or severe deadwood by percentage |
| | Moderate | Tree contains 11-30% deadwood, by ocular estimate |
| | Severe | Tree contains more than 30% deadwood, by ocular estimate |
| **Decay Column** | | Tree has visible or audible decay in central trunk(s) |
| **Defect** | Other | Tree has other defect not listed, specifics noted in comments field |
| | Unobservable | Tree has a potential defect that is not observable from the ground |
| **Dieback** | | Tree crown is dying back |
| **Girdling Object** | | A nondescript object is girdling the tree or tree part |
| **Hanger** | | Branches are hanging in crown, partially attached or free hanging |
| **High Location Value** | | Justification for Risk Assessment; tree is in prominent location and has ecological value |
| **Included Bark** | | Tree branches have tight V-shaped union(s) and have developed bark inclusions |
| **Insects/Disease** | | Tree has observable signs or symptoms of pests or pathogens |
| **Lean** | | Tree is leaning at undesirable angle |
| **Mechanical Damage** | | Basal damage caused by landscaping equipement, or other physical damage |
| **New Planting** | | Justification for establishment pruning, staking, mulching, etc |
| **Other** | | Other notable observance not listed, specifics noted in comments field |
| **Overgrown** | | Excessive branch or sucker growth requiring priority pruning |
| **Poor Form** | | Tree has poor architecture, often due to limited growspace or improper pruning |
| **Roots** | Compacted | Observed or inferred signs of soil compaction |
| | Girdling | Observed girdling roots or severe trunk flattening |
| | Heaving | Observed evidence of root or soil heaving |
| | Multiple Issues | Two or more root issues |
| | Still BB | Roots confined to ball & burlap due to intact twine and basket, treated burlap, or other observed factor |
| | Wounded | Root damage from construction, hardscape, mowing equipment, or other factor |
| **Rot** | Heartwood | Observable internal decay; decay column, cavity, etc |
| | Basal | Observable decay at the base of the tree |
| | Sapwood | Observable vascular tissue decay |
| | Other | Other signs of decay such as wetwood, root rot, etc |
| **Mushroom/Conk** | | Visible fungal fruiting bodies |
| **Topped** | | Tree had its apical meristem or terminal leader removed; typically due to poor pruning practice, utility pruning, or storm damage |
| **Weak Trunk Union** | | Weak union caused by included bark or poor branching angles that have compromised structural stability |
| **Wounds** | Crown | Scaffold or secondary branch wounds affecting tree health and/or stability |
| | Trunk | Trunk wounds affecting tree health and/or stability |
| **Utility Conflict** | | Pruning required due to interference with wires, street lamp, traffic light, or other utility |
| **Sign Conflict** | | Pruning required due to obstruction of signage |
| **Storm Damage** | | Tree has recent damage due to storm or winds such as torn limbs |

**LAND USE**
For the purposes of this inventory, land use designations include Agricultural, Commercial, Industrial, Institutional, Multifamily, Recreational, Single Family, Transportaion, and Other.

**GROWING SPACE/PARKWAY SIZE**
For street tree inventories, this field is used to record the distance from the curb to the sidewalk or such other soil volume conditions or restrictions.

| | |
|---|---|
| **1-3 FEET** | Parkway width is 1-3 feet |
| **4-6 FEET** | Parkway width is 4-6 feet |
| **7-12 FEET** | Parkway width is 7-12 feet |
| **13+ FEET** | Parkway width is 13 feet or greater |
| **TREE PIT** | Tree is planted in a container or pit |
| **NO SIDEWALK** | No sidewalk is present |
| **OPEN** | Tree is growing in an open area, used primarily for trees in Park settings |
| **OTHER** | Any other category not described above |

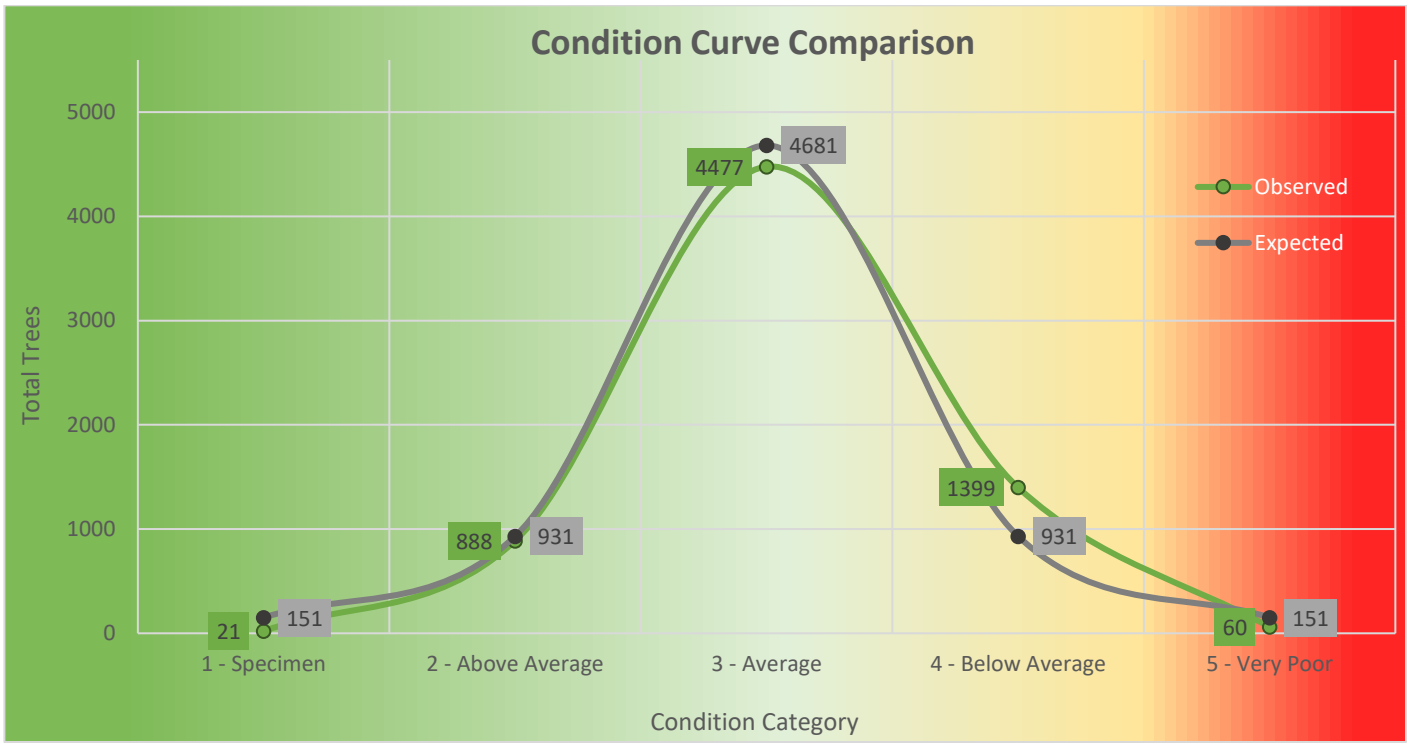
**RISK LEVEL**
This is the equivalent of a Level 1 Limited Visual Risk Assessment and denotes a condition observed by the Arborist that would appear, in their judgement at the time of the inventory, to pose possible risk to people or property. The specific condition would be reflected in the above Arborist Recommendations and Reasons.

