# **Reeve House Arboretum Project**

## <u>Trees</u>

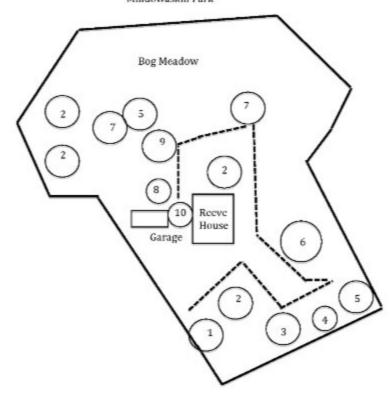
- 1. Honeylocust
  - a. Botanical name: Gleditsia Triacanthos
  - b. Deciduous
  - c. Native to North America
- 2. Maple
  - a. Botanical name: Acer, in the family Sapindaceae
  - b. Deciduous
  - c. Native to North America
- 3. Norway Spruce
  - a. Botanical name: Picea abies
  - b. Evergreen conifer tree
  - c. Native to Central and Northern Europe
- 4. Leyland Cypress
  - a. Botanical Name: Cupressocyparis Leylandii
  - b. Evergreen
  - c. Discovered in South of Wales in 1888
- 5. Dawn redwood
  - a. Botanical Name: Metasequoia Glyptostroboides
  - b. Deciduous conifer tree
  - c. Native to China
  - d. Introduced to the West in 1948
- 6. Yew
  - a. Botanical name: Taxus baccata,
  - b. Evergreen
  - c. One of New Jersey's largest
- 7. Eastern White Pine
  - a. Botanical Name: Pina Strobus
  - b. Evergreen
  - c. Native to North eastern United States
- 8. Weeping Spruce
  - a. Botanical name: Picea Breweriana
  - b. Evergreen
  - c. Native to Western United States
- 9. Winged Euonymous
  - a. Botanical name: Euonymous alatus
  - b. Deciduous
  - c. Native to China, Japan, and Korea

## **Flowers**

- 1. Shady Garden
  - a. Woodruff -low lying ground cover
  - b. Pulmonaria -blue, pink, and purple blooms
  - c. Blue Star small blue blossoms
  - d. Hellebore (Lenten Rose) colorful flowers
  - e. Wild Geranium small purple blooms, attracts butterflies and hummingbirds
  - f. Crown imperial red and yellow flowers
  - g. Snowdrops delicate white blossoms
- 2. Sunny Garden
  - a. Lamb's Ears soft leaves
  - b. Rosemary fragrant leaves
  - c. Russian sage many small fragrant lavender blooms; attracts butterflies and hummingbirds
  - d. Milkweed attractive to butterflies
  - e. Bee balm (purple daisy) like flowers, attracts butterflies and humming birds
  - f. T. th luscious red blossoms
  - g. Butterfly weed to small clumps of orange flowers, attracts butterflies and hummingbirds
  - h. Jonquilla Daffodil yellow blooms



Mindowaskin Park



 Tree: Honey locust Botanical name: Gleditsia Triacanthos Genus: Deciduous



The first tree you will see on this tour is the Honey Locust, which is also known as the Thorny Locust, Thorny Honeylocust, or even the Sweet Locust. Its botanical name is "Gleditsia Triacanthos", and is part

of the Deciduous genus. The trees in this genus have been known to shed their leaves in Autumn, before Winter hits. The name Deciduous itself means "the dropping of a part that is no longer needed or useful".

The Honey Locust is native to central North America where it is mostly found in the moist soil of river valleys, although these trees are highly adaptable and have been introduced all around the world. They exhibit fast growth, however they live a medium life span of about 120 years. The Honey Locust was first introduced to Europe by the 1700s, when Bishop Henry Compton planted a specimen from Virginia in his London garden.

The Honey Locust has been very prevalent throughout America's history. For starters, one of the first documented uses of honey locust timber was by the native Cherokee tribe in Tennessee, who used it to make bows to hunt. Later on, during the Civil War, the Confederate Army used the Honey Locust's thorns as pins to hold their uniforms together. Even today, the Honey Locust has proved useful in treating some modern ailments, such as rheumatoid arthritis, and it has even helped with certain cancers. Some other uses of the Honey Locust involve its timber, which is used in fence posts, railroad ties, furniture, warehouse or shipping pallets, tool handles and fuel.

