

April 9, 2015

The Marquand Park Trust Tree Collections and Management Policy

Overview and History

Marquand Park and Arboretum is a 17-acre historic preserve of trees and woodlands, and a well preserved example of a 19th century landscaped garden. The park was once part of the Woodlawn estate purchased in 1842 by Richard Stockton Field, a successful lawyer and professor at Princeton University. Field had a great interest in gardening and was the founder and first president of the New Jersey Horticultural Society.

In 1846, Field commissioned John Notman, a Philadelphia architect to design a garden and mansion for his property. Notman developed part of the property into a landscaped garden with meandering paths, clusters of trees, and wide vistas but left a wooded area along Mercer Street relatively untouched. The park became well known among horticulturalists and was frequently noted for its collection of rare trees from all over the world.

Although many additions and changes to the park occurred over the years, the park has maintained most of its original character. The wooded area is the home of the park's oldest trees, many 200 years or older. In addition, some of the known mid-19th century plantings including native oaks, beeches, a Cedar of Lebanon, white pines, rhododendrons, and a Japanese Arbor Vitae are still part of the current collection of over 140 species of trees in the landscaped part of the park.

When the park was donated to Princeton in 1953, it became a municipal Park called Marquand Park named after its last owners. Maintenance of the park and its trees is the responsibility of the municipality. The Marquand Park Trust helps provide additional oversight of the park, promotes new plantings, and is involved in conservation, education, and outreach.

Purpose

While respecting the historical importance of the park and its heritage as an arboretum and an example of 19th century landscape architecture, it is the intent of this policy to reinforce the importance of enhancing the park's tree collection with locally appropriate trees in the right location and to preserve signature trees of historic importance to be studied and enjoyed by the public. It is also designed to delineate the process of accession and deaccession from the tree inventory.

Scope

This policy covers the installation of trees and the preservation of signature trees.

Inventory

An inventory of all trees in the landscaped part of the park and mature trees with aluminum tags in the wooded area was conducted in 2014 and constitutes the basis for acquisition and tree management in this policy.

When a tree is installed in the arboretum, the GPS coordinates shall be noted in addition to its size, genus, species & cultivar, its general condition and its provenance. This data shall be added to the existing tree inventory.

When a tree is removed, the tree shall be deaccessioned from the inventory. A history of removed trees shall be preserved in the inventory for future reference. When a tree without a tag in the wooded area reaches a mature stage, it will be tagged and its location, size, genus, species & cultivar, its general condition added to the inventory.

On-line access to the inventory is available through the park website.

Acquisition

New trees shall always be selected specifically for use and with the conditions and limitations of its location in mind. The inventory shall be reviewed in an attempt to select trees that are not already represented at the park or, based on historical sources, have disappeared from the park. The aesthetic value is important (taking into account texture, flowering, fruiting, and fall color and winter interest) as is the ecological value (to feed and support native insects, birds, mammals etc.) and scientific value (for future study).

At times, an exotic species may present itself to be the best choice, but care should be taken to not install species known to be invasive in this region. Trees which attract and support a variety of wildlife, especially pollinators, and especially with off-peak blooming periods shall be given greater consideration than those that don't.

All new nursery stock shall be inspected to ensure compliance with the latest version of the American National Standards Institute, American Standard for Nursery Stock Z60.1. Of particular importance is to check for proper planting depth and depending on the species, proper apical dominance with no or reduced co-dominant stems. Wherever possible, material shall be field grown and not in pots. If potted material must be sourced due to availability, the root mass shall be thoroughly separated and the roots shall be re-oriented or pruned to avoid girdling.

Care should be taken to not spoil some key views and vistas that make the park special. An ill-placed tree can quickly spoil an otherwise beautiful view, despite its species' importance to the arboretum. Conversely, trees should be used to screen undesirable views and to help focus one's eye toward especially beautiful views and vistas.

Care should be taken to not plant trees near infrastructure if they are known to have aggressive root systems, weak scaffold branching or problematic fruiting. Prolific fruiting can be a problem for pedestrians. These trees should be located away from sidewalks and buildings

Collection Management

Newly planted trees: The first five years are critical in the establishment of trees in the park. Special care, especially with regard to hydration shall be taken during this time. Once established, the trees should be revisited to make corrective pruning cuts to reduce or remove co-dominant stems, and to remove dying, diseased, decayed, crossed or rubbing branches. No fertilizer shall be used on the trees unless dictated by a soil test specific to that planting location

Signature trees: Some mature trees are especially important to the collections at the arboretum because of their heritage or importance of their species. Special care shall be taken to protect these trees as they are sentinels among the collections. They shall be watched more closely and their pruning cycles shall be more frequent than those of most other trees. At times, more extreme measures may be taken to preserve these trees (e.g. lightening protection, treatment for Bacterial Leaf Scorch, Phytopthera, Bleeding Canker etc.).

Pruning cycles of signature trees depend largely on the location of each tree and its consequence of failure. Trees located directly over targets receive greater attention than those along natural borders or in areas of reduced target value. So called 'hazard' trees, are monitored regularly for changing defects which may cause them to be unstable.

All trees: As disease and insect pressures rise and fall, protection of signature trees becomes important. This is currently the case with the invasion of Emerald Ash Borer. While deemed cost prohibitive to protect all Ash trees, we do consider it important to preserve some because of their importance for their species.

Whenever treating for insects or diseases, care shall always be taken to minimize impact to non-target biota.

When a tree is removed, care shall always be taken to not export any plant material that may be infected or infested. Depending on the situation; care should be taken to carefully and properly dispose of this material on site.

Education

A bulletin board close to the Lovers Lane entrance to the park has information on the park and its trees. It also posts upcoming events.

A selection of signature trees, large enough to support signage, has aluminum tag with stainless steel screws and springs. These tags include the arboretum logo, and botanical (including cultivar or variety) & regionally common name.

The Board of Trustees hosts arboretum tours for the public.

Tree rescue events are organized during the spring and the fall.

A website www.marquandpark.org with information and park event is maintained.