| | |
|---|---|
| **None Observed** | No observable risk observed at the time of the inventory |
| **Elevated** | Moderate level of risk to people or property that should be investigated by the Owner/ Manager |
| **Substantial** | High level of risk to people or property that should be investigated by the Owner/Manager and mitigated as soon as practical |
| **Critical** | Extreme level of risk to people or property that should be mitigated by the Owner/ Manager as soon as possible |

**COMMENTS**
Comments have been included as a courtesy to denote any conditions worthy of note. These comments will be standardized as much as possible, though certain situations certainly exist where nonstandard comments were utilized.

## Statistical Overview

| **Number of Trees Inventoried** | **6,845** |
|---|---|
| Number of Stumps Inventoried | 30 |
| Number of Planting Spaces Inventoried | 1,701 |
| Total Number of Species | 116 |
| Total Diameter Inches | 120,675" |
| Average Tree Diameter | 17.63" |
| Average Tree Condition | 3.08 (Below Average) |
| Average Mature (8" and up) Tree Condition | 3.07 (Below Average) |




This curve represents the distribution of trees in each of the categories enumerated above. As stated in the collection parameters section, deviations from the expected normal standard distribution can serve as a useful tool in analyzing the overall health of a tree population, and for this reason, we have included a theoretical curve representing a normal distribution so that comparisons can readily be made. The green line with green labels represents what we observed in the field, and the grey line with grey labels is the predicted normal distribution. The condition curve for the Westchester inventory indicates a tree population that is in overall slightly below average condition.

The Condition 1, or specimen, trees were lower than would be predicted by the standard distribution alone, but we always expect that the specimen trees will come in lower than their statistical norm because of their rarity. A Condition 1 tree, by definition, must be at least 16" DBH (and generally much larger), have textbook perfect architecture for the species, and have no observable defects. Just over half of Westchester's tree population currently meets the DBH minimum for this condition. As younger trees are planted in sites with adequate growing space, and if they are properly pruned and maintained, they should develop with good structure and may mature to become Condition 2 and eventually Condition 1 trees.

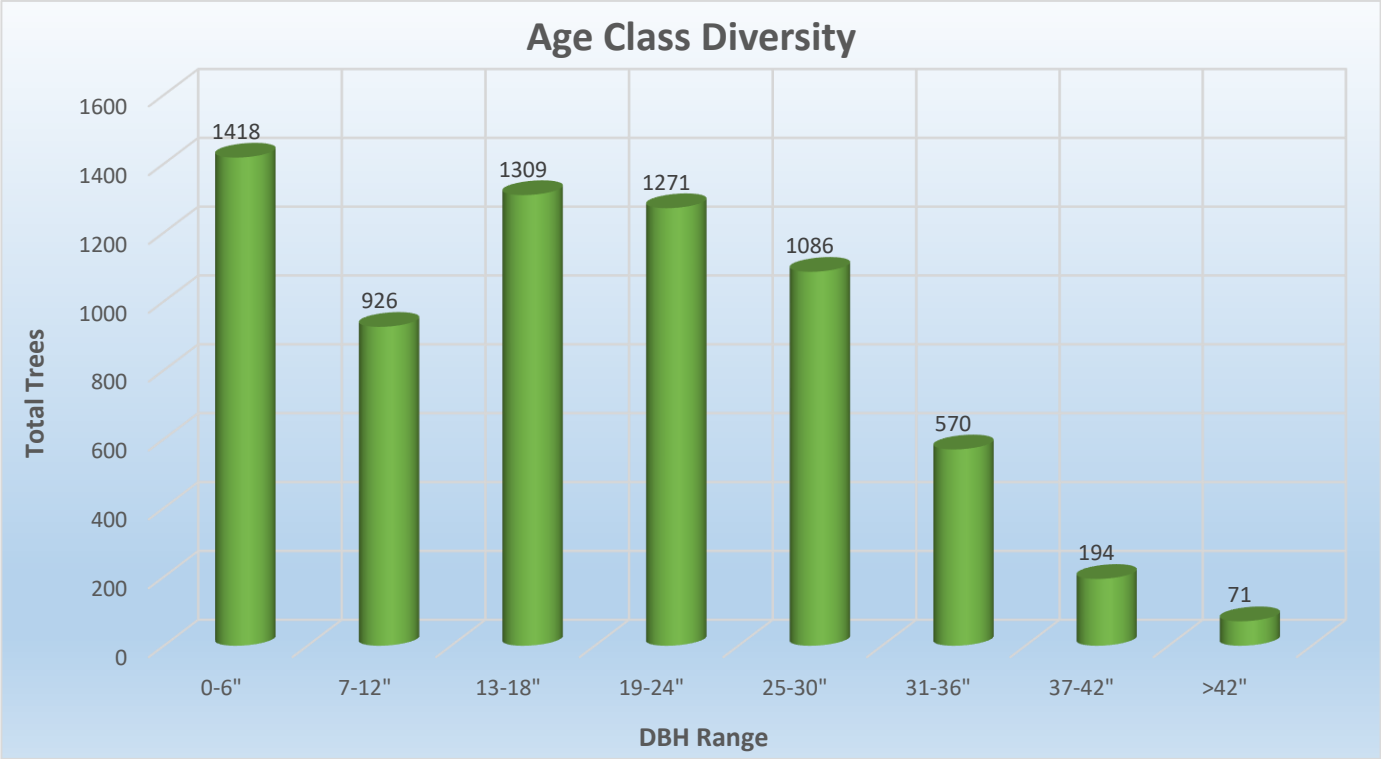
The Condition 5, or very poor, trees are also lower than the expected norm which is common in municipal settings as trees are more often removed before reaching this state. It is recommended that Condition 5 trees be prioritized and removed in a timely manner.

