Tree Campus USA - Agnes Scott College - Tree Care Plan



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Mission

The purpose of the Agnes Scott College tree care plan is to establish policies, procedures, and practices to protect, maintain, remove and plant trees on the Agnes Scott campus. The overall goal is to ensure a safe, attractive, and thriving campus urban forest while preserving and replenishing our tree canopy through conservation, education, and replanting. Our tree care plan will

- guide proper species selection,
- set out advanced and protective planting procedures,
- lead to species diversity and proper age structure in the tree population,
- promote healthy trees and safe management practices,
- commit to a goal of no net loss of trees, and
- reconnect the campus community with the trees it interacts with everyday and educate it on the value of the campus urban forest.

Responsible Department

Agnes Scott College's Office of Facilities, with the advice of the Arboretum Advisory Committee and in partnership with the Office of Sustainability, will be responsible for the implementation of the Agnes Scott College Tree Care Plan.

Arboretum Advisory Committee

Students Faculty	Izzie Atkinson Jim Abbot	Class of 2014 Adjunct Professor	<u>iatkinson@agnesscott.edu</u> jabbot@agnesscott.edu
Facility	John Hegman	Vice President for Business and	jhegman@agnesscott.edu
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Date of committee establishment: May 2012Meeting dates of the past year:Early May, Mid-JulyScheduled dates: Mid-September, Mid-March

The Arboretum Advisory Committee is comprised of faculty, staff, students, and community members to ensure an interdepartmental, interdisciplinary, and collaborative approach to the protection and maintenance of the campus tree canopy. The committee contributes by providing a wide variety of views on the improvement of the campus landscape. The Arboretum Advisory Committee also makes arrangements for and oversees the upkeep of the Agnes Scott Arboretum, which includes updating and adding information on the website and mobile site as well as maintaining arboretum plaques and labels. Finally, the committee is responsible for reapplication to Tree Campus USA annually.

Campus Tree Care Plan

Planting

Guided in part by the 2003 Updated Landscape Master Plan Report prepared by the Carol R. Johnson Associates, the College commits to the following policies and procedures for planting on campus.

Seasons for Planting:

As stated by Trees Atlanta -- a knowledgeable, well-established tree planting organization – the planting season shall be mid-October to mid-April. That includes all plant material, deciduous and evergreen.

Inspection of Plant Material Before Planting

- All plants shall be typical of their species or variety and shall have a normal habit of growth and be legibly tagged with the proper name.
- Plants shall be in accordance with the ASNS Standards of the American Association of Nurserymen.
- If any plant shows signs of graft incompatibility then the tree or shrub and all other similarly grafted plants for the same Genus/Species/Variety shall be rejected and removed from the site. Visual symptoms of graft incompatibility as cause for rejection include:
 - 1. Development of over-growths by rootstock or scion resulting in the development of shoulder or inverted shoulders.
 - 2. Suckering of the rootstock combined with poor growth or dieback of scion.
 - 3. Any mechanical weakness between scion and rootstock.
 - 4. Any marked difference in bark pattern and structure between scion and rootstock.
- All deciduous trees shall meet the following standards:
 - 1. The caliper-size of a tree to be planted shall depend on such factors as site characteristics, species, and cost. Selection of larger or smaller stock shall take into account research showing that smaller-caliper trees regenerate root systems more quickly than larger transplants, which can lead to higher survival rates and lower maintenance costs during the initial years. The College may opt to seek advice from a qualified arborist to determine the optimal size for the new trees.
 - 2. Trees shall have a single, straight trunk, well formed, and sturdy. No part of the trunk shall be conspicuously crooked as compared with normal trees of the same variety.
 - 3. Trees with multiple leaders shall conform to all standards noted in the section for single leader trees and shall be accepted only as noted on the plant list.
 - 4. All pruning wounds shall show vigorous bark on all edges at the time of harvest. Trees shall be free from all signs of pest and disease damage. The trunk shall be free from sun scald, frost cracks, and wounds resulting from abrasions, fire, animal damage, or other causes.
 - 5. Pruning scars within the crown of any tree shall be clean cut and shall leave no protrusion beyond the branch collar.
 - 6. All trees shall have a comprehensive inspection of all plant components prior to planting, including bare and those leafed-out.
 - 7. Unless otherwise indicated on the plant list, the height and spread of deciduous shade trees shall be the minimum requirements.
 - 8. No deciduous tree shall be pruned after it has been tagged in the nursery except as directed by the College's landscape architect, arborist, or other representative.
 - 9. Unless otherwise noted on the plant list, shade trees for use in paved areas shall have no branches lower than (*6.5 feet from finish grade and no higher than 7.5 feet from finish grade*) (*2 meters from finish grade and no higher than 2.25 meters from finish grade*).

