

Magnolia Collection at The Scott Arboretum of Swarthmore College

Rhoda Maurer, Assistant Curator and Greenhouse Manager, The Scott Arboretum of Swarthmore College

About the Scott Arboretum

The Scott Arboretum is a garden of ideas and suggestions. While the arboretum encompasses more than 300 acres of the Swarthmore College campus, our major collections, consisting of over 3,200 living woody taxa, are concentrated on 110 acres at the heart of the college campus. The Arboretum is a living memorial to Arthur Hoyt Scott (Swarthmore class of 1895), president of the Scott Paper Company and an avid gardener who believed there were too few public gardens for the amateur horticulturist. Through a bequest from Arthur Hoyt Scott's family, the Arboretum was formed in 1929 to display some of the best trees, shrubs, vines, and perennials for use in the Delaware Valley.

Swarthmore College's Scott Arboretum is located approximately 15 miles southwest of Philadelphia in USDA Zone 7A/7B. On average, annual rainfall approaches 43 in., seasonal snowfall averages just over 20 in. The last frost date in spring is approximately April 25, although it is not uncommon to experience a devastating frost through May 15.

The Magnolia Collection

Since the establishment of the arboretum, the collection has acquired over 621 accessions consisting of 1984 individual plants of the genus *Magnolia*. (Accessions are defined as any taxon received from one supplier of a certain size on one given day, so we can have multiple plants that would be listed as one accession.) As of June 2009, our collection consists of 262 individuals of 163 taxa, with 38 species concentrated in the Magnolia Collection and Tree Peony Garden.

North American Plant Collection Consortium (NAPCC) status was awarded to the Scott Arboretum's Magnolia Collection in September of 2003. The NAPCC, administered by the American Public Gardens Association (APGA), is a network of botanic gardens and arboreta working together to coordinate a continent-wide approach to germplasm preservation and conservation. The arboretum holds three NAPCC collections; its Holly Collection was awarded in 1995 and we became a multi-institutional collection holder for oaks in 2007 (http://www.publicgardens.org/web/2008/08/multiinstitutional_quercus_oak.aspx).

Magnolia



M. zenii at Scott Arboretum at Swarthmore College.

In 2007, Botanic Gardens Conservation International (BGCI) and Fauna and Flora International (FFI) jointly published *The Red List of Magnoliaceae*. From a global total of 245 species, that document identifies 131 wild magnolias as being in danger of extinction. Besides being an intuitional member of BGCI, The Scott Arboretum participated in this survey and found our magnolia collection to rank 23rd in the world out of the 238 participating institutions. The survey did not include *Magnolia* hybrids or cultivars since the survey aimed at evaluating the value of *ex situ* collections towards the long-term conservation of wild populations.

Within the genus *Magnolia*, the arboretum's holdings consist of significant collections of yellow hybrids and *Magnolia* \times *soulangeana* cultivars, in addition to original distributions of the Little Girl hybrids (*Magnolia stellata* \times *M. liliflora* crosses made by William F. Kosar and Francis DeVos) introduced by the U.S. National Arboretum. A visit by Philippe de Spoelberch in 2003 confirmed that many of the *M.* \times *soulangeana* cultivars that are often confused in the trade are correctly named in our collection. Dr. John C. Wister, the first director of the arboretum, acquired many of these first additions to the collection from B.H. Slavin, Arthur Slavin, Semmes Nursery, J. Norman Henry, Henry Hicks, Bobbink & Atkins, Tingle Nursery and Ben Blackburn.