 Tree: Botanical Name: Acer Genus: Deciduous



The next tree you'll encounter on this tour is the Maple tree, with its botanical name being "Acer". Maple trees are not just native to North America, and in fact can be found pretty commonly around the world. In fact, there are 132 different Maple species, and the majority of them are native to Asia. The rest are relatively spread out throughout Europe, Northern Africa, and North America, though only one type of Maple species can be found in South America. Like the Honey Locust, the Maple is also part of the Deciduous genus.

Maple trees typically have easily recognizable palmate leaves, which means that they are palm shaped and have little leaflets stemming from the base. They also typically have little winged fruits, which are those fruits that children tend to throw and watch them spin to the ground. The sap from a Maple tree has a few uses, though the most common use is taking sugar Maple sap, boiling it, and making maple sugar and maple syrup. This concept was actually passed on to the American colonists from the Natives. Fun fact: it takes about 32 gallons of sap to produce 1 gallon of maple syrup, which is equivalent to 8 pounds of maple sugar. Another fun fact is that one tree can produce from 5 to 10 pounds of maple sugar each season.

Maple wood timber has a wide variety of uses, and each type of Maple can be used for different projects. Sugar Maple wood is often called "hard maple", and it can be used for bowling pins, bowling alley lanes, pool cue shafts, and butcher's blocks. Maple wood is also used to create baseball bats, and the first time a Maple bat was used in the MLB was in 1998. Maple wood has been used in other sports too, such as creating the bows for archery due to its stiffness and strength.

 Tree: Norway Spruce Botanical name: Picea abies Genus: Evergreen conifer tree



If you continue walking along the trees, you will encounter the Norway Spruce. This tree is actually native to North and Central Europe, not North America. It can be found from Norway to Poland, from the Alps all the way to the extreme North of Greece. The botanical name of the Norway Spruce is "Picea Abies", which comes from Latin. Picea refers to the pitch produced by pines, and Abies is actually a classical latin name for Silver Fir. For its genus, the name refers to two different things. The first part, "Evergreen", refers to a type of tree that retains its foliage that remains green and functional through more than one growing season. The second part, "Conifer", refers to a type of tree that has cone-bearing seed plants, like the common pine cone.

On average, a Norway Spruce can grow 2' to 3' each year, and reach heights of 80 feet, with 40 feet worth of spread, or width. Due to their huge size and all-year greenness, they are commonly used as

Christmas trees in cities or town squares. However, if cut down early in its lifespan, it can also make a perfect indoor tree.

Its timber is softwood timber, a contrast to the Maple Woods timber. Norway Spruce timber is usually used for lumber and paper production, though it can also be used to make items such as string instruments, like a violin. Its branches hang down to prevent snow from building up, helping it to survive in the Winter. And when it begins to blossom, it has some beautiful purple showings.

 Tree: Leyland Cypress Botanical Name: Cupressocyparis Leylandii Genus: Evergreen Conifer



Right next to the Norway Spruce, you'll find the Leyland Cypress, a tree discovered by C.J. Leyland at Leighton Hall in 1888, just South of Wales. The botanical name of the Leyland Cypress is the Cupressocyparis Leylandii, and it's from the Evergreen Conifer genus, like the Norway Spruce. An interesting fact about the Leyland Cypress is that the only way this tree can be reproduced is by cutting its roots.

A Leyland Cypress typically grows from 40 to 60 feet tall, and they grow about 4 feet per year. They can survive in many different conditions, and have even been known to grow to about 50 feet tall in poor conditions. In full sun, the Leyland Cypress can grow 60 to 70 feet, and is popular as a hedging and screening plant. When you crush their leaves, they release a pungent aroma.

 Tree: Dawn Redwood Botanical Name: Metasequoia Glyptostroboides Genus: Deciduous conifer tree



Continuing down the path in the corner of the garden you will find a Dawn Redwood tree, which is native to China. Thought to be extinct, it was discovered in a small grove in East Sichuan, China, by botanist T. Kan. The only records of the Dawn Redwood prior to this discovery were from fossils, its origins have now been traced back to the Sichuan-Hubei region and the Shui-Sha Valley of China. The Dawn Redwood was later introduced to the West in 1948. The Dawn Redwood's botanical name is the Metasequoia Glyptostroboides, and its genus is Deciduous Conifer, with both terms having been mentioned about earlier trees.