Flowering trees for use in areas away from pedestrian traffic shall have the first branch of their crowns no higher than (*4 feet*) (*1.25 meters*) from finish grade.

10. Branching of all deciduous trees shall be best quality representatives of the species, cultivar or variety with lateral branching around the entire trunk to form a symmetrical tree for 80 percent to 100 percent of the tree's outer perimeter. All branches on deciduous trees shall meet the trunk at angles no less than 30 degrees and no greater than 90 degrees from the vertical.

Deciduous Tree Planting:

- Evergreen trees shall meet the following standards:
 - 1. The height of the evergreen trees (measured from the trunk flair at the natural ground line of the tree to the midpoint of the terminal leader) shall be not less than the minimum size designated on the plant list.
 - 2. No trees with double-leaders or twin-heads will be permitted.
 - 3. Evergreen trees shall be specified height with spread in proportion to height as designated in ASNS Standards, and shall be well-branched to the ground.
 - 4. All pruning wounds shall show vigorous bark on all edges at the time of harvest.
 - 5. Terminal and top whorl buds of all evergreen trees shall be in healthy and whole condition at the time of harvest.
 - 6. No evergreen tree shall be pruned after it has been tagged the tree in the nursery except as directed by the College's landscape architect, arborist, or other representative.
 - 7. All trees shall have vigorous leaves or needles of normal size, color, shape, and texture for the particular species and variety.

Evergreen Tree Planting:

Before Planting and After Planting:

- 1. Notify the Arboretum Advisory Committee 3 working days prior to the proposed arrival of plant material on the site. All trees shall be planted within 5 days of arrival on site. All balled-and-burlapped trees delivered to the site and not planted within 24 hours of delivery shall have their root balls covered with mulch and shall be watered on a daily basis. All potted trees shall be watered on a regular basis.
- 2. Locations for all plants and outlines for planting areas shall be staked on the ground by the planter for approval by the Arboretum Advisory Committee before any plant pits are dug.
- 3. Plant pits for trees shall be *minimum* 2 feet greater in diameter than the diameter of the root ball. As a rule, however, the top of plant pit should be 3 times wider than the top of the root ball and as many as 5 times wider in clay or heavily compacted soil. Place root ball directly on subgrade. Slope sides of tree pits.
- 4. All root balls must be damp and thoroughly protected from sun and wind from the beginning of the digging operation, during transportation and on the ground until the final planting. The trees shall be planted in the center of the holes and at a depth that ensures the root collar or flare is flush with or slightly above the natural grade. After completion of planting installations, remove rope, wires, etc. from the upper quarter of the root balls, in the case of balled-and-burlapped trees. Do not pull burlap or wires out from the sides or under root balls. The existing soil, amended as deemed appropriate, shall be backfilled in layers of not more than 6 inches and each layer watered sufficiently to settle

before the next layer is put in place. Enough soil shall be used to bring the surface to finished grade when settled.

- 5. At planting time, **do not...**
 - a. Fertilize: Fertilize prior to the second growing season.
 - b. Prune: Only prune damaged, dead, and diseased branches
 - c. Stake: Only stake trees that are in high wind areas, evergreen species (e.g. Magnolia), and trees larger than 3" caliper. And then only when needed.

