



"To conserve, to enjoy, and to learn"

Marywood University Arboretum

## About Us:

Marywood University has long been known for its natural beauty as well as its academic excellence. The Marywood University Arboretum, which spans the University's scenic 115acre campus, combines the best of these worlds, emphasizing the aesthetic charm of the campus while incorporating environment-related educational components.

An arboretum is defined as a place grown with trees or a place where trees, shrubs, and herbaceous plants are cultivated for scientific, educational and/or aesthetic purposes. To date, the Marywood University Arboretum has 39 species of trees that comprise 103 varieties, and a comparable number and variety of shrubs, as well as ornamental grasses, perennial, biennial, and annual blooms.

# History of the Arboretum:

Marywood became an arboretum by its own declaration in 1975 as "The Sister Maria Laurence Maher Arboretum," named in honor of one of Marywood's most avid environmental supporters, Sister Maria Laurence Maher, I.H.M., then Professor of Biological Sciences. At the time, there was a symbolic planting "to recognize the value of the woods of Marywood, both as a study area and a place of beauty."

Pennsylvania Magazine has recognized Marywood's campus as "Most Beautiful Religiously-Affiliated Campus in Pennsylvania." Tireless efforts to cultivate "official" arboretum status were made by the father/son team of John and Mark Burns, who respectively served as Superintendent and Foreperson of Grounds at the time.

In 1996, the Science Department, with the assistance of John and Mark Burns, submitted a proposal aimed at capturing official, national recognition of the campus grounds as an arboretum. Marywood University was officially named as an arboretum in 1997, and is a current member of the American Association of Botanical Gardens and Arboreta (AABGA).

### Mission of the Arboretum:

By encouraging others to conserve, to enjoy, and to learn about the environment, the Marywood University Arboretum is a living example of responsible stewardship to the world in which we live. The Arboretum serves as an aesthetic and scholarly resource for the community, and aims to continue its vital role as a center of learning for the public through ongoing physical enhancement and program development.

### Visitor Information:

- Explore the Marywood University Arboretum with the assistance of the self-guided, all-season arboretum map . The map points out the location and type of vegetation in each area and helps with tree identification.
- The Marywood University library also offers the following books: 1. Flowering Crabapples...635.9F52
- 2. Plants That Merit Attention, Vol. 1-Trees...635.9P62 V1, Vol. 2-*Shrubs...635.9P62V2 (two books)*
- 3. Conifers, The Illustrated Encyclopedia, Vol.1...R635.9G36 V1, Vol.2...R635.9G V2 (two books)
- 4. Dirr's Hardy Trees and Shrubs....R635.9D58
- · Arboretum events include educational activities and community workshops. Resource materials are available. Special tours and programs associated with elementary and secondary school field projects are also welcome.
- The Arboretum may be enjoyed free of charge daily from sunrise to sunset. Marywood University is closed on all major holidays, but self-guided walking tours are still possible on those days.

# How You Can Help Us:

The essential support for the Marywood University Arboretum is provided through the generosity of foundations, corporations and individuals that believe in the Arboretum's mission to conserve, to enjoy, and to learn.

With your help, we can further our efforts to enhance the Arboretum, to develop exciting exhibits and programs that connect people and nature, and to advance Marywood University's ability to be a center of learning for students and the general public.

There are many ways to show your support. Donating a tree in honor of a loved one is a lasting gift, which will further enhance the Arboretum. Financial contributions are also critical; these may include outright gifts, pledges, and deferred gifts, as well as gifts of assets, such as securities and gifts-in-kind. Resource materials to enhance our library offerings are appreciated in the form of educational videos, books, or computer programs that are focused on environmental learning and appreciation. In addition to helping the Marywood University Arboretum, such gifts can often be structured to provide attractive tax advantages for the donor.

However you choose to support us, your donations are deeply appreciated. You can learn more about these opportunities to help the Marywood University Arboretum by contacting the University Advancement Office at (570) 348-6200.

### Contacts:

For information about the grounds of the Marywood **University Arboretum**, contact the Superintendent of Grounds at (570) 348-6218.

For online access to general information or a schedule of events and programs, browse our web site at www.marywood.edu/arboretum.

