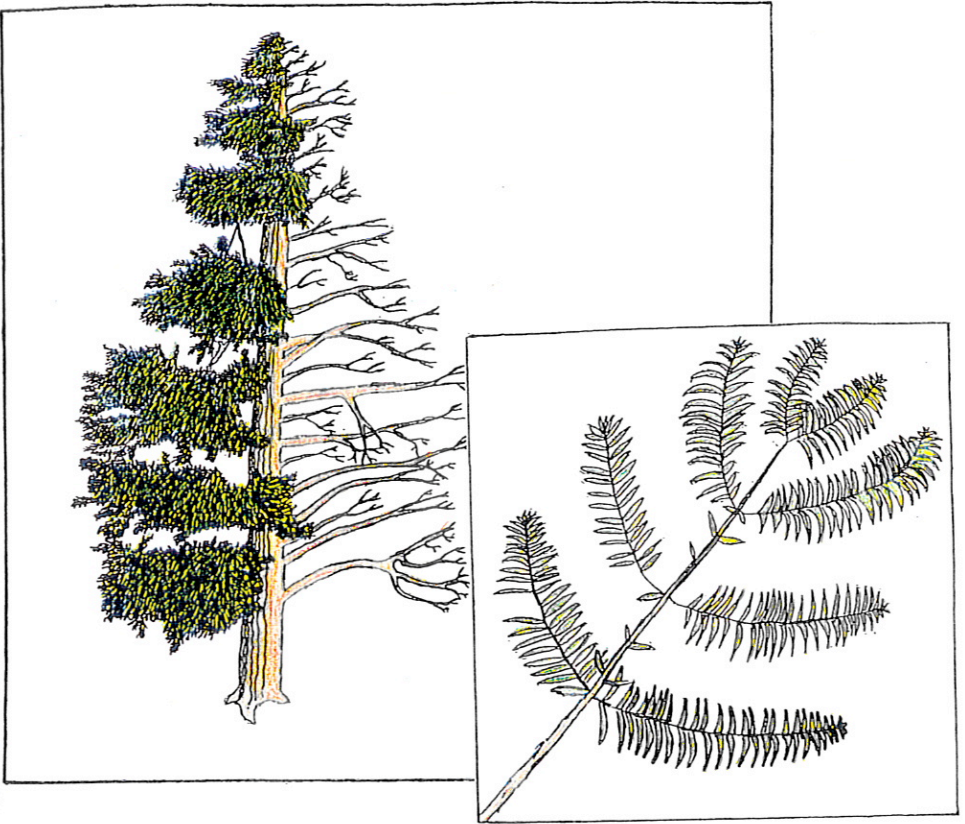


A PARK GROWS IN PORTLAND



**A Field Guide to the Trees of Deering Oaks
Windsor-7 Students
King Middle School
1998**

Introduction

This field guide was written and illustrated by seventh grade students in the Windsor House at King Middle School. It was part of an expedition called "A Park Grows in Portland." The guide is intended to help you identify the wide variety of trees in the park. As a result, we hope that you will care even more about the trees in Deering Oaks.

In writing the field guide, each student gathered research on a tree that is located in Deering Oaks. We worked with Jeff Tarling, the city arborist, reviewed plant and tree books, and searched the Internet for information about our trees. After all the research was completed, we typed the pages in the computer lab. This was a long process because of all the revising we had to do. The next step was to draw our tree and a close-up of the leaf. We practiced shading techniques so we could make our drawings realistic. The illustrations you see in this guide are of mature trees. As you try to locate the trees in Deering Oaks, you may need to use the description as well as the illustration, as some of the trees are not fully grown.

We would like to thank our expedition leaders, Mrs. MacDonald (language arts), Mr. Dyer (math), Mrs. Griffin (social studies), Mrs. Norton (art), and Mr. LeGage (science), whose direction made this field guide possible. We also thank Mr. Morgenstein for his patience in the computer lab, Mrs. Lunt who helped us with research, our intern, Mrs. Hewes, parent volunteers who helped cut and paste, and our principal, Mr. McCarthy, who encourages creative experiences such as this. We really enjoyed working on this guide, and we hope that you will enjoy using it.