Pruning

Tree pruning should only be performed by trained arborists or landscape workers under the direct supervision of a Certified Arborist. Prune first for safety, next for health, and finally for aesthetics. When removing branches, the pruning cut shall not damage, by flush cutting, the branch bark ridge and branch collar. Thinning shall be performed to remove dead, diseased, dying, defective branches, which reduces hazards, promotes health, and improves appearance. Large branches should be removed with aid of ropes and rigging equipment to minimize the risk of tree injury from falling debris. Thinning shall be performed to reduce the density of branches, which increase light penetration, improves visibility, and decreases wind load. Assess how a tree will be pruned from the top down. Do not remove more than one-quarter of the living crown of a tree at one time. If it is necessary to remove more, do it over successive years. Never top a tree. Do not tip branches.

Maintenance and Removal

Newly planted trees will require careful monitoring during the initial months after planting along with more care throughout the first couple of years. Established trees in the landscaped sections of campus will need inspections on a regular basis and mulching. Our main focus and goal for the maintenance and improvement of our non-landscaped sections of campus, e.g., at the south end, will be to restore our naturally wooded areas to a healthy condition that is supportive of biodiversity. These areas may eventually need only occasional monitoring and safety inspections.

- Newly Planted Trees
 - 1. Maintenance shall begin immediately after each plant is planted.
 - 2. Maintenance shall consist of keeping the plants in a healthy growing condition and shall include but is not limited to watering, weeding, cultivating, remulching, removal of dead material, resetting plants to proper grades or upright position, staking, and maintaining the planting saucer.
 - Plants shall be inspected for watering needs at least twice each week and watering shall be adjusted as necessary to promote plant growth and vitality.
 - Planting beds and individual plant pits shall be kept free of weeds, and mulch shall be replaced as required to maintain the specified layer of mulch. Beds and individual pits shall be neat in appearance and maintained to the designed layout.
 - Plants that die during the maintenance period shall be removed and replaced at once, unless designated otherwise by the Arboretum Advisory Committee.
 - Spraying for both insect pests and diseases shall be included during the maintenance period as required and as directed by the Arboretum Advisory Committee.
 - All vines (e.g., English ivy) in the vicinity of trees must be monitored. Ivy and vines will be removed from the trunk and bark of the trees.
 - 3. During the maintenance period, any decline in the condition of plantings shall require the Arboretum Advisory Committee to take immediate action to identify potential problems and

undertake corrective measures. If required, they shall engage qualified arborist to inspect plant materials and to identify problems and recommend corrective procedures.

- Established Trees Landscaped Areas
 - 1. A Certified Arborist should regularly inspect trees on the main campus for hazard. In addition, members of the Arboretum Advisory Committee will be trained to recognize potential tree hazards and will call attention to the committee when they see something of possible concern. Continuous observation in the course of other duties or activities can provide information necessary to select individual trees for evaluation.
 - 2. Mulch is key to the overall health of a tree. It improves moisture retention, regulates soil temperature, reduces erosion, protects trunks and roots from damage, and is a medium for mycorrhizal fungi which enhance the root systems. Successful mulch practices should include use of either wood-chip or wood-bark mulch at a depth of 3-4", replenished on a schedule that maintains the recommended depth . Pine straw may also be used but will require more frequent reapplication. Regardless of type, no mulch should be placed against the tree trunk: a gap of approximately 6" for smaller trees and 12" for larger trees is appropriate. When possible, trees should share mulch areas. The College will use mulch from its own green waste when possible.
 - 3. Removals are generally required only to protect the public safety. Trees may only be removed after consultation with the Arboretum Advisory Committee. When the committee cannot reach agreement, an independent assessment by a qualified arborist may be required and submitted to the committee for review. In the typical instance, the Arboretum Advisory Committee shall engage qualified arborist and/or horticulturists to recommend all corrective procedures. The Arboretum Advisory Committee must provide an answer within a reasonable timeframe to prevent any safety issues.
- Established Trees -- Non-Landscaped Areas
 - 1. In the naturally wooded areas of campus, invasive species and vines should be removed and eliminated from all trees. This plan expresses a preference for non-chemical removal and suppression of invasive plants, e.g., manually cutting vines from trees, pulling out invasive shrubs by the roots, using goats and/or sheep, and similar efforts.
 - 2. Trees cleared of vines and areas cleared of other invasive plants should be monitored to prevent return of those plants. Moreover, trees in these areas, especially any in the vicinity of paths and sidewalks, should be inspected on a regular basis for hazard.