The Condition 2, or above average, trees are slightly lower than what statistical analysis would predict. Similar to the Condition 1 category, Condition 2 trees need to have good structure that is consistent with the species in question and also be a minimum of 8" DBH. Approximately 77% of the inventoried trees measure 8" DBH or larger and qualify for the Condition 2 status, however only 17% of those trees were rated as Condition 2 or above average. Looking toward the future, Westchester has an opportunity to increase the number of trees in the Condition 2 category. In general, if trees are properly planted, mulched, watered, and established, and site selection for the trees is well matched to the species, followed with cyclical pruning and maintenance, trees will often mature with good form and without significant defects. These trees can eventually become Condition 2 trees.

The Condition 4, or below average, trees were significantly higher than what would be statistically expected. Two singular species: Norway Maple and Silver Maple make up almost half of the Condition 4 trees. Focusing on reducing the number of the aging Silver and Norway Maple trees will not only help improve general condition but will also help

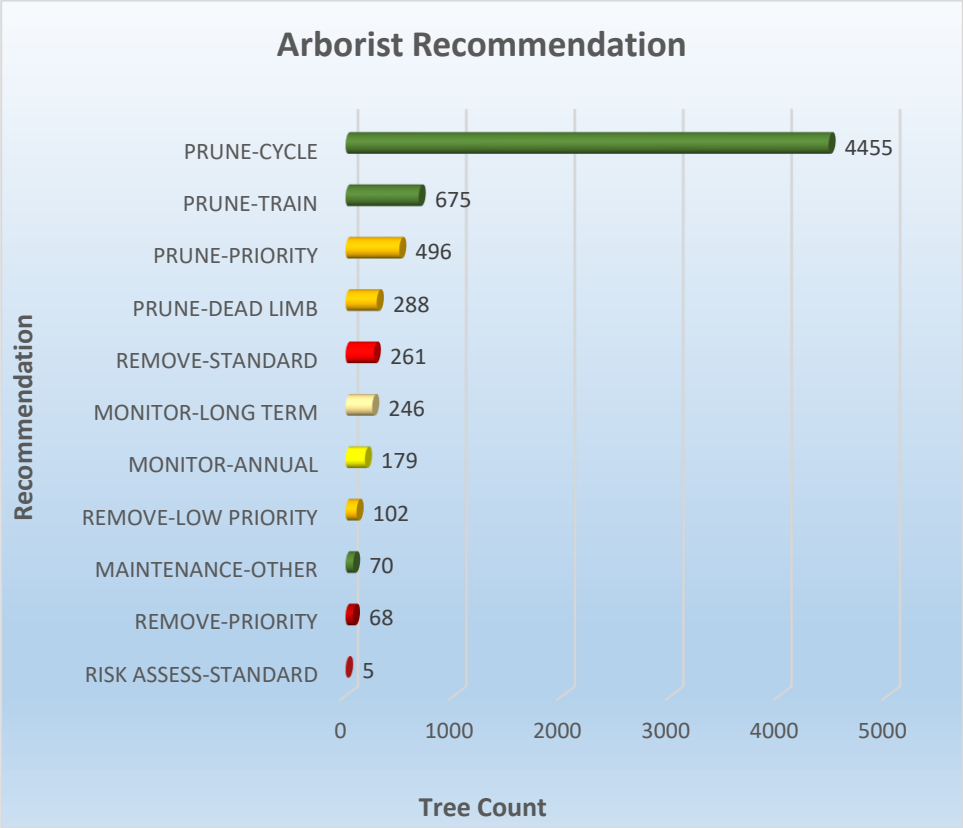
improve overall diversity as the number of Maple trees are being reduced and new species are being planted in their place. Species diversity is further explained below. Westchester can use the data from this inventory to locate Condition 4 trees and prioritize them for maintenance or removal. Westchester can look to further decrease this number over the next few years as they move forward and attend to issues that have been identified.