Marywood University, in accordance with applicable provisions of federal law, does not discriminate on grounds of race, color, national origin, sex, age or disability in the administration of any of its educational programs or activities, including admission, or with respect to employment. Inquiries should be directed to: Coordinator of Act 504 and Title IX, Marywood University, Scranton, PA 18509-1598. Phone (570) 961-4731.

# Marywood University

"To conserve, to enjoy, and to learn'

# Arboretum Identification Key

D11. "Crimson Queen" Japanese Maple - Native to Japan, China, and Korea. Small deciduous tree to 10' tall and 12' wide. Growth rate is slow. Prefers full sun to partial shade, moist, acidic well-drained soil. Avoid windy sites. "Crimson Queen" is a red-leaved form with finely cut dissected leaves.

*D12.* "White Cascade" Flowering Crabapple - A hybrid crabapple. Deciduous white-flowered weeping form to 15'. Blooms in early May. Small yellow fruit in winter. Crabapples are adaptable but prefer slightly acidic, moist soil. This variety shows good disease resistance.

**D13.** "Emerald Green" Arbovitae - Native to northeastern North America. Conical shaped evergreen. Very tolerant and adaptable. Prefers full sun in moist soil. "Emerald Green" is the most popular cultivar. The bright green colored foliage holds well through winter. Grows to 15' tall and 5' feet wide.

*E. "Cherokee Chief" Flowering Dogwood* - Native to eastern United States. Small deciduous tree to 30' x 30'. Flowers are small yellowish green surrounded by 4 bracts. Blooms in mid May. Prefers cool, moist, acidic soil in full sun. Not tolerant of heat, drought, pollution, or road salt. Dogwoods have a host of problems that can severely stress or kill the tree. "Cherokee Chief" is a reddish pink flowered cultivar.

E1. Kousa Dogwood - Kousa dogwoods are native to Japan, Korea, and China. Small deciduous tree to 30' tall and wider than 30'. Autumn leaves turn a reddish purple. The fruit looks like large raspberries. The flowers are small greenish yellow, surrounded by four large pointed creamy white bracts. Bark on older trees develops a camouflage-like appearance. Prefers moist, fertile, acidic, well-drained soil in full sun.

**E2. Black Birch** - Native to eastern North America. Medium sized tree to 60'. Autumn color is a golden yellow. Prefers deep, rich, moist, acidic soil in full sun.

E3. Common Flowering Quince - Native to China. Deciduous multi-stemmed shrub to 10' tall and wide. Branches are very dense and spiny. Blooms in April. Normal flower color is red, but comes in white, pink, and salmon-colored varieties.

**E4. White Dogwood** - Native to eastern United States. Small deciduous tree to 30' x 30'. Flowers are small yellowish green, surrounded by 4 bracts. Blooms in mid-May. Prefers cool, moist, acidic soil in full sun. Not tolerant of heat, drought, pollution, or road salt. Dogwoods have a host of problems that can severely stress or kill the tree.

**E5.** Horse Chestnut - Native to Greece and Albania. Large deciduous tree to 50' to 70' tall. Dark green summer leaves show poor yellow autumn color. Very showy white upright panicle flowers in May. The brown nuts are encased in spiny hulls.

**E6.** "Brandywine" Flowering Crab - A hybrid crabapple. Deciduous tree to 20' x 20'. Blooms in May. Flowers are a double pink and fragrant. Shows good disease

*E7. Concolor Fir* - Native to the western United States. Conical evergreen to 75'. Soft foliage has a blue cast. Tolerant of most climates and urban conditions. Prefers deep, wel-drained soil in full sun.

**E8. Yoshino Cherry** - Native to Japan. Deciduous tree to 40'. Upright spreading shape, moderate growth rate. Blooms in late April. Flowers are white to pale pink. Very showy in bloom. Prefers well-drained, moist, acidic soil in full sun.

E9. Norway Spruce - Native to Europe. Conical evergreen with horizontal branches Fast growth rate to 60'. Prefers well-drained, sandy, acidic soil in full sun.

*E10. Weeping Higan Cherry* - Native to Japan. Deciduous weeping tree to 40'. Fast growth rate. Pink flowers in April. Prefers well-drained soil in full sun. Easily transplants and is cold tolerant.