-Amie Winchenbach

Deering Oaks

Deering Oaks is a beautiful public park located in the heart of Portland. It has approximately one thousand trees and covers an area of fifty-three acres.

The first major historical event to take place in Deering Oaks occurred in 1689. This was the year that Major Church defeated seven hundred Native Americans on Brackett's Field, as this area was known at the time.

In 1856, Portland offered \$50,000.00 to buy the land from the owner, James Deering, and he refused! Finally, in 1879 the city was able to purchase the land for \$9,000.00.

The official park did not open until 1881. The famous Deering Oaks duck house and fountain were added to the park in 1887. To this day, the duck house is still a main attraction. One of the other attractions, the playground, was originally built in 1902.

In March of 1906 there was a huge ice storm, causing 2,568 trees to be damaged or destroyed. The storm caused more damage than the ice storm of 1998. On Christmas of 1909 three thousand people skated on the pond.

Scientists did their first study on the trees in 1920. They concluded that car exhaust was damaging the trees. In the mid-1990's car traffic was eliminated from most of the park.

Deering Oaks was registered as an historic site in 1989. President Clinton addressed a large crowd at the park in 1993. The Barking Squirrel Restaurant opened with rave reviews in 1996.

As you can see, Deering Oaks has never stopped changing. The Windsor-7 students would like to thank you for taking the time to read our field guide. We hope you enjoy it!

-James Pelletier

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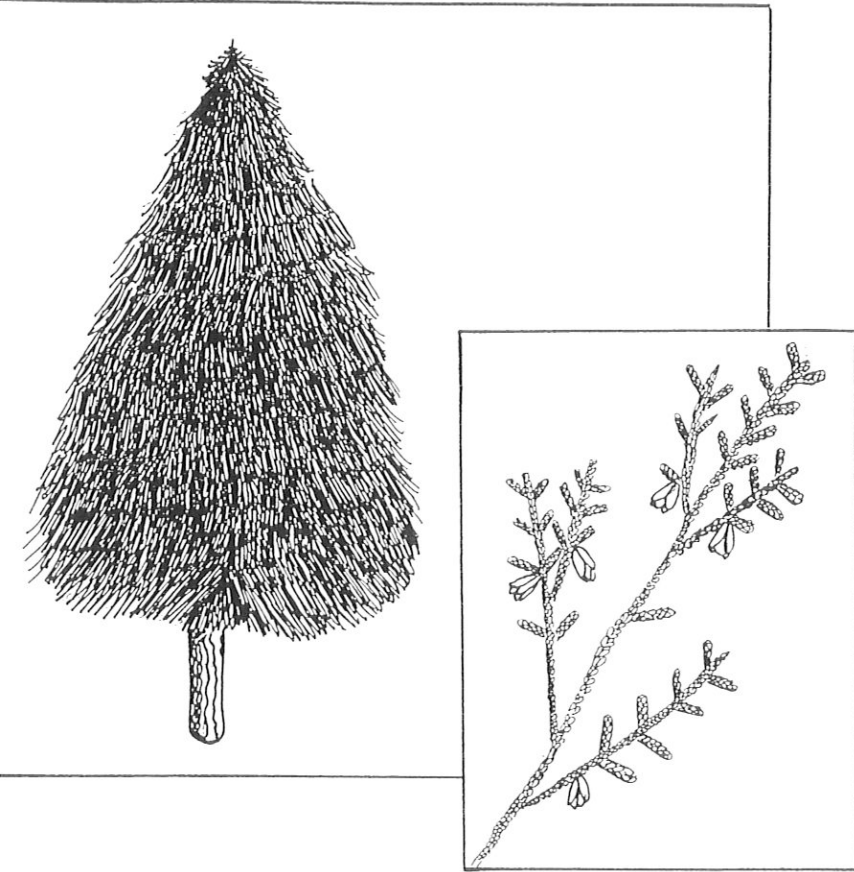
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Arborvitae (White Cedar)

Thuja occidentalis L.