The trees in the Condition 3, or average, category were very close to the statistical analysis. In the next few years, as the below average trees are pruned or removed, we would expect the average and above average categories to increase.




This age class analysis chart illustrates a somewhat atypical trend in the overall age spread of a tree population seen in a municipal setting. Often, we see many trees being younger to middle aged and a gradual and relatively lower number of trees in the older age categories. Young and middle-aged trees are highly represented here, however we are also seeing a significant number of mature trees as well. As shown above, almost a quarter of the total population has a DBH of 6" or less, which is an indication of relatively recent commitment to continual tree planting, as evidenced by the number of trees in the 1-6" ranges. It is assumed that most trees grow on average approximately ½" per year, although that figure varies significantly depending on the species in question, so we consider these trees to be less than 15 years old. About 14% of Westchester's trees have a DBH of 7-12" which are generally considered to be about 15-25 years old. The 13-18" DBH category make up approximately 20% of the population and are considered to be approximately 25-35 years old. The 19-24" DBH category which are generally mature trees over 35-45 years old represent approximately 19% of the total tree population.

Trees measuring over 24" DBH make up approximately 28% of the total tree population. The 1,921 trees in the 25"+ DBH categories are considered to be about 45-50+ years old. It should be mentioned that the number of trees in the 30"+ categories are often lower due to the natural senescence and ensuing decline of trees in urban settings, however this is generally a higher survival rate compared to neighboring similarly sized tree populations. A fairly equal number of trees in each age classification is, within reason, desirable and indicative of a consistent focus on tree planting and tree maintenance in Westchester over the years and shows that the right trees are being planted in the correct locations. Westchester continues to have an opportunity, over time, to bring the age classes to a more balanced level.




In terms of Arborist Recommendations of maintenance needs in the Westchester tree population, the statistics displayed above show an encouraging trend overall. The majority of trees (65%) require only Cyclical Pruning on a regular basis, which is an overall desirable trait in a tree population. However, 431 or 6% of the trees are recommended for removal. The 68 trees in the Priority Removal category should be prioritized over other removals. The 261 trees designated as standard removals should be prioritized and removed in a timely manner. The 102 trees in the low priority category should be removed as time and budget allow. The remaining categories, other than removals discussed above, were used to indicate trees in need of maintenance which should be prioritized over those in the Cyclical Prune category and will be discussed briefly below.

The 496 trees in the "Prune-Priority" group and the 288 trees in the "Prune-Dead Limb" group are trees which are simply overgrown, or have parts which need to be removed promptly, and should have pruning prioritized over the trees in the cyclical prune set. Generally, we consider this to be a "within 1-3 years" level of pruning.

The 425 total trees in the "Monitor" categories can be viewed as being in a transitional phase. For the most part, the tree has an indiscernible defect, or shows signs of developing issues or general decline which must be observed. These trees should be reassessed periodically, and their maintenance status updated.

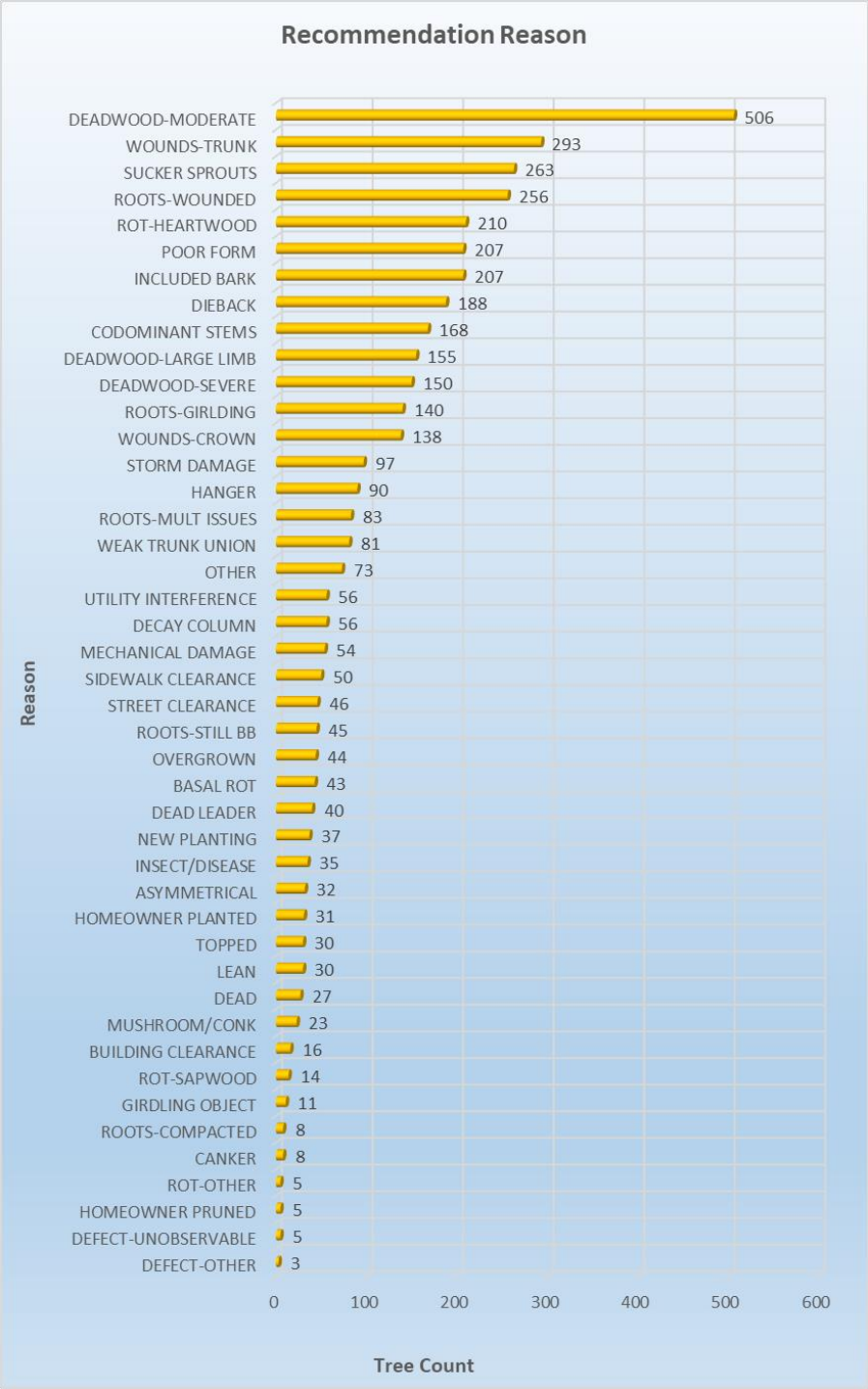
Trees categorized as "Prune-Train" are typically trees smaller than 8" DBH and have structural issues or are overgrown and require selective pruning to establish better architecture in the future. Establishment pruning, or the pruning of young trees to establish proper branching habit and structure, is one of the least expensive yet most effective maintenance items that can be performed on a young tree.