Lists of Recommended and Undesirable Species

There are many factors that may influence the College's choice of tree species. Provided below are three lists to provide guidance on selection of the "right tree" for planting in the "right place." The College commits to revising its recommended and prohibited species lists at five year intervals. This will enable Agnes Scott to consider new cultivars, avoid newly identified invasive species, ensure diversity, and guarantee an update to the College's tree inventory.

Scientific Name	Common Name	Mature Size
Cornus kousa	Kousa Dogwood	Utility/Shrub
Hibiscus sp.	Hibiscus	Utility/Shrub
Lagerstroemia sp.	Crapemyrtle species	Utility/Shrub
Viburnum sp.	Viburnum	Utility/Shrub
Vitex agnus-castus	Chastetree	Utility/Shrub

Native and Non-Native Trees and Shrubs (Source: Carol R. Johnson Associates, 2003)

Acer buergeranum	Trident Maple	Small
Ilex sp.	Holly species	Small
Lagerstroemia sp.	Crapemyrtle species	Small
Prunus-cultivars	Flowering Cherry	Small
Acer rubrum	Red Maple	Medium
Carpinus caroliniana	American Hornbeam	Medium
Ilex sp.	Holly species	Medium
Juniperus virginiana	Eastern Redcedar	Medium
Koelreuteria paniculata	Golden Raintree	Medium
Magnolia grandiflora	Southern Magnolia	Medium
Oxydendrum arboreum	Sourwood	Medium
Pistacia chinensis	Chinese Pistache	Medium
Quercus lyrata	Overcup Oak	Medium
Magnolia grandiflora	Southern Magnolia	Large
Metasequoia glytostroboides	Dawn Redwood	Large
Quercus coccinea Scarlet Oak		Large
Quercus nuttallii	Nuttall Oak	Large
Taxodium distichum	Bald Cypress	Large
Ulmus parvifolia Chinese Elm		Large

Trees Native to the Georgia Piedmont

Scientific Name	Common Name	Agnes Scott Suitability	Mature Size
Acer barbatum	Florida Maple	Yes	Medium
Acer leucoderme	Chalk Maple	Yes	Small
Acer rubrum	Red Maple	Yes	Medium
Aesculus pavia	Red Buckeye	Yes	Small
Aesculus sylvatica	Painted Buckeye	Yes	Small
Alnus serrulata	Hazel Alder	Yes	Small
Amelanchier arborea	Downy Serviceberry	Yes	Medium
Aralia spinosa	Devil's Walking Stick	Very Limited	Small
Baccharis halimifolia	Eastern Baccharis	Yes	Small
Betula nigra	River Birch	Limited	Medium
Capinus caroliniana	American Hornbeam	Yes	Small
Carya cordiformis	Bitternut Hickory	Yes	Large
Carya glabra	Pignut Hickory	Yes	Large
Carya ovata	Shagbark Hickory	Yes	Large
Carya pallida	Sand Hickory	Yes	Medium
Carya tomentosa	Mockernut Hickory	Yes	Large
Castanea dentata	American Chestnut	Limited	Large
Castanea pumila	Allegheny Chinkapin	Yes	Small
Catalpa bignonioides	Southern Catalpa	Yes	Large
Cercis canadensis	Redbud	Yes	Medium
Chionanthus virginicus	Fringetree	Yes	Medium
Cornus alternafolia	Alternate Leaf Dogwood	Yes	Medium
Cornus florida	Dogwood	Yes	Medium
Cornus stricta	Swamp Dogwood	Yes	Medium
Diospyros virginiana	Persimmon	Yes	Medium