Location in the Oaks: It is located near Park Row, which is on the western side of the park.

The Bark: The bark of the White Cedar is orange-brown. It is thin, fibrous and shreddy. It peels in vertical strips.

The Leaves: The leaves are about 1/16 to 1/8 inch long. They are flat and scale-like. The scales are very small

most of the time. The leaves are a yellowish-green above and a paler color with no white marks beneath.

The Wood: The White Cedar wood is soft and light, and it is easy to break. The very inner wood is durable. The tree has a fragrant odor. The wood is or was used for railroads, shingles, poles, post, fencing, and occasionally sawed into lumber, boxes, crates, and boats.

Flowers: The flowers depend on the tree. If the tree is a male then it will have the male flowers, which are red. If the tree is a female tree, the flowers will be female and the color will be yellow-brown.

The Fruit: The fruit is an upright cone that is $\frac{3}{8}$ of an inch long. They are yellow.

The Twigs: The twigs branch horizontally. They are also flat like the leaves.

Size: Typically, a White Cedar grows to a height of 40 to 70 feet. The diameter is 1 to 3 feet.

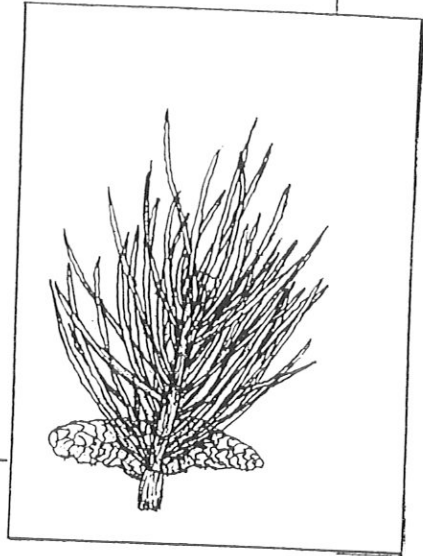
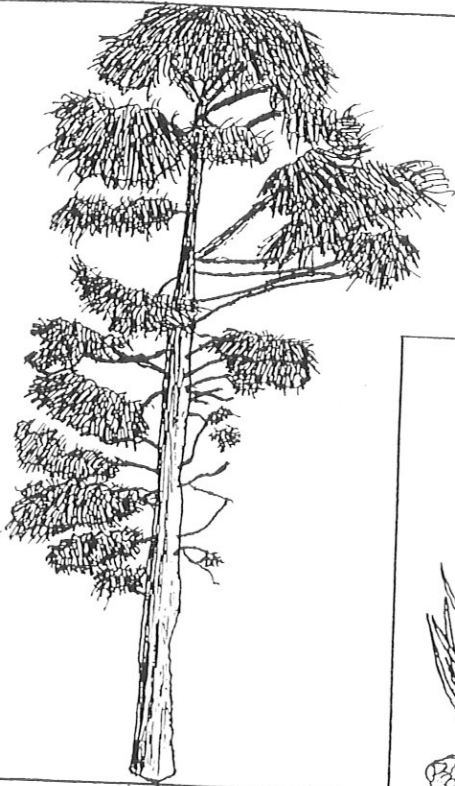
Other Locations: You can often find a White Cedar near the Rocky Mountain slopes and in swampy areas.

Other Interesting Facts: Cedar oil is used in medicine. It is taken from the twigs. The White Cedar is native to swampy areas in the northern U.S. The White Cedar can live in wet soil and will grow in sandy soil. The species was one of the first North American trees to be grown in Europe.

-Heather

Austrian Pine

Pinus nigra



Location in the Oaks: The Austrian Pines are located near the horseshoe pits and the tennis courts.

The Bark: The bark is nearly black and scaly.