E11. PJM Rhododendron - A hybrid Rhododendron. Small broadleaved evergreen to 6'. Leaves turn to a deep purple in winter. Blooms in late April. Flower color is lavenderpink. Prefers a cool, moist, well-drained, acidic soil in partial shade to full sun.

E12. Black Gum - Native to eastern United States. Large deciduous tree to 50'. Very showy autumn foliage of yellow, orange, red or purple. Prefers moist, well-drained, acidic soil in full sun. Difficult to transplant.

*F. "Sea Green" Juniper* - Native to Japan and China. Evergreen shrub of slow to moderate growth rate. "Sea Green" is a popular cultivar with upward arching branches of dark green foliage.

F1. "Wichita Blue" Juniper - Native to the Rocky mountains of North America. Conical evergreen to 15'. Slow to moderate growth rate. Prefers full sun. "Wichita Blue" is a cultivar with bright blue foliage.

F2. White Fringetree - Native to southeastern United States. Deciduous small tree to 20'. Growth rate is slow. White fringe-like flowers are very showy and lightly fragrant.

F3. Columnar White Pine - White Pines are native from New England to Georgia An evergreen with 4" long, 5-bundled needles that are soft with a bluish cast. "Fastigiata" is a narrow columnar form to 70' with a much narrower spread.

**F4.** "Bloodgood" Japanese Maple - Native to Japan, China, and Korea. Small deciduous tree to 25' with a slow growth rate. Prefers moist, well-drained, lightly acidic soil in full sun to partial shade. "Bloodgood" is a very common form with excellent burgundy colored foliage.

**F5.** Washington Hawthorn - Native to eastern United States. Medium-sized deciduous tree to 30' x 30'. White flowers in early June. Small orange-red fruit persist into winter. Attracts birds. Branches are covered in thorns.

F6. White Pine - White Pines are native from New England to Georgia. An evergreen with 4" long, 5-bundled needles that are soft with a bluish cast. Can grow to 80' or more. Fast growing easily transplanted tree that prefers moist, well-drained, acidic soil in full sun. Cones are light brown and up to 8" long.

F7. "Sargent" Flowering Crabapple - Native to Japan. Small deciduous tree to 8' and twice as wide. Fragrant white flowers in May are very showy. Blooms heavily every other year. Small red fruit attracts birds.

**F8.** Norway Maple - Native to Europe. Large deciduous tree to 60'. Rapid growth rate. Prolific self seeder can be invasive. Autumn color is yellow. Very adaptable and tolerant of urban conditions. Root system can kill turf and damage sidewalks.

**F9. Whitebarked Himalayan Birch** - Native to western Himalayas. Moderate growing tree to 30'. Bark is pure white. Not heat tolerant and tends to be short lived.

F10. Austrian Pine - Native to Europe. Large evergreen to 60'. Dark green needles in bundles of 2, 6" long. Somewhat tolerant of heat, pollution, urban conditions, and salt. Prefers full sun.

**G.** Weeping Norway Spruce - Norway spruce are evergreens native to Europe. "Pendula" is a weeping form, typically upright and narrow. Used as a specimen plant.

G1. "Autumn Brilliance" Apple Serviceberry - A hybrid cross between native serviceberries. Small deciduous tree to 20'. Very adaptable. Prefers full sun. Very showy white flowers in late April. Good autumn color of red, orange, and yellow.

G2. "Vanderwolf's" Limber Pine - Native to western Rocky Mountains of the United States. Medium size evergreen to 50'. Needles in bundles of 5 are up to 3.5" long and bluish-green. "Vanderwolf's" is the most popular cultivar. The needles are bright blue

G3. "Sunburst" Honeylocust - Native to central United States. Medium deciduous tree to 35'. Tolerant of pollution and salt. "Sunburst" is a very popular form, with bright gold spring foliage that fades to green.

**G4. Alaska Cedar** - Native to coastal regions of North America from Alaska south to Oregon. Medium growth rate to 30' to 45' tall. An evergreen tree that prefers deep, moist, well-drained soil in full sun.

*H.* "Fat Albert" Blue Spruce - Native to southwestern United States. Evergreen tree with horizontal, stiff branches, overall conical shape. "Fat Albert" is a bright blue-needled form only reaching 15' with a squat pyramidal habit.