The 70 trees in the "Maintenance-Other" category typically need some other form of maintenance not covered in the rest of the categories, mostly the removal of girdling objects, anchor staking, or no longer needed trunk wrapping. A description of the maintenance needed should be found in the reasons or comments field.

5 trees received a "Risk Assessment" status. Trees which received the "Risk Assessment" recommendation are trees which have developed defects and require a more in-depth inspection and analysis to determine Westchester's risk tolerance threshold and the need for mitigation efforts. It is recommended that a Level 2 Basic Risk Assessment be

performed on this tree (per TRAQ or ANSI A300 Pt 9 Standards), or equivalent (ISA Tree Risk BMP methodology, Matheny and Clark, etc).

As will be discussed in detail in Westchester's Urban Forestry Management Plan, the Village's cyclical pruning program will ensure that each Village tree in Westchester will be pruned on a regular basis. Proper pruning will help to improve the overall condition of the tree population.



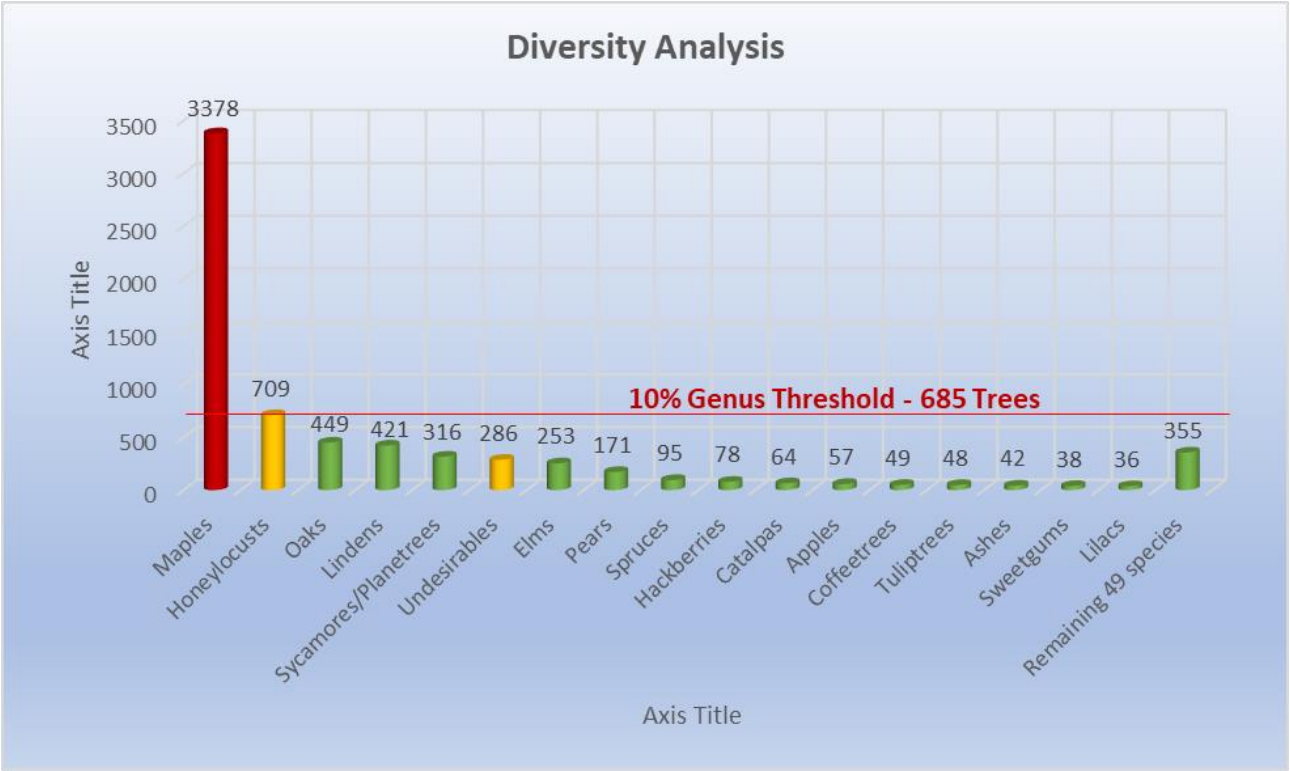

The arborist recommendation reasons summarize the field observations into the main factors that justify the Arborist Recommendation and the condition rating of each tree. Some trees may have more than two factors, but the two most prominent issues that directly pertained to the maintenance recommendation or condition were noted. Westchester can use this inventory data to query specific defects and prioritize mitigation actions. This chart illustrates an interesting overview of the overall health, defects, and maintenance needs of Westchester's tree population.