The Leaves: The leaves are needle-like. They are 6 inches long, come in pairs, are sharp and dark green. They are on stout glossy roots.

The Wood: The wood is usually fairly soft and contains a strong smelling resin that helps prevent decay.

The Flowers: The males are yellow, and the females are red. They are borne in separate clusters on young shoots in the late spring to early summer.

The Fruit: The fruit is an egg-shaped brown cone. The cones are 2 to 4 inches long and have scales tipped with a prickle.

The Twigs: The twigs are glossy, brown, and stout.

Size: The Austrian Pine is 130 feet tall and 2.5 feet in diameter. The shape is broad and column-like with stout branches and pyramidal crown.

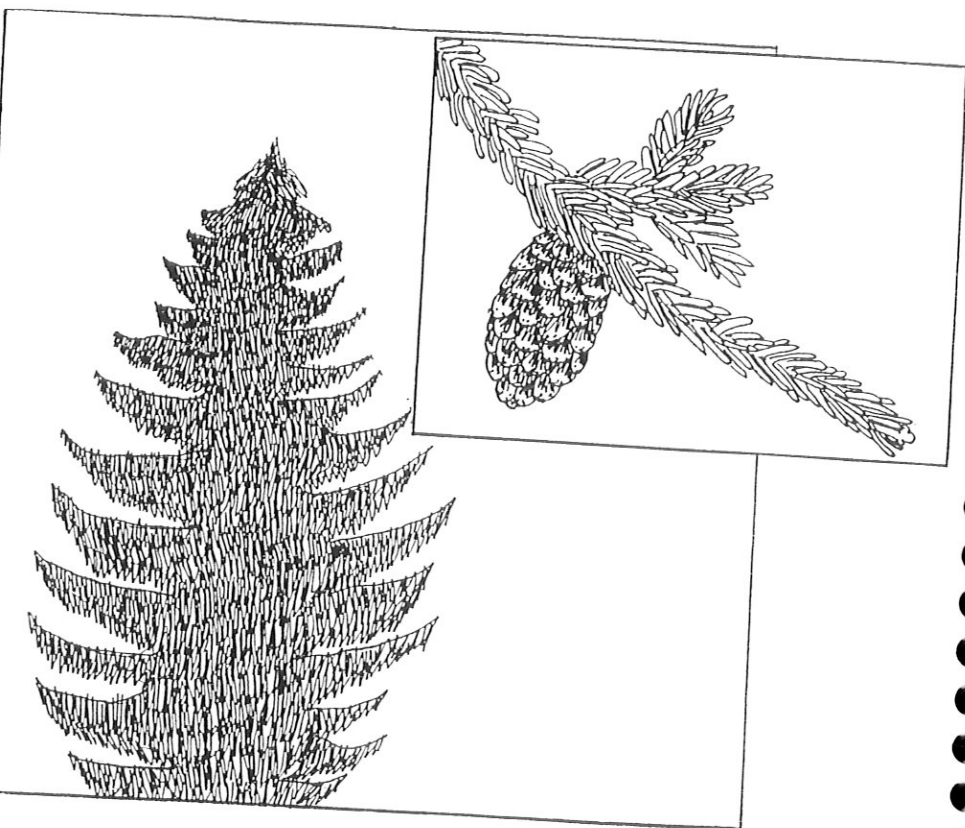
Other Locations: Other locations that you can find the Austrian Pine are in central and southeastern Europe.

Other Interesting Facts: The green needles resemble those of Red Pine but are darker, heavier and do not break cleanly.

-Ricky

Balsam Fir

Abies balsamea



Bark: The bark on the Balsam Fir is brown, thin, and smooth, with many resin blisters that become scaly.

The Needles: The needles of the Balsam Fir are one and a half to two inches long and are spread at almost upright angles on upper twigs. They are flat with rounded tips, and are sometimes notched or short pointed. The needles are shiny on the bottom and dark green on the top.