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Fraxinus americana	White Ash	Limited	Large
Fraxinus pennsylvanica	Green Ash	Yes	Large
Halesia carolina	Carolina Silverbell	Yes	Medium
Hamamelis virginiana	Witch-Hazel	Yes	Small
Ilex decidua	Possumhaw	Yes	Small
Ilex montana	Mountain Winterberry	Yes	Small
Ilex opaca	American Holly	Yes	Large
Ilex verticellata	Common Winterberry	Yes	Small
Juglans nigra	Black Walnut	Limited	Large
Juniperus virginiana	Eastern Redcedar	Yes	Medium
Kalmia latifolia	Mountain Laurel	Limited	Small
Liquidambar styraciflua	Sweetgum	Limited	Large
Liriodendron tulipifera	Yellow-Poplar	Yes	Large
Magnolia macrophylla	Bigleaf Magnolia	Yes	Medium
Magnolia tripetala	Umbrella Magnolia	Yes	Medium
Magnolia virginiana	Sweetbay	Yes	Medium
Malus angustifolia	Southern Crabapple	Limited	Small
Morus rubra	Red Mulberry	Limited	Medium
Nyssa sylvatica	Blackgum	Yes	Large
Ostrya virginiana	Eastern Hophornbeam	Yes	Small
Oxydendrum arboreum	Sourwood	Yes	Medium
Pinus echinata	Shortleaf Pine	Limited	Large
Pinus palustris	Longleaf Pine	Limited	Large
Pinus rigida	Pitch Pine	Limited	Medium
Pinus taeda	Loblolly Pine	Yes	Large
Pinus virginiana	Virginia Pine	Yes	Medium
Platanus occidentalis	American Sycamore	Limited	Large
Populus deltoides	Eastern Cottonwood	Limited	Large
Prunus americana	American Plum	Limited	Medium
Prunus angustifolia	Chickasaw Plum	Limited	Medium
0 1		Limited	Medium
Prunus serotina	Black Cherry	Yes	Small
Ptelea trifoliata	Hoptree White Oak		
Quercus alba		Yes	Large
Quercus coccinea	Scarlet Oak	Yes	Large
Quercus falcata	Southern Red Oak	Yes	Large
Quercus georgiana	Georgia Oak	Yes	Medium
Quercus incana	Bluejack Oak	Yes	Medium
Quercus laurifolia	Laurel Oak	Limited	Large
Quercus lyrata	Overcup Oak	Yes	Medium
Quercus marilandica	Blackjack Oak	Yes	Medium
Quercus michauxii	Swamp Chestnut Oak	Yes	Medium
Quercus muehlenbergii	Chinkapin Oak	Yes	Large
Quercus phellos	Willow Oak	Limited	Large
Quercus prinus	Chestnut Oak	Yes	Large
Quercus rubra	Northern Red Oak	Yes	Large
Quercus shumardii	Shumard Oak	Yes	Large
Quercus stellata	Post Oak	Yes	Medium

Quercus velutina	Black Oak	Yes	Large
Rhamnus caroliniana	Carolina Buckthorn	Yes	Small
Salix nigra	Black Willow	Limited	Medium
Sassafras albidum	Sassafras	Yes	Medium
Stewartia ovata	Mountain Stewartia	Yes	Small
Styrax americana	American Snowbell	Yes	Small
Styrax grandifolia	Bigleaf Snowbell	Yes	Small
Tilia caroliniana	Carolina Basswood	Yes	Medium
Tilia heterophylla	White Basswood	Yes	Large
Ulmus alata	Winged Elm	Limited	Medium
Ulmus americana	American Elm	Limited	Large
Ulmus rubra	Slippery Elm	Yes	Large
Vaccinium arboreum	Tree Sparkleberry	Yes	Small
Viburnum nudum	Possumhaw Viburnum	Yes	Small
Viburnum prunifolium	Blackhaw	Yes	Small
Viburnum rufidulum	Rusty Blackhaw	Yes	Small

Some Undesirable Species (Source: Park Pride of Atlanta)

http://www.parkpride.org/get-involved/funding-yourpark/content/downloads/recommendedtreelist.pdf

Managing for Catastrophic Events

Storm response and recovery are generally accomplished through the Facilities Management. In a crisis, the first priority is to remove tree debris that blocks campus thoroughfares, disrupts campus operations, or pose hazards to the campus community. Once these critical needs are addressed, a prioritized recovery plan is implemented during which unsalvageable trees are systematically removed and salvageable trees are pruned to restore their health and structure. As the tree planting budget permits, lost trees are strategically replaced to restore the structure and function of the campus urban forest in a reasonable time frame. During storm response and recovery, trees requiring specialized equipment not available in-house are addressed by outside contractor. If either city or utility concerns are involved in the fell of a tree, then the College will work with local city officials to ensure safety.