**H1. Tartian Dogwood** - Native to northern Asia. A deciduous colonizing shrub to 6'. "Elegantissima" is a red-stemmed variety with light green leaves that are edged

H2. Pink Clethra/Summersweet - Native to eastern United States. Deciduous upright shrub to 8'. Often multi-stemmed. Showy yellow autumn color. Fragrant pink blooms in July. Prefers moist, acidic soil in full sun to partial shade.

H3. "Winter King" Hawthorn - Native to eastern United States. Deciduous tree to 20'. White flowers in May. "Winter King" is the most common hawthorn at nurseries. The clusters of orange-red fruits are very showy and persist into winter.

**H4.** Oakleaf Hydrangea - Native to southeastern United States. Deciduous multi-stemmed flowering shrub to 8' by 12'. Leaf shape is oak-like. Autumn foliage is a H5. Koreanspice Viburnum - Native to Korea. Small deciduous shrub with a slow growth rate. Flowers are pinkish white and fragrant. Blooms in late April. Prefers well-drained, slightly acidic soil in full sun to partial shade.

**H6.** "Royal Star" Magnolia - Native to Japan. Deciduous small tree to 20'. Showy fragrant white flowers have up to 18 petels per flower and are narrow and strap-like. Prefers full sun in moist, fertile soil. "Royal Star" is the most common

H7. "Ivory Silk" Tree Lilac - Native to northern Japan. Small deciduous tree to 30'. Blooms in early summer. Creamy white fragrant flowers are up to a foot long. "Ivory Silk" is a common variety that blooms heavily.

**H8. Swamp White Oak** - Native to eastern United States. Deciduous tree to 60'. Bark is deeply furrowed and ridged. Likes wet sites, but is drought tolerant, in full sun to partial shade.

**H9. "Snow Goose" Flowering Cherry** - Native to Japan, China, and Korea. Deciduous tree to 20'. Prefers well-drained soil in full sun. "Snowgoose" has abundant white flowers in April. Tends to be short lived.

H10. "Tina" Flowering Crabapple - Native to Japan. Small deciduous tree to 8' and twice as wide. Fragrant pink flowers in May are very showy. Blooms heavily every other year. Small red fruit attracts birds.

*H11.* "Summit" Green Ash - Native to eastern United States. Large deciduous tree to 70'. Fast growth rate. Showy yellow autumn foliage. Prefers deep, moist soil in full sun but is quite adaptable. "Summit" only grows to 50'.

I. Dawn Redwood - Native to China. Thought to be extinct, but rediscovered in 1941. A large deciduous coniferous tree to 75'. Fast growth rate.

11. Weeping Willow - Native to eastern Asia. Very fast growing deciduous tree to 50'. Prefers full sun in moist to wet soils but is adaptable except for very dry sites. Very graceful but tends to be messy, and root system will clog pipes.

*I2. "Patmore" Green Ash* - Native to eastern United States. Large deciduous tree to 70'. Fast growth rate. Showy yellow autumn foliage. Prefers deep, moist soil in full sun but is quite adaptable. "Patmore" is a seedless cultivar with good disease and insect resistance.

*13. Douglas Fir* - Native to western North America. Large evergreen to 80'. Needle color varies from blue-green to bright green. Prefers well-drained, slightly acidic soil in full sun. A common tree in the Christmas tree market.

J. River Birch - Native to eastern United States. In the wild found along streams, rivers, and floodplains. Adaptable to drier sites. Prefers full sun. Often multistemmed, deciduous tree to 50'. Fast growth rate. Medium green leaves turn yellow in autumn and drop quickly. Best known for its exfoliating bark of brown, tan, and white.