The cones: The cones of the Balsam Fir are dark purple and

found upright on upper twigs. They are two to three and one quarter inches long, with the cone scales finely haired and the bracts mostly hidden.

Size: The Balsam Fir grows to a height of forty to fifty feet and to a diameter of one and a half to two feet.

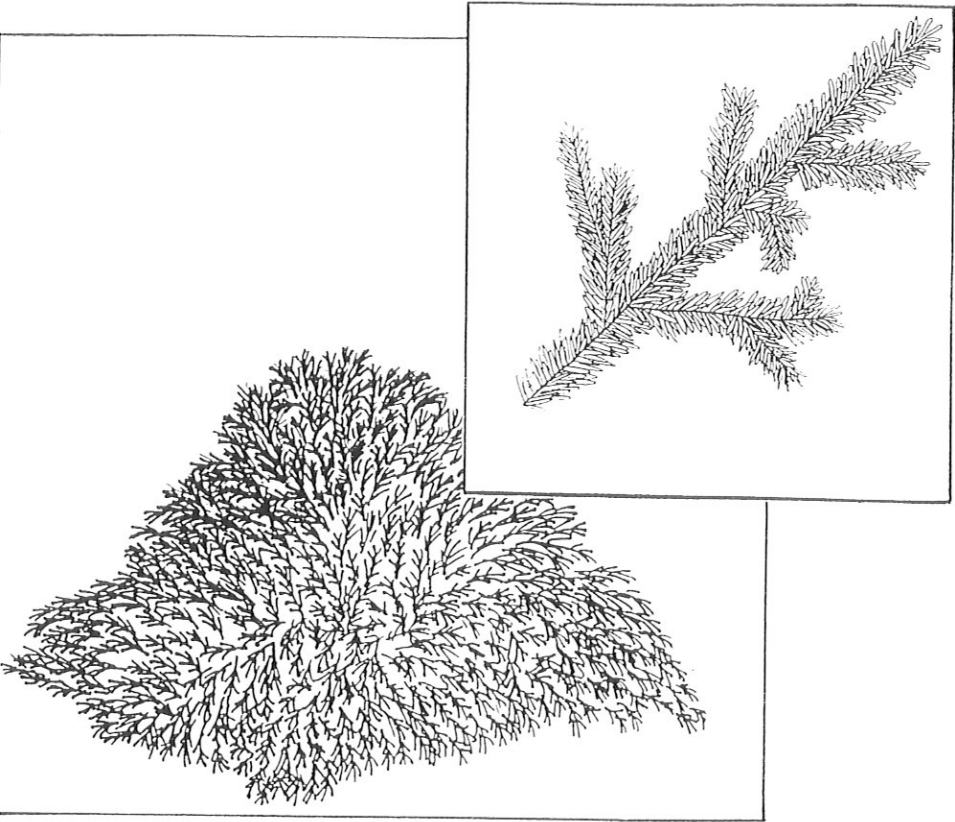
Other Locations: The Balsam Fir is located in coniferous forests, often in pure stands. It is found from Alberta, Canada east to Labrador, Canada south to Pennsylvania, U.S.A. and west to Minnesota, U.S.A.

Other Interesting Facts: Balsam Firs are grown as Christmas trees, and wreaths. The needles contain a special chemical that prevents insects from eating it.

-Nancy

Broadmoor Juniper

Juniperus broadmoor



Location in the Oaks: Juniper Trees can be found near the Deering Oaks entrance on the Deering Avenue side, directly to the right of the stone pillars.

The Bark: The bark of the Juniper Tree is incredibly thin, like paper, and it scales off in long strips. This makes this particular tree prone to peeling off of its bark, which can lead to a multitude of horrible things.

The Needles: The needles of the Juniper tree are dark green

in the summer season, but they change to a yellow-tinted, dingy green in the colder winter months. When crushed, these needles omit a very disagreeable odor, and when eaten, a horrible bitter taste. They contain powerful diuretic properties, and can also be used for other medicinal purposes.