Protection and Preservation

Our campus is enhanced by its many trees. They are assets that provide shade, wildlife habitat, beauty, and character to Agnes Scott College. Protection of our trees from damage, whether by members of the campus community or by visitors, can be a dynamic part of ensuring the health and longevity of the trees that define our campus.

Tree Protection During Construction and Renovation

From our 2003 Updated Landscape Master Plan Report prepared by the Carol R. Johnson Associates Inc. are the following instructions for the protection of trees during construction and renovation on the Agnes Scott campus.

• There needs to be protective fencing as required by the City of Decatur Tree Preservation Ordinance.

- Prior to starting site demolition operations, the Contractor shall flag all trees to be saved, as noted on the Drawings, in the field. Contractor shall install fencing immediately according to plan around those trees to be protected.
- Before any site demolition is done, the Contractor shall arrange a conference on the site with the Architect and Landscape Architect to approve existing trees that have been designated to be protected or removed. Do no demolition without a clear understanding of existing conditions to be preserved.
- The Contractor shall be responsible for the protection of all existing trees designated to remain for the length of the construction period and be protected, including liability for all damages as specified herein. Tree protection shall remain in place until directed for removal by the Architect.
- The Contractor shall not damage any remaining trees by burning, by pumping of water, by cutting of live roots or branches, or by any other means. No trees to be saved shall be used for crane stays, guys or other fastenings. Vehicles shall not be parked or be allowed to drive over root zones where damage may result to trees to be saved. Construction materials shall not be stored beneath trees to be saved. Any excavation required within the tree protection fence shall be by hand with the approval of the Architect.
- Class A pruning of all broken, dead, diseased or weak branches by a certified arborist. Trees and shrubs shall be pruned in accordance with the ISA Pruning Standards to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed to the full height of the trees. (See http://www.isa-arbor.com/education/onlineResources/treeOrdinanceGuidelines.aspx)
- All existing trees shall be fertilized by the deep root injection method by a certified Arborist. The available elements of the fertilizer shall be determined by the Architect upon recommendations made by the Arborist.
- Watering during drought periods.
- Contractor liability: The Contractor shall be liable for all damage and/or disturbance to existing trees not otherwise designated for removal. Actual charges for damage to plants shall be in accordance with the schedules defined herein, with assessed charges to be deducted from sums payable under the Construction Contract.
- Damage which, in the Architect's opinion, can be remedied by corrective maintenance shall be repaired immediately. All tree work shall be undertaken only by a certified Arborist.
- Trees that are damaged irreparably shall, at the Architect's discretion, be removed and replaced by the Contractor with new trees of the same size and type as determined by the Architect.
- In the event that replacement of damaged trees is unfeasible or impractical as determined by the Architect, the full replacement costs will be assessed to the Contractor's account in accordance with the "Guide for Plant Appraisal."
- Damaged trees which require removal and/or replacement shall be removed according to the Specification requirements for removals, including filling and repair of ground surface, with such costs to be borne by the Contractor in addition to assessed charges described herein.

Tree Protection During Filming on Campus

Agnes Scott College has been a desired film location since 1955. Since 2008, the College has had a committee consisting of students, faculty, and staff to advise school leaders on the content of the film and the fit for the College. Similar safeguards can also protect our trees. All movie contractors will be made aware of our requirements under this tree protection clause.