# It's easy to get here...

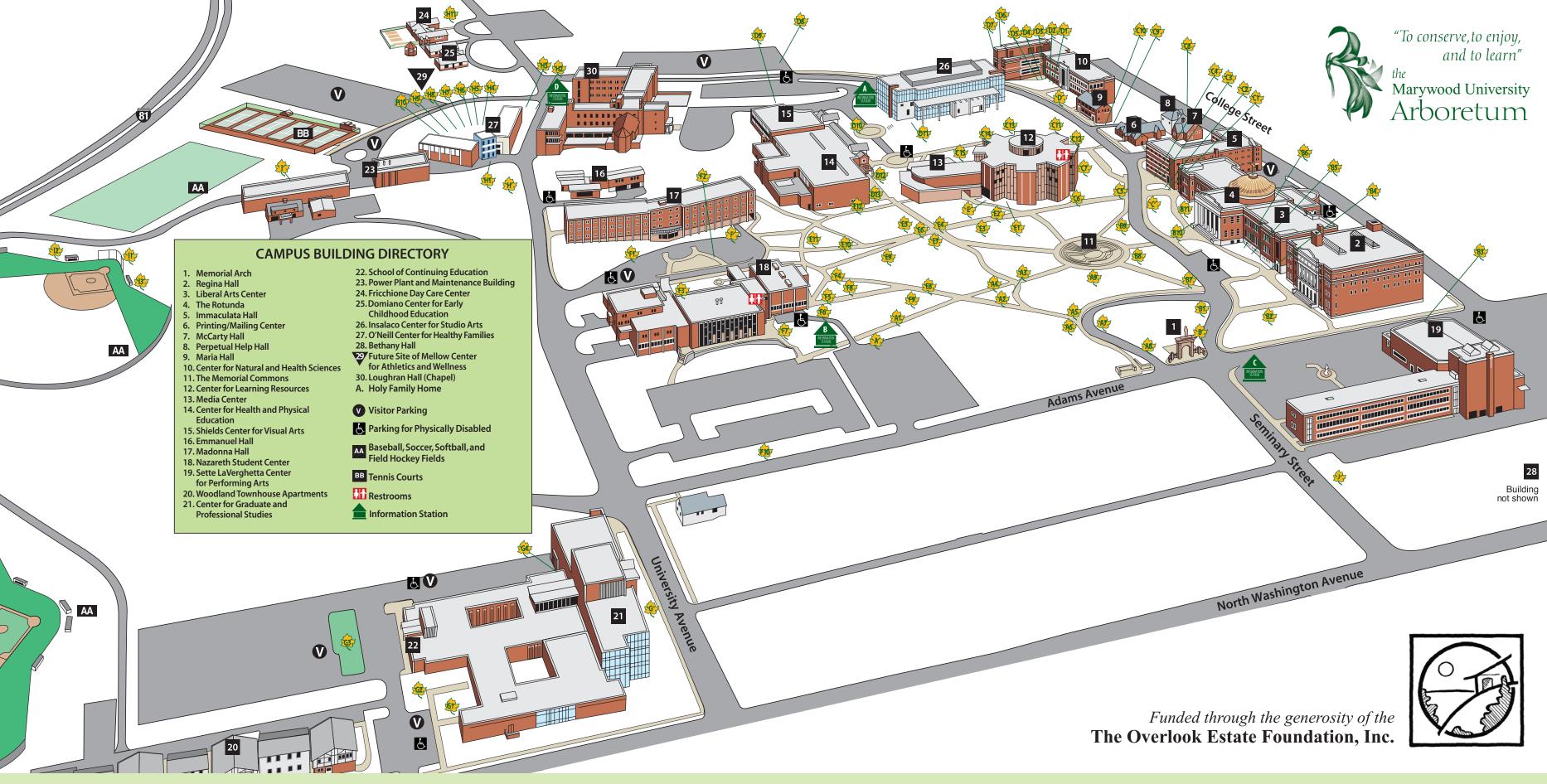


Marywood University is in Scranton, PA, just off U.S. Interstate 81. The campus is located approximately 120 miles west of New York City and 125 miles north of Philadelphia and is easily accessible by a network of interstate highways.

- From Philadelphia, take NE Extension of PA Turnpike (I-476) north to Wyoming Valley Exit #115 to I-81 north
- From Baltimore, take I-83 north to I-81 north
- From the West, take I-80 east to I-81 north
- · From the North, take I-81 south
- From the East (Connecticut & New England), take I-84 west to I-380 north to I-81 north
- From New York City & Northern New Jersey, take I-80 west to I-380 north to I-81 north

Take Exit 188 from I-81; follow directional signs at the end of the exit ramp toward Dunmore (347S), which becomes Blakely Street, to traffic light at Drinker Street. Turn right onto Drinker Street, which merges with Electric Street. Proceed to second traffic light. At this intersection, turn right onto North Washington Avenue and proceed four blocks. At third stop sign on North Washington, turn right onto Seminary Street. Proceed up the hill to the Memorial Arch. Parking areas are located near the Memorial Arch. and on other designated sections of campus.

