

I. Purpose

The purpose of the Roosevelt University Schaumburg Campus Arboriculture Plan is to identify the policies, procedures, and practices that are used in protecting, maintaining, and removing trees on the Schaumburg Campus. In cooperation with the University Environmental Sustainability Landscape Plan, the goal is to create and maintain a safe, attractive, inviting, and sustainable urban campus environment.

Roosevelt University offers a Bachelor's Degree program in Sustainability Studies, as well as an integrated sustainability curriculum through all programs at the university.

<http://www.roosevelt.edu/ETS/Programs/SustainabilityStudies.aspx>

The arboretum supports the aforementioned program and it is a great asset for tactile coursework. Plant and tree identifications are done in the courses BIOL 332 Ecology of the Tall Grass Prairie and BIOL 330 Wetlands Delineation.

One of Roosevelt's main goals is to create an atmosphere where the whole community can come enjoy the sustainable landscape and learn how they can employ sustainable practices at their homes. The growing biodiversity being cultivated at the Schaumburg campus provides a display of how to strategically chose and place the right species.

Specific goals are:

- Promote native species and species diversity in the tree population.
- Protect campus trees during construction and renovation projects.
- Promote tree health and safety.
- Ensure that trees are reasonably replaced when there is mortality due to weather, pest infestations, injury, or construction displacement.
- Encourage campus community members to respect and value the campus tree population, landscape, and purpose. Live trees are generally removed only when required to protect the public safety.

II. Managing Department

The responsibility of the Roosevelt University Arboriculture Plan will be held by Campus Planning and Operations under the supervision of the Assistant Vice President. The Physical Resources Department is dedicated to transforming Roosevelt University into a resilient, adaptable, and sustainable institution. Tremendous progress has been made in this area. Clear and measurable goals with timeframes have been established, and tracking mechanisms are in place to monitor these goals.

III. Schaumburg Campus Tree Canopy Committee

The Roosevelt University Environmental Sustainability Committee is the main steering committee for all sustainability efforts at the university. Open to the entire Roosevelt community, the committee is currently comprised of: Faculty from four different colleges at the university including the College of Pharmacy, College of Arts and Sciences, College of Professional Studies, and the College of Business, Student Sustainability Associates from the Physical Resources department and College of Professional Studies Sustainability Studies program, The President of Roosevelt University “RU Green” student sustainability organization, the Physical Resources Department AVP of Campus Planning and Operations; and the Environmental Sustainability and Transportation Coordinator.

The Committee meets monthly to review and approve efforts recommended by Land Use subcommittees to enhance the Roosevelt University Schaumburg Campus Sustainability Landscape Master Plan. Action is taken as needed to add or replace trees with native Illinois species, maintain the prairie restoration, and improve efforts to compost on site, enhance educational opportunities.

Roosevelt University’s complete tree inventory is based upon field-based assessments, as a means to measure the physical structure, which is used for strategic management by connecting forest functions and values with management costs, risks, and needs.

At present, we have 33 documented trees species labeled. Furthermore, we are in the process of tagging and recording a complete inventory of ~471 woody plants to include a

detailed description of each tree as well as an assessment of the condition, maintenance needs and hazards for each tree on campus.

As a subcommittee of the Environmental Sustainability Committee, the Schaumburg Campus Tree Canopy Committee provides input into the care, maintenance, and improvement of the tree population. Committee members serve for a period of one year with the option for renewal. Committee members are expected to actively participate and contribute to policies and guidelines as well as provide information that aids in the Arboriculture Plan. At all times the committee will have at least one member from each of the following categories: Faculty, Staff, Student Body, and Community Member. Organization relationships with Roosevelt Sustainability Committee Members, Student Interns, and Physical Resources Staff.

The University Sustainability Coordinator holds seats on the CNSHE Committee and CNSHE Bike Planning Committee, The USGBC-IL Green Schools Higher Education Sub-Committee, Higher Education Energy Efficiency Retrofit Committee, One Earth Film Festival Planning Committee, and The Greener South Loop Alliance Committee. The University VP for Campus Planning and Operations also Co-Chairs the USGBC-IL Green Schools Higher Education Sub-Committee, and sits as a Judge on the Greener South Loop Alliance Judging Committee. Physical Resources Sustainability Interns serve on the Green Town Planning Committee, and attend each organization committee meeting.

IV. Arboriculture Practices

- Tree Removal
 - Live trees are generally removed only when required to protect the public safety.
 - Trees may only be removed after consultation with the Tree Canopy Committee only when an agreement is reached among committee members.