The Wood: The wood of the Juniper Tree is usually a highly colored, reddish-brown wood. It is very durable, and essential oils may be distilled from it which can be used for perfume, and sometimes medicine.

The Cones: The Juniper Tree grows small cones on recurved stalks. The male cones ripen in their first season, or in the springtime of their second season. The female cones of this plant ripen in the autumn of their first year, or in the following spring. These are about a fifth of an inch in diameter, and are brownish or bluish-black. Each of these cones contains up to six tiny seeds, which have a taste similar to gin.

Size: The Broadmoor Juniper is low to the ground, typically about a foot high, and has a spread of ten feet.

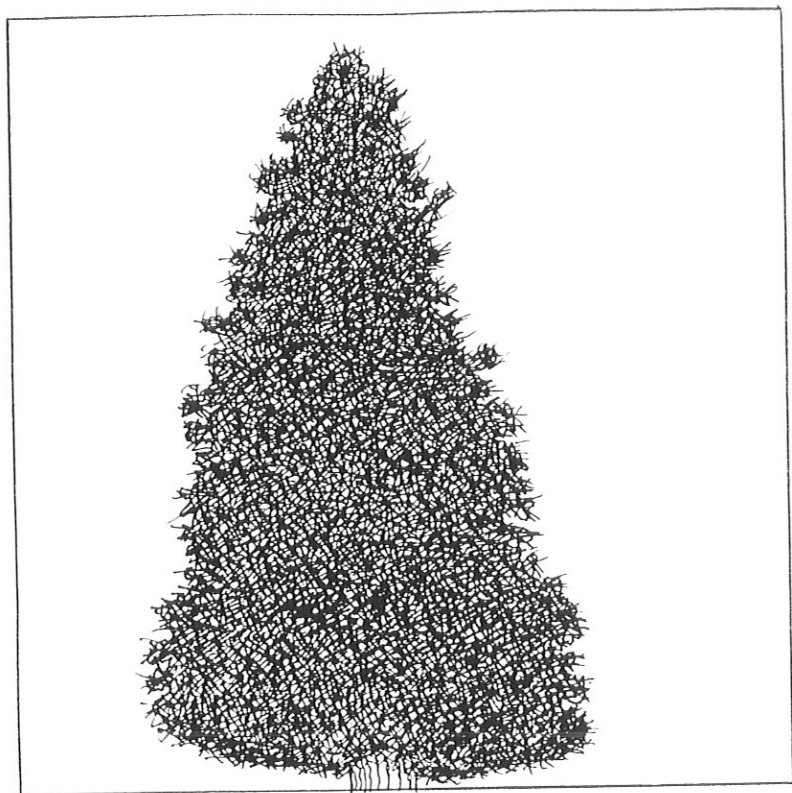
Other Locations: The Juniper can be found in the mountains of central and southern Europe, the Caucasus, Western Asia, and parts of Serbia.

Other Interesting Facts: The Broadmoor is resistant to a very common disease amongst these plants, known as Juniper Blight. Broadmoors make excellent ground coverings because of their immense spread. With age, they build up in the center, making them very strong.

-Allison

Canadian Hemlock

Tsuga canadensis



The Needles: This tree's needles are three to eight inches long. The needles are glossy, dark green, with a white, striped underside. They are parallel and alternate.

The Wood: The wood is soft and tolerant and is used in furniture, indoor siding, and storage crates.

The Fruit: The fruits are small cones, about half an inch in length and about three quarters of an inch wide.

The Branches: The branches are curving, flat, and quite spread out. They are irregularly whorled and covered with the needles.

Size: Canadian Hemlocks grow to be from forty to seventy feet tall. The branches cover a spread of twenty-five to thirty-five feet. This tree grows in a pyramidal form.