Major funding for this project provided by a grant from the Overlook Estate Foundation.



# Arboretum Identification Key

- **A. Ponderosa Pine-** Native to western North America. Fast growth rate to 50-80', prefers full sun. Needles in bundles of 3 are 8-10" long. 4" long reddish brown cones are usually in pairs.
- **A1. "Red Jade" Flowering Crab** Hybrid weeping form to 10' by 15'. White flowers in May. Small red fruit persists into winter. Attracts birds. Prefers full sun and is tolerant to many soil types.
- **A2. Green Colorado Spruce** Native to southwestern United States. Evergreen tree with horizontal, stiff branches, overall conical shape. Slow growth rate to 30' to 60' tall.
- **A3. Burning Bush** Native to northeastern Asia. Deciduous shrub to 10' tall, slow growth rate, very adaptable and tolerant, full sun to partial shade and can be sheared.
- **A4.** "River's" Purple Beech Native to Europe. Deciduous tree to 60′ tall and 50′ wide, slow growth rate. Bark is light grey and smooth. Leaves are a deep purple in color, which tend to fade as the season progresses.
- **A5.** Red Oak Native to northeastern United States. A large, long-lived tree to 75′. Rapid growth, full sun, easily transplanted and withstands urban conditions well. Needs ample room to develop. Large acorns to 1″ can be numerous, creating a litter problem on lawns and sidewalks.
- **A6.** "Legacy" Sugar Maple Native to northeastern and northcentral United States and Canada. Large deciduous tree to 75' or more. Best known for its autumn foliage of yellow, orange, or red. Prefers well-drained, moist, fertile soils. Not tolerant of high heat, pollution or road salt. One of the best large shade trees, if its growing conditions are met.
- **A7. Weeping Hemlock** Native to eastern North America. An evergreen tree that prefers cool, moist, well-drained soils. Not tolerant of pollution, salt, heat, or drought. Weeping Hemlocks may reach 15' tall and twice as wide.
- **A8. American Linden** Native to eastern North America. Large deciduous tree to 70'. Leaves are heart shaped, dark green above, and silvery underneath. Small creamy white flowers in June are very fragrant. This is a Witness Tree that was planted near the date of Marywood's founding (1915).
- **A9. Colorado Blue Spruce** Native to southwestern United States. Evergreen tree with horizontal, stiff branches, overall conical shape. Slow growth rate to 30' to 60' tall. "Glauca" is the blue variety of Colorado Spruce.
- B. Copper Beech Native to Europe. Deciduous tree to 60' tall and 50' wide,

- slow growth rate. Bark is light grey and smooth. Good tree for large open areas. Leaves are a shiny coppery red. This is a Witness Tree that was planted near the date of Marywood's founding (1915).
- **B1.** Weeping Alaska Cedar Native to coastal regions of North America from Alaska south to Oregon. Medium growth rate to 30′ to 45′ tall. An evergreen tree that prefers deep, moist, well-drained soil in full sun. "Pendula" is an extremely hardy cultivar with strongly weeping branches and deep green foliage.
- **B2. Japanese Stewartia** Native to Japan. Small to medium deciduous tree. Has good autumn colors of yellow, red, and purple. Has single, white, Camilla-like flowers from June to August. Prefers rich organic soil with shelter from afternoon sun. Difficult to establish. Dislikes heat and drought.
- **B3. Snowmound Spirea** Native to Japan. Deciduous shrub to 7' tall, vase shaped. Medium growth rate. Abundant white flowers in early summer. Leaves are a blue-green in color.
- **B4.** Weeping Blue Atlas Cedar Native to Atlas mountain of northwestern Africa. Evergreen tree with blue needles. Tolerant of pollution and urban conditions. Needs protection from wind, especially in winter. "Glauca Pendula" must be pruned and staked when young to develop a good form. Typically grows to 15'.
- **B5. Dragon's Eye Pine** Native to Japan. Slow growing evergreen, small tree or large shrub of irregular growth. Needs well-drained, acidic soil in full sun. "Dragon's Eye" has alternating bands of green and yellow on the needles.
- **B6. Shadblow Tree** Native from Maine down through the Carolinas. Naturally occurs in wet sites and swamps. Deciduous small tree or large shrub. Often multistemmed to 20' tall. Good fall color. Numerous small white flowers in early April.
- **B7. Yellow/Tulip Poplar** Native to eastern United States. A large deciduous tree that easily reaches 70′ to 90′ tall. Leaves and flowers are tulip shaped. Autumn color is golden yellow. Flowers are yellow green with an orange base.
- **B8.** Tanyosho Pine Native to Japan. Multi-trunked evergreen to 20' tall and wide, often vase-shaped and flat-topped in form. Bark is orange in color.
- **B9.** Red Maple Native to eastern United States and Canada. Deciduous medium to large tree to 70' tall. Relatively fast growing. Autumn color can vary from bright yellow to vibrant scarlet to burgundy. Tolerant of many conditions and adaptable. An excellent tree for fall color.
- **B10.** Variegated Norway Maple Native to Europe. A variegated form of Norway Maple. Has light green leaves with a creamy white edge. Slow growing.