## Risk Level Summary

We cannot stress enough that these were Rapid Assessments, and not full risk Assessments, and as such, are meant to indicate a need for further study, and do not represent a legal description of these trees' risk levels. These assessments are not legally binding and are not intended to be utilized as evidence in a court of law. They serve primarily for internal record keeping, and a means of locating trees which require more detailed study before making a final decision as to management strategy. Since the risk level field is part of the data collection parameters for Westchester, it is recommended that Westchester develop and implement a Tree Risk Assessment Policy so that consistency and accountability is successfully achieved.


As illustrated in the chart above, the vast majority of Westchester trees were found to have no observable risk level. However, as shown above, 398 trees were found to have some degree of risk. The 8 trees in the Critical risk category are the most concerning, all of which received a Priority Removal or Priority Prune recommendation. Going forward, any tree that falls into the critical risk level category should receive immediate mitigating actions. Any trees that fall into the substantial risk level category should receive a Level 2 Risk Assessment and/or mitigating action. Any tree found to pose an elevated risk level should be monitored and/or inspected by Westchester and a threshold of risk tolerance be established. Some elevated risk level trees may also be considered for a Level 2 Risk Assessment and/or mitigating action. Great Lakes Urban Forestry Management would be pleased to assist Westchester in any aspect of developing or managing a Tree Risk Assessment Policy or performing Level 2 Basic Risk Assessments or Level 3 Advanced Risk Assessments.

# Diversity Statistics




The "20-10-5" rule has been adopted as a Best Management Practice in Urban Forestry. This rule simply states that a tree population should ideally have no more than 20% of any single Family, no more than 10% of any single Genus, and no more than 5% or any single species. As we have learned from the EAB infestation and Dutch Elm Disease, when a pest or pathogen that attacks specific tree genera is introduced into a region where those specific genera are overrepresented, tree populations can take a devastating hit. That being said, we have included a 10% Genus threshold line on the diversity analysis graph above.

Maple species account for almost 50% of Westchester's tree population. It is quite common for Maple species to be the highest represented species in municipalities and in other urban settings because they are typically a native, adaptable, and hardy shade tree. However, if a pest or pathogen that attacks only the Maple genus were introduced into our region, Westchester could potentially lose half of its tree population. The Silver Maple species alone make up nearly 20% of Westchester's entire population. Norway Maple is the second most common species and makes up 16% of the population. Going forward and with the help of the Urban Forestry Management Plan, Westchester will need to focus on reducing the number of poor condition and over-mature Maples. It is highly recommended that the Village of Westchester regulate any new plantings of Maples.

Although an in-depth diversity analysis is beyond the scope of this inventory executive summary, Westchester can use the tables and graphs that have been provided as a reference when choosing species to plant in the future. An Urban Forestry Management Plan will provide a comprehensive analysis of the current population and a detailed plan for diversity projections. Proper planning will help Westchester protect the investment in each new tree and to create a future tree population that is more resilient and diverse than the current one. The table below, which lists species that each account for less than 0.5% of the total tree population, can be used as a resource when choosing future species to plant. This list is limited and does not represent the other options available for planting in this region. Going forward, Westchester should plan to take a more targeted approach when it comes to choosing new species to plant in its parkways and properties and focus on planting a wider variety of tree species and genera.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARBOR VITAE | 32 | | PEACH | 7 | | DAWN REDWOOD | 2 |
| GINKGO | 30 | | SERVICEBERRY-SPP | 7 | | DOGWOOD-CORNELIANCHERRY | 2 |
| CHERRY-SPP | 23 | | BIRCH-RIVER | 6 | | DOGWOOD-SPP | 2 |
| BLACKGUM | 22 | | HAWTHORN-SPP | 6 | | HORNBEAM-EUROPEAN | 2 |
| MAGNOLIA-SAUCER | 19 | | JUNIPER-COMMON | 6 | | GOLDEN RAINTREE | 2 |
| AMERICAN REDBUD | 15 | | PINE-AUSTRIAN | 6 | | KATSURA | 2 |
| HORSECHESTNUT | 15 | | PINE-WHITE | 6 | | MAGNOLIA-SPP | 2 |
| WALNUT-BLACK | 15 | | PAGODA TREE | 4 | | YEW | 2 |
| EASTERN REDCEDAR | 13 | | PINE-MUGO | 4 | | ALDER-SPP | 1 |
| HORNBEAM-AMERICAN | 11 | | ZELKOVA | 4 | | BIRCH-YELLOW | 1 |
| BUCKEYE-OHIO | 11 | | BALDCYPRESS | 3 | | EUONYMUS | 1 |
| IRONWOOD | 11 | | BIRCH-WHITE | 3 | | HAWTHORN-WASHINGTON | 1 |
| ASPEN-QUAKING | 10 | | HAWTHORN-COCKSPUR | 3 | | MAGNOLIA-STAR | 1 |
| MAGNOLIA-CUCUMBER | 10 | | HICKORY-PECAN | 3 | | PINE-RED | 1 |
| OSAGE ORANGE | 9 | | PERSIMMON | 3 | | SEVENTH SON FLOWER | 1 |
| PLUM-SPP | 8 | | PINE-SCOTCH | 3 | | TAMARISK | 1 |
| | | | ROSE OF SHARON | 3 | | | |

## Conclusion

It has been a pleasure for Great Lakes Urban Forestry Management to provide this tree inventory, data analysis, and executive summary to the Village of Westchester. Westchester, along with Great Lakes Urban Forestry, will use the tree data to develop an Urban Forestry Management Plan, which will create long-term strategies and budgets for tree planting and management in Westchester. We look forward to the opportunity to partner with Westchester to assist in Urban Forestry Management Planning, performing Tree Risk Assessments, or assisting in any other tree or natural resource related initiatives. Thank you for the opportunity to partner with you, and we look forward to continuing to serve as your Tree, Natural Resource, and Geospatial Data experts.