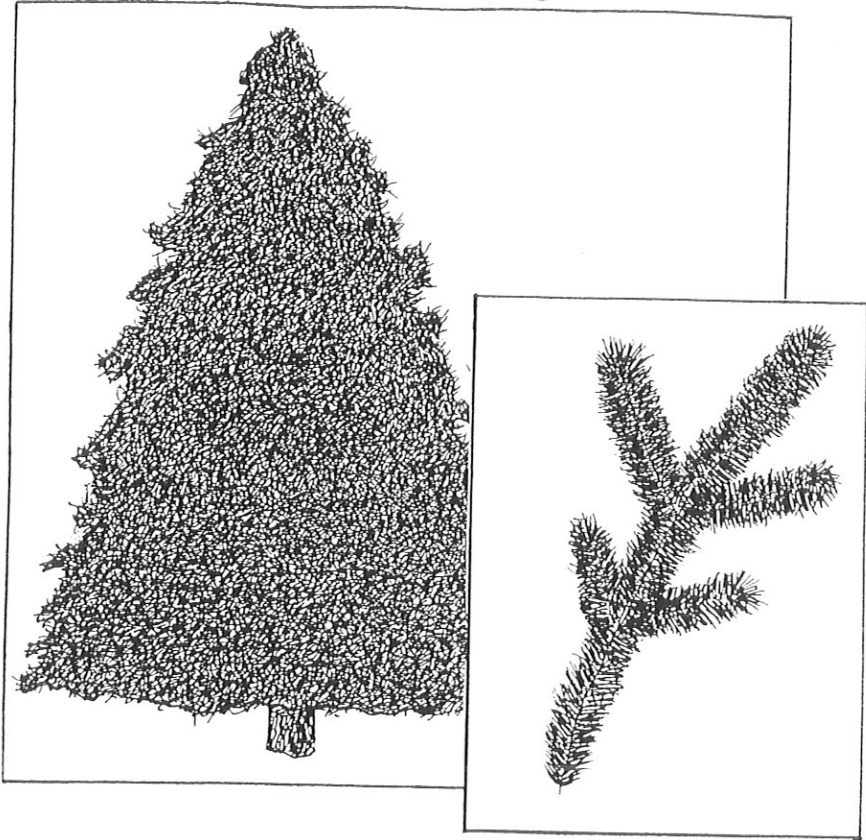
Other Locations: The Canadian Hemlock grows in many places all around North America. It grows best in clay ground, but is used mostly in people's yards for ornamental purposes.

Other Interesting Facts: The annual growth rate of a Canadian Hemlock is twelve to eighteen inches. There are over seventy-five cultivated varieties of Canadian Hemlock. They are some of the smallest conifers ever known, while some are the largest. The Canadian Hemlock will die if there is any pollution, salt, or prolonged periods without moisture.

- Thomas C. .

Colorado Blue Spruce

Picea pungens



Location in the Oaks: There are two Colorado Blue Spruces in Deering Oaks. They are west of the Barking Squirrel, and between the ravine and Deering Avenue.

The Bark: The bark on a Colorado Blue Spruce is dark gray. It has small flattened scales when it is young and when it is older it is reddish-brown, and furrowed.

The Needles: The needles on a Colorado Blue Spruce are about 1-1/2 inches long, (dull blue-gray to silvery white) and

stick out in all directions. Some Blue Spruces are selected for Christmas trees because of their shiny needles and perfect shape.

The Wood: The wood from a Colorado Blue Spruce is light/pale brown. It is lightweight, soft, brittle, and usually full of knots. It usually grows in relatively inaccessible locations, so it is not used for commercial uses. The wood is still suitable for posts, poles, and fuels.

The Pine Cones: Both male and female flowers (strobili) grow on the tree, although in different locations. Pollination for a Blue Spruce occurs in late spring. Cones mature in one season. By fall, the pine cones are 2 to 4 inches long. They are chestnut brown with stiff scales. The cones generally remain on the tree for 1 to 2 years after seed fall.

Size: A mature tree can grow anywhere between 65 to 115 feet. The diameter is about 2 feet with a circumference of about 7 to 8 feet. The Blue Spruce is fairly long-lived. It can grow to be 60 to 80 years old.