- **B11.** Weeping White Pine White Pines are native from New England to Georgia. An evergreen with 4" long, 5-bundled needles that are soft with a bluish cast. "Pendula" is a weeping form with branches that twist and droop.
- **C. "Shademaster" Honeylocust** Native to the central United States. A medium to large tree to 40′ tall with an equal spread. Full sun, very adaptable, and tolerant of pollution and salt.
- **C1.** Eastern Redbud Native to southeastern United States. Hardy to zone 5 if protected. Small deciduous tree to 35' tall and wide. Small, pink, pea-like flowers in early May are very showy. Leaves are heart shaped.
- C2. "Satomi" Kousa Dogwood Kousa dogwoods are native to Japan, Korea, and China. Small deciduous tree to 30' tall and wider than 30'. Autumn leaves turn a reddish purple. The fruit looks like large raspberries. The flowers are small greenish yellow, surrounded by four large pointed bracts. "Satomi" has bright pink bracts. Bark on older trees develops a camouflage-like appearance. Prefers moist, fertile, acidic, well-drained soil in full sun.
- C3. "Blue Boy" Holly "Blue Boy" holly is a hybrid male holly. Male hollies do not produce berries. A dense, shrubby, broadleaf evergreen to 8' tall and wide. Leaves are dark glossy green and serrated. Grows best in full sun. Prefers moist, slightly acidic soil.
- **C4.** "**Blue Girl"** Holly "Blue Girl" holly is a hybrid female holly. It is the female counterpart to "Blue Boy." Produces bright red berries.
- **C5. Silver Maple** Native to eastern United States and Canada. Large deciduous tree to 70' tall or more. Very fast growing tree. Leaves are bright green above and silvery below
- **C6. Cutleaf Weeping Birch** Native to Europe and northern Asia. A deciduous tree to 60'tall and up to 40' wide. Main trunk is straight and branches are pendulous. Leaves in summer are dark green and yellow in autumn. Leaves of Cutleaf are deeply cut and serrated.
- C7. "Sky Rocket" Juniper Native to the Rocky Mountains of North America. A narrow, conical evergreen that is silvery blue in color. Tolerant of most soils, except wet soils. Prefers full sun.
- **C8. Mountain Laurel** Native to eastern North America. State flower of Pennsylvania. Typically found on forest edges. A broadleaf evergreen shrub to 12' tall and wide. Leaves are dark green and glossy. Pink flowers fade to white in late May.
- **C9.** White Oak Native to eastern United States. Large deciduous tree to 80' tall and as wide. Mature leaves are a dull blue-green, turning a purple-red in autumn.