The Dawn Redwood typically grows between 50 and 60 feet tall, and will grow about 3 to 5 feet each year. The trunk of this tree is a brigh-treddish brown and is often fluted. Its leaves are about ½ inch long and 1/16 inch wide, giving the tree a feathery appearance. Because the tree is almost extinct, it doesn;t have any uses besides being used as an ornamental specimen.

 Tree: Yew Botanical name: Taxus Baccata Genus: Evergreen

Continuing along the fence line, you will encounter the Yew. The Yew has its origins in Europe, from eastward to Northern Iran, the Atlas Mountains of North Africa, and Britain. Its botanical name is the Taxus Baccata, and it's also an Evergreen, like many other trees here. The Yew you will find here is actually one of New Jersey's largest yews, with a diameter of 65 feet. This Yew is also believed to be over 100 years old.

The Yews bark is reddish-brown with purple tones, and peeling, and is highly malleable yet durable. It's also thin and scaly, and will break off easily when exposed to direct sunlight. The Yew produces bright

red berry-like fruits with highly poisonous seeds. However, birds have adapted to this and only eat the sweet flesh surrounding the seed. The Yew also grows male and female flowers on separate trees.

Over time, Yew trees have become a symbol for many things. For example, due to its longevity (400-600 years) the Yew has become a symbol of death and doom despite providing food and shelter for many woodland animals. It's also often associated with churchyards, so it has become an ornamental specimen. Its wood also has many uses, ranging from anti-cancer agents to hedges by landscapers. Similar to the Norway Spruce, it's also softwood lumber, making it great for cabinetry, tool handles, and even longbows.

 Tree: Eastern White Pine Botanical Name: Pina Strobus Genus: Evergreen Conifer



Moving to the back of the house, you will find the Eastern White Pine, another Evergreen Conifer genus. In fact, it is the largest conifer found in the Northeast United States. The Eastern White Pine can be found from New England to Iowa and Minnesota, and even along the slopes of the Appalachian Mountains. The Haudenosaunee, an Iroquoian-speaking confederacy of Native Americans and First Nations peoples in northeast North America, have maintained a Eastern White Pine as a symbol of their multinational confederation, and have even dubbed it the "Tree of Peace."

The Eastern White Pine is one of 35 species native to North America, and has the botanical name of Pina Strobus. The Eastern White Pine grows more than 24 feet each year, and can have a lifespan of 200 years. It was actually called the "Coffin Pine" during early pioneer days because it was light and easy to work with. Eastern White Pines have had many uses, from being masts on royal ships to timber frames for construction. Its pines are great for herbal tea, and their Vitamin C exceeds that of oranges and lemons.

8. Tree: Weeping Spruce Botanical name: Picea Breweriana Genus: Evergreen



Another tree you will encounter here is the Weeping Spruce, which is native to Western United States, specifically the Siskiyou and Shasta Mountains of Northern California and Southwestern Oregon. The botanical name of this tree is the Picea Breweriana, which is also part of the Evergreen genus. Some common nicknames for this tree are the Brewer spruce or Brewer's weeping spruce.

Weeping Spruces usually grow to about 15 feet in height, which is a lot smaller than a good amount of the trees here. This Weeping Spruce used to be 40 feet tall, but Hurricane Sandy ended up knocking this one over. The bark is thin and scaly, and purple-gray in color. The branches tend to hang down and form a "curtain" of foliage. These hanging branches also help to brush off snow without damaging the tree, helping them to grow even in elevations up to 7,000 feet. Weeping Spruces are rarely found in the wild, and are now used more for decoration in parks and gardens.

 Tree: Winged Euonymus Botanical name: Euonymus alatus Genus: Deciduous



The final tree you will learn about is the Winged Euonymus, a tree native to Asian countries such as China, Japan, and Korea, and was introduced to the United States in the 1860s. The botanical name of this tree is the Euonymus alatus, which is another tree in the Deciduous genus. A common nickname of this tree is the "Burning Bush" due to its red leaves. These branches also have raised rides on the branches, which is the reason the Winged Euonymus got its name. Along with its winged tips and red leaves, the Winged Euonymus grows dark purple or red fruit, complimenting its leaf color.