- In the event of severe weather, fallen trees are removed in the order of importance, starting with the clearing of roadways and public walkways, access to building entrances, and non-critical areas, in that order.
- After a tree is removed, the stump is scheduled for grinding. Once the stump is ground down, the grindings are raked and left in place to serve as mulch.
- All trees removed are replaced with a species of tree similar to the tree lost and located within the immediate vicinity.
- Pruning
 - Pruning is not conducted without a clear objective or outcome.
 - Pruning is done for safety first, then health of the tree, and finally for aesthetics.
 - Reduction pruning is only done when absolutely necessary.
 - Tree wrapping is not used unless absolutely necessary to the health of the tree.
 - When limbs fall from trees on campus, members of the campus community put in a work request (via School Dude) to have the damage assessed. All attempts are made to clear fallen limbs within one day.
 - All pruning and tree removal done for emergency purposes is reported to the Tree CanopyCommittee in a timely manner.
- Fertilization and Pest Management
 - Trees are only treated for pest problems on an as needed basis.
 - There is no regular tree fertilization beyond treatment received as a result of routine lawn treatments. In the circumstance of young trees, fertilization may be recommended if soil tests show significant reason for it.

V. Village of Schaumburg § 154.135: Tree Preservation Plan

- Purpose: It is the purpose of this section to establish regulations limiting the removal and ensuring the replacement of trees removed from private property within the village and in doing so, safeguard the ecological and aesthetic environment of the community. These regulations are further intended to serve to dissuade the unnecessary clearing and disturbing of land so as to:

- Preserve trees as an important public resource enhancing the quality of life and the general welfare of the village and enhancing its unique character and physical, historical and aesthetic environment;
 - Preserve the essential character of those areas throughout the village which are heavily wooded and in a more natural state with plant material indigenous to the region;
 - Enhance and preserve the air quality of the village through the filtering effect of trees on air pollutants;
 - Reduce the noise within the village through the baffle and barrier effect of trees on the spread of noise;
 - Aid in the stabilization of soil by the prevention of erosion and sedimentation,
 - Reduce energy consumption through the windbreak and shade effects of trees when they are properly placed on the lot;
 - Preserve and enhance nesting areas for birds and other wildlife which in turn assists in the control of insects;
 - Reduce stormwater runoff and the cost associated therewith and replenish the groundwater supplies.
- Tree Removal: Unless otherwise specifically authorized in this code, it shall be unlawful for any person without written approval from the community development director or his/her authorized designee, to remove, injure, destroy or undertake any procedure, the result of which is to cause the death or substantial destruction of any tree within the village limits having a trunk size of four inches (4") or greater, a multibranch tree with an aggregate diameter of eight inches (8") or greater as measured at diameter breast height (54 inches) above the established ground level, or evergreen trees measuring five (5) vertical feet or more in height. The tree removal permit request shall include the following:
 - Owner's name and address and the owner's consent to remove the tree;
 - Name, address and phone number of contractor or other person who will have the responsibility for tree removal;
 - A written statement indicating the reason for removal;

- The tree name, including genus and species;
 - Size, location and condition of the tree(s) to be removed.
- Conditions Of Approval: Except for street trees whose removal shall be considered by the village board, the community development director or his/her authorized designee shall consider and may approve all requests for tree removal if one (1) or more of the following conditions are present:
 - Diseased Or Weakened Trees: Necessity to remove trees harboring harmful insects or disease(s) that constitute a threat to other trees, or trees weakened by age, storm, fire or other injury.
 - Adherence To Good Forestry Practice: Necessity to observe good forestry practice, i.e., the number of healthy trees a given parcel of land will support or when removal will enhance a tree preservation area and the health of the remaining trees.
 - Approved Site And Landscape Plan: A site and landscape plan indicating those trees to be removed has been approved for the site.
 - Invasive Trees: The necessity to remove invasive trees in order to achieve goals of ecological restoration efforts. Invasive trees include, but are not limited to, buckthorn, black locust, Siberian elm, Chinese elm, slippery elm, and box elder. At the discretion of the community development director, approvals to remove invasive trees may require the submittal of a restoration plan for the subject area.
- Protection Of Existing Trees: Requirements For Preservation Of Existing Trees: A tree survey, tree preservation plan, and landscape plan are required for all development activity requiring site plan review. Site plan review will not commence until such materials are submitted to the community development director or his/her authorized designee in an acceptable form.
 - Integration Of Existing Trees Into Site And Landscape Plans: Every reasonable effort shall be made to retain existing trees in all development requiring site plan review through the integration of those trees surveyed into the site and landscape plan for the proposed development. Removal of