- Acorns are 1" long. A slow growing tree that prefers full sun and acidic soils. This is a Witness Tree that is believed to be original to the property.
- **C10.** Climbing Hydrangea Native to Japan and China. Deciduous climbing shrub to 30'. Leaves are dark green. Flowers are large flat clusters, lacy in appearance and fragrant. Blooms in June. Bark in winter is very showy, exfoliating and cinnamon-tan in color. Prefers partial shade to full sun in a cool, moist, well-drained soil with a north or east exposure. Slow to establish.
- **C11. Bigtooth Aspen** Native to eastern North America. Medium-sized deciduous tree to 50' tall and 40' wide. Fast growth rate and tends to be short lived. Yellow autumn color.
- C12. Japanese Pieris Native to Japan and eastern China. Broadleaf evergreen shrub to 8' tall. Slow growth rate. Leaves are glossy green. Spring growth is reddish in color. Flowers are small, white, and hang in pendulous clusters to 6" long. Blooms in March/April.
- C13. Crimson King Norway Maple Native to Europe. A popular cultivar of Norway Maple. Leaves emerge crimson and change to a deep maroon color. Medium to large deciduous shade tree to 60' tall. Very adaptable and tolerant.
- C14. "Green Mountain" Sugar Maple Native to northeastern and northcentral United States and Canada. Large deciduous tree to 75' or more. Best known for its autumn foliage of yellow, orange, or red. Prefers well-drained, moist, fertile soils. Not tolerant of high heat, pollution, or road salt. One of the best large shade trees, if its growing conditions are met. "Green Mountain" is a popular form with dark green summer foliage.
- **C15.** Forsythia Of hybrid origin. Deciduous shrub, 8' to 10' tall and 10' to 12' wide. Very vigorous grower. Flowers are a brilliant yellow in early April. Very adaptable, tolerant of urban conditions, prefers full sun. Easily pruned or sheared.
- **D.** "Aristocrat" Flowering Pear Native to Japan and Korea. Medium-sized tree to 35'. Leaves are a glossy dark green that change to red, purple, and orange for autumn. Fast growth rate. Very showy small white flowers in April, mildly malodorous. Very tolerant and adaptable of hot dry conditions. Excellent street tree. "Aristocrat" is a cultivar more preferable to "Bradford," as it is less likely to split under snow load.
- **D1. "Youngii" Weeping Birch** Native to Europe and northern Asia.

  Deciduous tree to 20′. "Youngii" is a weeping form that lacks a central leader and has very pendulous branches. Tends to be short lived.
- D2. "Emerald Gaiety" Wintercreeper Euonymus Native to China. A

- semi-evergreen vining shrub with fast growth rate. Full sun to shade. "Emerald Gaiety" is a popular form, with green leaves variegated with a wide white margin.
- **D3.** "Heritage" River Birch Native to eastern United States. In the wild found along streams, rivers, and floodplains. Adaptable to drier sites. Prefers full sun. Often multistemmed, deciduous tree to 50'. Fast growth rate. Best known for its exfoliating bark of brown, tan, and white. "Heritage" has excellent disease
- **D4.** "Arnold Promise" Witch-Hazel A hybrid witchhazel. Deciduous large shrub or small tree, often multistemmed. Leaves are grey-green. Small spider-like flowers bloom early, from late January to March, are lightly fragrant. Prefers full sun to partial shade and moist acidic soil. "Arnold Promise" is the best

yellow-flowered form.

- **D5.** Inkberry Holly Native to eastern United States. Typically found in swamps and wet areas. An evergreen shrub to 8' with glossy dark green leaves. Small black berries are borne on female plants. Prefers full sun to partial shade in acidic soil with adequate moisture.
- **D6.** Eastern Hemlock Native to eastern North America. Large evergreen tree to 70'. Prefers full sun to partial shade in cool, moist, well-drained soils. Not tolerant of pollution, salt, heat, or drought. State tree of Pennsylvania.
- **D7. Shagbark Hickory** Native to eastern North America. Large deciduous tree to 80'. Typically has a very straight central leader. Autumn color is a very showy golden yellow. Produces 1" to 1.5" rounded edible nuts with a sweet taste. Old bark shags into long plates.
- **D8. Black Locust** Native to central and southeastern United States. Medium-sized deciduous tree to 50'. Leaves are a dull blue-green. White, pea-like flowers hang in pendulous clusters to 8" long and are very fragrant. Very tolerant tree that prefers full sun.
- **D9.** Winterberry Holly Native to eastern United States and Canada. In the wild, often found at forest edges and in swamps. Deciduous, multi-stemmed shrub to 10'. Bright red berries are only produced on female plants. Berries are held well into winter, making them attractive to birds.
- **D10. Vanhoutte Spirea** A hybrid Spirea. Deciduous shrub to 8' tall and 12' wide. Fast growth rate. Leaves are blue-green in color. Very showy white flowers in April/May.