The Winged Euonymus has been known to survive in a wide range of conditions, which has actually lead to some environmental problems. The Burning Bush grows well in a variety of soil types and pH levels, it doesn't need as much sunlight to survive, and it doesn't have any serious pest problems. All of these advantages gave it a competitive edge against native species, and the tree has now become a threat to mature forests, fields, and woodlands.

The Winged Euonymus has had a couple of uses. It's become a popular ornamental plant in gardens and parks because of its color fruit, burning leaves, and attractive fall color. In historical context, Native Americans and pioneers have crushed the bark into powder and used it as a purgative. This powdered bark has also been called "Wahoo".

### **Flower Beds**

1. Shady Garden

One of the seven plants in the Shady Garden is the Woodruff, which also goes by Galium odoratum, the sweet woodruff or sweetscented bedstraw. It's native to Europe from Spain and Ireland to Russia, as well as Western Siberia, Turkey, Iran, the Caucasus, China and Japan, and grows to about 8 inches tall. As Woodruff grows, it covers more ground, allowing it to be used as ground cover. A more colorful flower would be the Pulmonaria, which grows blue, pink, and purple blooms. Pulmonaria blooms during the Spring, and can grow from 9 to 18 inches tall. With a similar growth season we have Blue Star, a flower with small blue blossoms that give the flower its name. Blue Star grows from March to May, and can reach about 3 feet in height. Another flower in this garden is the Hellebore, or Lenten Rose. The Hellebore has flowers that aren't simply purple or white, but instead are more colorful and are gradients. Hellebores actually have a very different blooming season, and bloom from late November through April. Closer to Hellebore's Winter bloom season, we have the Wild Geranium. Wild Geraniums bloom in the

late fall, and have small purple blooms that attract butterflies and hummingbirds. Wild Geraniums also grow in full sun or light shade, which is different from many of this garden's flowers since most require plenty of shade. They can also supply ground cover, but not as much as Woodruff does. Native to a wide stretch from the Anatolian plateau of Turkey to Afghanistan, we have the Crown Imperial. Their flowers are red, orange, and yellow, and have gained their name because of the shape their flowers create. They can actually grow 3-5 feet in height, and their flowers bloom facing the ground. The last flower in this garden is the Snowdrop, a flower with delicate white blossoms. These flowers bloom in the Winter season from January to March, and are quite small. They only grow 3-6" in height, and their flowers tend to droop.

#### 2. Sunny Garden

One of the plants you will find in the Sunny Garden is the Lamb's Ear, a drought-tolerant perennial that grows well in full sun. These flowers usually bloom from late spring to early summer, and they have rather soft leaves. Rosemary is also planted in this garden, and it's a very common herb. Rosemary plants are evergreen bushy shrubs that grow along the Mediterranean Sea and sub-Himalayan areas, and they tend to have very fragrant leaves. Another plant with fragrant leaves is the Russian sage, although their leaves are more small lavender blooms. The Russian sage, like all plants in this garden, grows best in full sun. They can grow 3-5 feet in size, and are attractive to butterflies and hummingbirds. Like the Russian sage, the milkweed can also be attractive to butterflies. The genus name of Milkweed, Asclepias, commemorates Asklepios, the Greek god of medicine. Milkweed can grow in a variety of colors, from whites to pinks to oranges. While Milkweed is attractive to butterflies, the milky liquid it releases is actually toxic to humans. The Bee Balm, a purple daisy, attracts both butterflies and hummingbirds. Bee Bal, blooms mid to late Summer, and grows 1 to 4 feet in height. With luscious red blossoms, the Peony is up next in this garden. Peonies are native to Asia, Europe, and Western North America, and have become a traditional floral symbol of China. They are also perennials, so they will return every year. One of the last flowers in this garden is the Butterfly weed, which has small clumps of orange flowers. They are also part of the milkweed genus, and can also attract butterflies and hummingbirds. Butterfly weed tends to grow 12-24" in width and 2 feet in height. The last flower you will learn about in this garden is the Jonquilla Daffodil, which can grow 2-3 yellow blooms per stem. It was originally native to Spain and Portugal, but it has been introduced to many more countries around the world.