- trees designated for preservation shall only be allowed by amendment to the approved landscape plan and shall require village board approval.
- The root zone of protected trees on lots adjacent to the lot in question on which construction activity will take place shall be carefully reviewed and considered during site plan review. Every effort shall be made during the architectural layout and design of the proposed development to preserve trees located within fifteen feet (15') of the lot line on adjacent lots through sensitivity to the root zone of said trees.
 - Tree Survey: A tree survey shall be submitted at the time of site plan review, or as required by the community development director and shall include the following:
 - The location, size and species (both scientific and common names) of all deciduous trees located on the parcel with a trunk size of four inches (4") or greater or a multibranch tree with an aggregate diameter of eight inches (8") or greater, as measured at diameter breast height (54 inches) above the established ground level, all evergreen trees measuring five (5) vertical feet or more in height, and all trees that are located within fifteen feet (15') of the lot line on adjacent parcels that fall within the size classifications as listed above. All trees illustrated on the tree survey shall be numbered on the plan and tagged with the corresponding number on the site.
 - The overall condition of each tree such as health and form as it relates to preservation. The condition of the trees shall be based on a 5-point scale with 1 being the best and 5 the worst.
 - Tree Preservation Plan: A tree preservation plan shall be submitted at the time of site plan review, or as required by the community development director and shall include the following:
 - The location, size and species (both scientific and common names) of all deciduous trees located on the parcel with a trunk size of four inches (4") or greater or a multibranch tree with an aggregate diameter of eight inches (8") or greater, as measured at diameter

breast height (52 inches) above the established ground level, all evergreen trees measuring five (5) vertical feet or more in height, and all trees that are located within fifteen feet (15') of the lot line on adjacent parcels that fall within the size classifications as listed above. All trees illustrated on the tree preservation plan shall be numbered on the plan and tagged with the corresponding number on the site.

- The crown spread of the trees to be preserved and the location of the preservation fencing as required at the drip line of the tree(s) to be preserved. Provide details and notes of the tree protection fencing to be used.
 - The overall condition of each tree, such as health and form and as it relates to preservation as noted in subsection (C)(3)(c) of this section.
 - The survey shall distinguish existing trees which are proposed to be removed, relocated, or preserved at their present location.
- Replacement Requirements For Unauthorized Removal Of Trees:
 - Deciduous Trees:
 - All replacement trees for deciduous trees shall be a minimum trunk size of three inches (3") in diameter, as measured six inches (6") above the established ground, or a multibranch tree measuring eight feet (8') in height. At the time of installation, all replacement shrubs shall be a minimum of four feet (4') in height if mature size is greater than three feet (3') in height, or two feet (2') in height if mature size is three feet (3') or smaller in height. Any combination of tree sizes three inches (3") in diameter or larger, or multibranch trees measuring eight feet (8') in height or larger may be used for tree replacements; i.e., one 12-inch removed tree equals thirty six inches (36") of replacements which may be installed as follows: four (4) 6-inch trees and four (4) 8-foot multibranch tree replacements; twelve (12) 3-inch diameter replacements; or a

combination of trees and shrubs (if all of the replacement trees cannot fit on the lot): four (4) 6-inch diameter trees and twenty (20) shrubs.

○ Evergreen Trees:

- Size: All replacement trees for evergreen trees shall be a minimum height of six (6) vertical feet. All replacement evergreen shrubs shall be a minimum spread of three feet (3') at the time of installation. Any combination of tree sizes six feet (6') in height or greater may be used for tree replacements. For example, for one 20-foot removed tree, sixty (60) vertical feet of replacement trees may be installed as follows: ten (10) 6-foot trees; two (2) 10-foot trees and five (5) 8-foot trees; or a combination of trees and shrubs (if all of the replacement trees cannot fit on the lot): four (4) 6-foot trees and thirty (30) shrubs [36 vertical feet x 5 shrubs/6 foot trees].