- The Contractor shall be responsible for the protection of all existing trees designated to remain for the length of the filming period and be protected, including liability for all damages as specified herein.
- The Contractor shall not damage any remaining trees by burning, by pumping of water, by cutting of live roots or branches, or by any other means. No trees shall be used for crane stays, guys or other

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fastenings. Vehicles or other heavy machinery, including but not to limited to cranes and cherrypickers, shall not be parked or be allowed to drive over root zones where damage may result to trees to be saved. Filming materials shall not be stored beneath trees to be saved.

- Class A pruning of all broken, dead, diseased or weak branches by a certified arborist. Trees and shrubs shall be pruned in accordance with the ISA Pruning Standards to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed to the full height of the trees.
- Watering during drought periods.

Goals and Targets

Our goal for the Tree Care Plan is to help us protect and preserve the existing trees and establish baseline procedures for new trees. Agnes Scott College will have a no-net loss on campus. Instead of striving for a net-gain, which might harm the existing trees if we crowd them out with two trees for every one tree, the College will evaluate each situation as it occurs. We will determine how many trees should be replaced and where they should be planted. This will allow for the increase and maintenance of our urban forest. The equation for each individual case will be different and will be assessed with the guidance of a professional arborist. Along with replenishing our tree canopy when necessary, we will continue to strive to keep a similar diversity where no single species exceeds 10% of the inventory.

Tree Damage Assessment

The College will hire an outside consultant to perform tree risk assessments. He or she will visually assess tree structure, defects, evaluate the likelihood of failure, and determine damage if the tree failed. As advised by the consultant, the College may pursue corrective measures to prolong the life of high profile trees.

Prohibited Practices.

The committee will host a community engagement and education session to ensure that the following actions will not occur.

- No student activities that would be destructive to trees, including but not limited to decorations and locking bikes, will be allowed.
- There will be no planting or maintenance without the recommendation and oversight of the Tree Campus Committee.

Definitions

<u>American Standard for Nursery Stock (ASNS)</u> – The purpose of the American Standard for Nursery Stock is to provide buyers and sellers of nursery stock with a common terminology in order to facilitate transactions involving nursery stock. [T]he standards establish common techniques for (a) measuring plants, (b) specifying and stating the size of plants, (c) determining the proper relationship between height and caliper, or height and width, and (d) determining whether a root ball or container is large enough for a particular size plant." [from General Information page iv]"ANLA finds this collection of industry standards to be so essential, this downloadable file is available for both ANLA members and non-members." [from ANLA website]ANSI Z60.1–2004

<u>Branch bark ridge</u> – a ridge of bark that forms in a branch crotch and partially around the stem resulting from the growth of the stem and branch tissues against one another

<u>Branch collar</u> – the attachment structure in woody plants that connects a branch to its parent branch or to the trunk

<u>Caliper</u> – the diameter or thickness of the main stem of a young tree or sapling as measured at six (6") inches above ground level. This measurement is used for nursery-grown trees having a diameter of four inches or less

<u>Class A pruning</u> – Please see *Pruning Standards: The "Standards for Pruning Shade Trees" of the National Arborist Association* for official language

<u>Deciduous</u> – shedding all or most of their leaves for the winter because the leaves cannot survive cold to freezing temperatures

<u>Destroy</u> – any intentional or negligent act or lack of protection that is more likely than not to cause a tree to die within a period of five years, as determined by the city forester or city arborist. Such acts include, but are not limited to: performing grade changes (including lowering or filling the grade) that affect more than 20 percent of the root save area; trenching of roots; cutting, girdling or inflicting other severe mechanical injury to the trunk, roots or other vital sections of the tree; removing in excess of 20 percent of the live crown of the tree; inflicting damage upon the root system of a tree by the application of toxic substances, including solvents, oils, gasoline and diesel fuel; causing damage by the operation of heavy machinery; causing damage by the storage of materials; and/or deliberately or negligently burning or setting fire to a tree. In addition, topping, tipping, or any similar improper pruning practices will automatically be deemed as destruction of a tree

Double-leaders - co-dominant stems

<u>Evergreen</u> – leaves are needle-like or scale-like, typically evergreen, and well adapted for drought and freezing temperatures, thanks to a thick waxy coating and other protective features