Many of the first yellow hybrids to be introduced to the trade are represented, including *Magnolia* 'Elizabeth', *M.* 'Yellow Bird' and *M.* 'Butterflies'. However, many newer introductions have also been consistently acquired through on-going curation of sub-groups, including many of the American hybrids from August Kehr, David Leach and Phil Savage. Through a friendship between Pat McCracken and Ian Simpkins (curatorial intern 1997–1998), the Scott Arboretum acquired the following yellow hybrids: *M.* 'Hot Flash', *M.* 'Tranquility', *M.* 'Solar Flair', *M.* 'Sunburst', *M.* 'Gold Crown', *M.* 'Golden Endeavor', *M.* 'Gold Cup', *M.* 'Stellar Acclaim'. More recent Brooklyn Botanic Garden introductions, *Magnolia* 'Lois', *M.* 'Hattie Carthan', and *M.* 'Judy Zuk' (BBGRC 1164), are also included in the collection.

Dr. Wister acquired many magnolias from Henry Hicks of Hicks Nursery in Westbury, New York. During the Magnolia Society's visit in 1971, one particular *Magnolia virginiana* received in 1937 caused quite a stir. This evergreen specimen was later introduced by the Scott Arboretum as *M. virginiana* var. *australis* 'Henry Hicks'; the type specimen still resides in the Magnolia Collection.

Another magnolia which caught the eye of plantsman John Hillier in 2006, as well as Magnolia Society visitors in 2004, is an atypical individual of *Magnolia denudata* whose branches reach straight upwards rather than growing into the typical rounded, upright tree that broadens with maturity. The young plant was acquired in late 1987 from plantsman J. C. Raulston, whose parent plant had been grown from seed collected from the Beijing Botanic Garden. The selection was registered with the Magnolia Society International as *Magnolia denudata* 'Swarthmore Sentinel' (*Magnolia*, Volume 44, Issue No. 85, Spring/Summer 2009).

Goals for the Collection and Plans for the Future

Through institutional and staff dedication and collaborations, the Scott Arboretum has been able to continually diversify its collection over the years. The arboretum hopes to represent superior specimens, including those with best flower color, frost tolerance, and later bloom time suited for the climate of the Delaware Valley, while focusing on yellow hybrids, saucer magnolias, a significant selection of species, and American natives. Ultimately, we anticipate holding 250 taxa with final numbers only dependent upon space limitations. The arboretum has an open policy for botanical gardens and nurseries with permission to propagate holdings in hopes its collections will serve as a germplasm for other collections. It is also hoped that other important collections are awarded NAPCC status and that collaborations are established to ensure breadth in holdings of the genus *Magnolia* across the country.

Magnolia



M. 'Gold Crown'

To accomplish these goals, the arboretum curates sub-groups of the collection on a rotational basis. Digital images of each specimen in the collection are being linked to the plant records database for documentation and educational purposes. Plant records information is posted on the Web twice yearly (<http://www.scottarboretum.org/gardens/catalog.html>), making our taxa list available to a broader range of professionals.

To reach amateur gardeners with information about the collection, the Scott Arboretum conducts workshops on specific genera. Well-attended seasonal tours led by staff members in April and May focus on the Magnolia Collection and Cherry Collection. A feature on our collection appeared on Martha Stewart Living in May 2003. Free brochures provided to visitors are updated every winter. In the fall of 2006, the Scott Arboretum became one of six gardens in the world using BG-Map (<http://www.bg-map.com/>) and the Visitor QUICKfinder to help visitors learn about plants. This technology allows visitors to search for locations of living woody plants and dedicated trees by using the new touch screen kiosk in the entrance foyer of the Scott Arboretum Offices. The 19-in., wall-mounted touch screen operates like some of the new ATM machines with an on-screen keyboard and feature boxes for navigation by the touch of your finger. Simple searches of individual plants can be done by common or botanical name, species or cultivar. "Create a Tour" automatically arranges the selected plants by distance, creating a numbered walking tour. Maps and photographs can be viewed on-screen or printed in the reception lobby.

Since becoming a member of the Magnolia Society in 1963, the Scott Arboretum has continued to dedicate its staff's involvement, both locally and internationally. Current arboretum staff members have attended Magnolia Society meetings in New Zealand, South Korea, Seattle, Raleigh, Tallahassee, Italy, and Portland, and hosted the society during their visit to Philadelphia in 2004.