GREAT LAKES URBAN FORESTRY MANAGEMENT
A GRAF TREE CARE COMPANY

MEMBER ISA | CERTIFIED ARBORIST ISA | MUNICIPAL SPECIALIST ISA

# Appendix A: All Trees

The table below is an itemized list of all tree species present in the Village of Westchester tree population, along with average DBH (in inches) and average condition rating for each species. The average condition ratings combined with higher average DBHs can be used as a guide as to what species are growing well within the Village.

| SPECIES | COUNT | % OF TOTAL | AVG DBH | AVG COND |
|---|---|---|---|---|
| MAPLE-SILVER | 1272 | 18.58% | 27.40 | 3.23 |
| MAPLE-NORWAY | 1094 | 15.98% | 17.26 | 3.17 |
| HONEYLOCUST | 709 | 10.36% | 23.41 | 2.81 |
| MAPLE-RED | 480 | 7.01% | 11.96 | 3.14 |
| LINDEN-LITTLELEAF | 327 | 4.78% | 15.60 | 3.22 |
| SYCAMORE | 315 | 4.60% | 28.65 | 2.43 |
| MAPLE-SUGAR | 301 | 4.40% | 15.76 | 2.97 |
| MAPLE-AUTUMN BLAZE | 214 | 3.13% | 8.87 | 2.97 |
| ELM-HYBRID | 190 | 2.78% | 7.72 | 2.96 |
| PEAR-CALLERY | 163 | 2.38% | 11.38 | 3.17 |
| OAK-RED | 143 | 2.09% | 6.12 | 3.13 |
| ELM-SIBERIAN | 125 | 1.83% | 28.78 | 3.36 |
| OAK-SWAMP WHITE | 95 | 1.39% | 4.28 | 3.06 |
| LINDEN-AMERICAN | 89 | 1.30% | 12.28 | 3.02 |
| HACKBERRY | 74 | 1.08% | 6.91 | 3.01 |
| OAK-PIN | 69 | 1.01% | 18.78 | 2.87 |
| CATALPA | 64 | 0.93% | 3.45 | 3.06 |
| ELM-AMERICAN | 59 | 0.86% | 34.85 | 3.10 |
| SPRUCE-BLUE | 52 | 0.76% | 13.58 | 3.19 |
| APPLE-CRAB SPP | 50 | 0.73% | 9.56 | 3.34 |
| KENTUCKY COFFEETREE | 49 | 0.72% | 3.71 | 2.98 |
| TULIPTREE | 48 | 0.70% | 4.50 | 3.00 |
| MULBERRY-SPP | 46 | 0.67% | 16.63 | 3.67 |
| SWEETGUM | 38 | 0.56% | 18.32 | 2.89 |
| LILAC-TREE | 36 | 0.53% | 4.50 | 3.19 |
| OAK-WHITE | 34 | 0.50% | 2.59 | 3.24 |
| COTTONWOOD | 33 | 0.48% | 29.21 | 3.36 |
| ARBOR VITAE | 32 | 0.47% | 5.22 | 3.00 |
| ASH-WHITE | 31 | 0.45% | 15.55 | 3.42 |
| BUCKTHORN | 31 | 0.45% | 9.77 | 3.65 |
| GINKGO | 30 | 0.44% | 9.30 | 3.00 |
| OAK-CHINQUAPIN | 29 | 0.42% | 1.97 | 3.10 |
| SPRUCE-WHITE | 27 | 0.39% | 7.30 | 3.26 |
| OAK-SHINGLE | 25 | 0.37% | 4.56 | 2.92 |
| CHERRY-SPP | 23 | 0.34% | 6.00 | 3.39 |
| BLACKGUM | 22 | 0.32% | 2.59 | 3.18 |
| CHERRY-BLACK | 21 | 0.31% | 17.86 | 3.24 |
| MAGNOLIA-SAUCER | 19 | 0.28% | 13.05 | 3.21 |
| AMERICAN REDBUD | 15 | 0.22% | 9.00 | 3.20 |
| HORSECHESTNUT | 15 | 0.22% | 21.87 | 3.20 |