VI. Arboriculture 2015 Goals and Targets

The long-term goal of Roosevelt University's Environmental Sustainability Landscape Plan and Schaumburg Campus Arboriculture Plan is to develop and maintain a sustainable and ecologically diverse landscape and open space for its students, staff, faculty and community. Specific goals are:

- Maintain a healthy population and a variety of trees that encourages biodiversity in other areas of wildlife.
- Replace twenty-six trees removed in 2014 with trees of similar species, also in keeping with the Chicago Botanic Garden's study of 50 urban trees which will thrive in projected Chicago area climate change conditions. The study is named "Urban Forest Adaptive Planting List" and can be found online. http://www.chicagobotanic.org/plantinfo/tree_alternatives Trees will be selected and placed in locations fitting the species growth requirements.
- Plan and implement Arbor Day Observance activities that will include lectures, tree plantings, and tree care.
- Ongoing projects involving University classes and instructors.

- Tree tagging and signage. In 2015, Boy Scout Troop #392 will assist in identifying all campus trees, which will be marked to educate visitors along the prairie walk.
- Addition of a food forest.

VII. Dedicated Annual Expenditures for Campus Tree Program

On average, Roosevelt University has spent \$11,756 per year on the professional maintenance and care of its trees over the past year. At the beginning of the Fall Semester of 2013 Roosevelt University's Schaumburg campus had 1,105 students. At a \$3 annual expenditure per student, Roosevelt University would be required to spend \$3,315 per year on the maintenance and care of the trees on campus. (See application form for 2014 expenditures).

VIII. Communication

After the completion and adoption of the Schaumburg Campus Arboriculture Plan by the Tree Canopy Committee, articles about Roosevelt University's Goals and participation in Tree Campus USA were placed in the student newspaper "The Torch", announced to staff through RU Broadcast News, and communicated through Roosevelt's RU Green Campus website and social media efforts. Additionally, a press release was sent to local media through the Office of Public Relations. A flag is flown every day on the Schaumburg Campus promoting Tree Campus USA and the University's commitment to environmental sustainability. The Tree Campus banner is used at Environmental events. Events and activities associated with the Schaumburg Campus Arboriculture Plan, activities and participation in Tree Campus USA are widely publicized to staff, faculty, students and the public through articles in a student newspaper "The Torch", staff and faculty through the RUBroadcast news, and the public at large through press releases, the Roosevelt's Sustainability Website "RU Green Campus", blog, social media and Twitter feeds.

Roosevelt strives to educate the Community on environmentally-sound landscape management practices providing educational events and signage at Schaumburg to promote the benefits of natural storm water management, native prairie plants, a tree

canopy, organic and urban farming, and the use of vermiculture (worm farming) and composting to improve the soil.

Ongoing projects that attract public attention and gain support are:

- Community and Urban Gardens – Garden plots are available to faculty, staff and students on the Schaumburg campus. Food grown at the community garden, the herb garden as well on the rooftop at the Wabash campus is served on campus. Over 175 pounds of produce was donated by the gardeners to a local food bank in 2013. The Garden has been vigorously restarted in 2014 with the addition of a drip irrigation system to save water use.
- Prairie Walk and Butterfly Garden – A nature trail and butterfly garden were established on the Schaumburg campus to re-establish biodiversity in an urbanized, suburban environment and to enable the RU community to experience nature and sustainability initiatives first-hand.

*****Roosevelt University, Schaumburg Campus has been awarded Level I*****

Arboretum Accreditation, through the Morton Arboretum, in Lisle, IL by achieving a specific set of standards deemed important for arboreta and sustainable landscapes.

The base level of accreditation requires achievement of the following basic standards:

Level I Accreditation

- **An Arboretum Plan: Documentation of some sort, such as an organizational plan, strategic plan, master plan, or other that defines the purpose of the arboretum, its audience, the types of plants that are to be grown to achieve that purpose and serve that audience, provisions for the maintenance and care of the plants, and provisions for continuing operation of the organization through time.**

- **An arboretum organizational group of people or governing board or authority that is dedicated to the Arboretum Plan and its continuation beyond the efforts of a single individual. Such an organizational/governance group can affirm fulfillment of standards and authorize participation as an accredited arboretum.**
- **An Arboretum Collection with a minimum number of 25 kinds (species or varieties) of trees or woody plants having been planted and growing in accordance with the Arboretum Plan. Plants in the Arboretum Collection must be labeled in some way as to their identity, and documented in some way as to their acquisition (source or origin, date, etc.).**
- **Arboretum staff or volunteer support that ensures fulfillment of the Arboretum Plan and provides for the basic needs of the Arboretum Collection and functions of the arboretum.**
- **An arboretum public dimension that includes some level of public access, and at least one public event or educational program each year focused on trees or arboretum purposes (e.g., Arbor Day observance).**
- **Participation in ArbNet.**