<u>Flush cutting</u> – the removal of limbs by cutting immediately adjacent to the trunk, destroying the protective branch collar and exposing the trunk to decay organisms

 $\underline{Grafted}$ – a horticultural technique whereby tissues from one plant are inserted into those of another so that the two sets of vascular tissues may join together

<u>Hazard tree</u> – a tree with uncorrectable defects severe enough to pose present danger to people or buildings under normal conditions, as determined by the city arborist or city forester

 \underline{Mulch} – a ground covering, especially of organic materials, that holds water, slows evaporation and enriches the soil. Raking up dropped leaved and branches takes away natural mulch and causes the soil to dry out, harden and become less healthy for the trees and plants in it.

<u>Protective pruning</u> –pruning to elevate branches/limbs that are likely to be damaged by construction activities. Pruning must not exceed 20 percent of the live crown. Protective pruning is not an ISA term

<u>Pruning</u> –means that definition of the term as set forth in both the most recent International Society of Arboricultural pruning standards and guidelines and American National Safety Institute 300.33. At no time shall trimming, topping, tipping or flush cutting of trees be deemed a form of "pruning."

<u>Pruning standards</u> – to encourage the development of a strong, healthy tree prune first for safety, next for health, and finally for aesthetics. Please see *Pruning Standards: The "Standards for Pruning Shade Trees"* of the National Arborist Association for official language

 $\underline{Rootstock}$ – a plant, and sometimes just the stump, which already has an established, healthy root system, used for grafting a cutting or budding from another plant.

<u>Scion</u> – stems, leaves, flowers, or fruits containing the desired genes to be duplicated in future production by the rootstock/scion plant.

<u>Shade trees</u> – trees large enough to shade a two-story building. In some climates, shade trees lose their leaves in the winter. Some evergreen trees are suitable shade trees, but they may shade the house or street during the winter when people would prefer to have the light and warmth of the sun.

<u>Shoulder</u> – resulting from thickening at the bud-union as rootstock grows faster than scion may pinch conducting tissue enough to restrict translocation.

<u>Stake</u> – provides a young tree with the support it needs until the trunk is strong enough to hold its canopy upright.

<u>Sun scald</u> – the freezing of bark following high temperatures in the winter season, resulting in permanent visible damage to bark

<u>Terminal leader</u> - a dominant upright stem, usually the main trunk but, also can include upright branches and laterals. A tree may have more than one leader.

<u>Tipping</u> – the cutting of a lateral limb in such manner as to leave a prominent stub extending beyond a branch node or the trunk

 $\underline{\text{Tree}}$ – any self-supporting woody, perennial plant that has a trunk diameter of two inches or more when measured at a point six inches above ground level and which normally attains an overall height of at least ten feet at maturity, usually with one main stem or trunk and many branches

<u>Tree structure</u> – branch and trunk architecture that result in a canopy structure that resists failure

Trunk flair – the lowest few inches of the trunk just above its juncture with the roots

Communication Strategy

The Tree Care Plan will be presented to the College community through email and to the wider community through a press release on the main page of the website. Upon official adoption, the plan will be placed on the Agnes Scott College website with links from the Office of Sustainability.

Date Campus Tree Care Plan established: August 2012

Dedicated annual expenditures for the Campus Tree Care Program

Total Campus Tree Care Program expenditures: Attach Expenditure Worksheet

Arbor Day Observance

Date observance held: Friday, February 15, 2012 and Friday, April 27, 2012 Attach summary

Service Learning Project

Date(s) Service Learning Project held: May 9, 2012 Attach summary

General Information

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Resources

Definitions: http://www.isa-arbor.com/education/resources/educ_Portal_Risk_AN.pdf http://www.treepeople.org/glossary http://www.na.fs.fed.us/pubs/index.shtm http://ucce.ucdavis.edu/files/repositoryfiles/ca3909p13-62889.pdf http://www.treespecialists.com/pdfs/trunkflare.pdf http://www.springsgov.com/units/parksrec/treepruning.pdf http://www.na.fs.fed.us/spfo/pubs/howtos/ht_prune/addinfo.htm http://www.civanonursery.net/staking/