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|---|---|---|---|---|
| WALNUT-BLACK | 15 | 0.22% | 20.33 | 2.47 |
| OAK-BURR | 14 | 0.20% | 5.86 | 3.07 |
| EASTERN REDCEDAR | 13 | 0.19% | 15.46 | 3.00 |
| SPRUCE-NORWAY | 13 | 0.19% | 14.23 | 2.85 |
| HORNBEAM-AMERICAN | 11 | 0.16% | 2.55 | 3.00 |
| BUCKEYE-OHIO | 11 | 0.16% | 10.73 | 3.27 |
| IRONWOOD | 11 | 0.16% | 2.82 | 3.18 |
| OAK-CHESTNUT | 11 | 0.16% | 1.73 | 3.00 |
| OAK-ENGLISH | 11 | 0.16% | 6.55 | 3.18 |
| ASPEN-QUAKING | 10 | 0.15% | 2.50 | 3.00 |
| BOXELDER | 10 | 0.15% | 18.00 | 3.70 |
| MAGNOLIA-CUCUMBER | 10 | 0.15% | 10.70 | 3.10 |
| ASH-GREEN | 9 | 0.13% | 15.11 | 3.78 |
| OSAGE ORANGE | 9 | 0.13% | 4.89 | 3.33 |
| PEAR-EDIBLE | 8 | 0.12% | 4.63 | 3.13 |
| PLUM-SPP | 8 | 0.12% | 10.13 | 3.13 |
| APPLE-EDIBLE | 7 | 0.10% | 4.86 | 3.14 |
| PEACH | 7 | 0.10% | 5.57 | 3.43 |
| SERVICEBERRY-SPP | 7 | 0.10% | 3.43 | 3.14 |
| WILLOW-SPP | 7 | 0.10% | 8.57 | 3.14 |
| BIRCH-RIVER | 6 | 0.09% | 8.17 | 2.83 |
| HAWTHORN-SPP | 6 | 0.09% | 7.83 | 3.33 |
| JUNIPER-COMMON | 6 | 0.09% | 2.33 | 3.00 |
| PINE-AUSTRIAN | 6 | 0.09% | 12.50 | 3.17 |
| PINE-WHITE | 6 | 0.09% | 13.50 | 3.00 |
| BLACK LOCUST | 5 | 0.07% | 21.20 | 3.40 |
| OAK-BLACK | 5 | 0.07% | 3.40 | 3.00 |
| OAK-HERITAGE | 5 | 0.07% | 2.80 | 3.40 |
| OAK-SCARLET | 5 | 0.07% | 2.00 | 3.20 |
| MAPLE-HEDGE | 4 | 0.06% | 10.25 | 3.00 |
| PAGODA TREE | 4 | 0.06% | 4.75 | 3.25 |
| PINE-MUGO | 4 | 0.06% | 9.25 | 3.00 |
| SUGARBERRY | 4 | 0.06% | 24.75 | 3.50 |
| WILLOW-WEEPING | 4 | 0.06% | 14.00 | 3.25 |
| ZELKOVA | 4 | 0.06% | 4.00 | 2.75 |
| BALDCYPRESS | 3 | 0.04% | 1.67 | 3.67 |
| BIRCH-WHITE | 3 | 0.04% | 8.33 | 3.00 |
| HAWTHORN-COCKSPUR | 3 | 0.04% | 5.33 | 3.00 |
| HICKORY-PECAN | 3 | 0.04% | 15.00 | 3.00 |
| LINDEN-SILVER | 3 | 0.04% | 9.00 | 3.00 |
| MAPLE-AMUR | 3 | 0.04% | 8.67 | 3.33 |
| MAPLE-PAPERBARK | 3 | 0.04% | 4.33 | 3.00 |
| MAPLE-SPP | 3 | 0.04% | 3.67 | 3.00 |
| PERSIMMON | 3 | 0.04% | 23.67 | 3.00 |
| PINE-SCOTCH | 3 | 0.04% | 15.33 | 3.00 |
| ROSE OF SHARON | 3 | 0.04% | 3.67 | 3.33 |
| SPRUCE-SPP | 3 | 0.04% | 4.00 | 3.67 |

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|---|---|---|---|---|
| DAWN REDWOOD | 2 | 0.03% | 13.50 | 3.50 |
| DOGWOOD-CORNELIANCHERRY | 2 | 0.03% | 8.00 | 2.50 |
| DOGWOOD-SPP | 2 | 0.03% | 3.50 | 3.00 |
| ELM-RED | 2 | 0.03% | 11.00 | 4.00 |
| ELM-SPP | 2 | 0.03% | 18.50 | 3.50 |
| HORNBEAM-EUROPEAN | 2 | 0.03% | 2.50 | 3.00 |
| GOLDEN RAINTREE | 2 | 0.03% | 11.00 | 3.00 |
| KATSURA | 2 | 0.03% | 14.00 | 3.00 |
| LINDEN-SPP | 2 | 0.03% | 2.00 | 3.00 |
| MAGNOLIA-SPP | 2 | 0.03% | 3.00 | 3.00 |
| MAPLE-BLACK | 2 | 0.03% | 23.50 | 2.50 |
| MAPLE-JAPANESE | 2 | 0.03% | 1.50 | 3.00 |
| OAK-SPP | 2 | 0.03% | 2.50 | 4.00 |
| WILLOW-WHITE | 2 | 0.03% | 15.50 | 3.00 |
| YEW | 2 | 0.03% | 12.00 | 3.00 |
| AILANTHUS | 1 | 0.01% | 32.00 | 3.00 |
| ALDER-SPP | 1 | 0.01% | 7.00 | 3.00 |
| ASH-BLUE | 1 | 0.01% | 40.00 | 4.00 |
| ASH-EUROPEAN | 1 | 0.01% | 24.00 | 5.00 |
| BIRCH-YELLOW | 1 | 0.01% | 1.00 | 3.00 |
| EUONYMUS | 1 | 0.01% | 1.00 | 3.00 |
| HAWTHORN-WASHINGTON | 1 | 0.01% | 11.00 | 3.00 |
| LONDON PLANETREE | 1 | 0.01% | 33.00 | 3.00 |
| MAGNOLIA-STAR | 1 | 0.01% | 3.00 | 3.00 |
| OAK-OVERCUP | 1 | 0.01% | 27.00 | 3.00 |
| PINE-RED | 1 | 0.01% | 14.00 | 3.00 |
| POPLAR-SPP | 1 | 0.01% | 20.00 | 4.00 |
| SEVENTH SON FLOWER | 1 | 0.01% | 12.00 | 4.00 |
| TAMARISK | 1 | 0.01% | 1.00 | 4.00 |