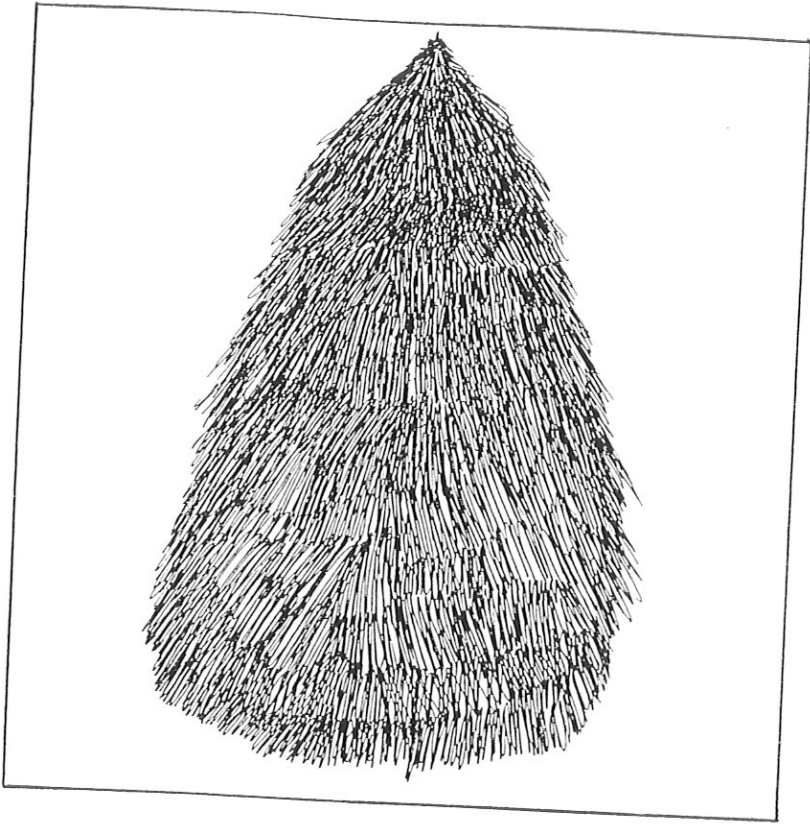
Other Locations: The Colorado Blue Spruce is most commonly found on mountain slopes in the Rocky Mountains.

Other Interesting Facts: The Colorado Blue Spruce is the official state tree of Colorado and Utah. It is quickly becoming popular as a Christmas tree because of its perfect shape and relatively easy care. There are over 70 different varieties of the Blue Spruce. The Colorado Blue Spruce is moderately shade tolerant. A deep penetrating root system makes it very resistant to being blown over.

-James

Concolor Fir

Abies concolor



The Bark: The bark is gray and smooth, but it becomes scaly with age.

Needles: The needles are blunt at the end. They are dark green or blue-green, shiny on top, and silvery underneath. They stay on the tree for a long time after it is cut down, and that is why it is often picked as a Christmas tree.

The Flowers: The male flowers are yellow. Female flowers are greenish-yellow. They appear in the spring.

The Cones: The cones appear mainly on high branches. The cones contain the seeds for the tree. The cones appear in early summer and mature in late fall.

Size: They grow fifty feet tall to as high as 130 feet tall.

Other Locations: The Concolor Fir's original home is in the Sierra Madre Mountains in California. Concolor Firs don't like damp soil. Concolor Firs can also be found on mountain slopes.

Other Interesting Facts: The Concolor Fir grows as fast as a balsam, but it acts differently. They do best in full sun. The Concolor Fir can also be called White Fir.

-*Aman*

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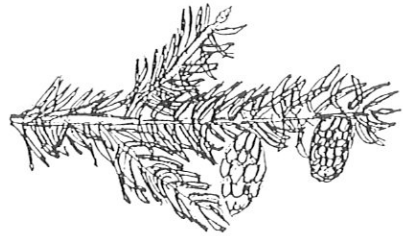
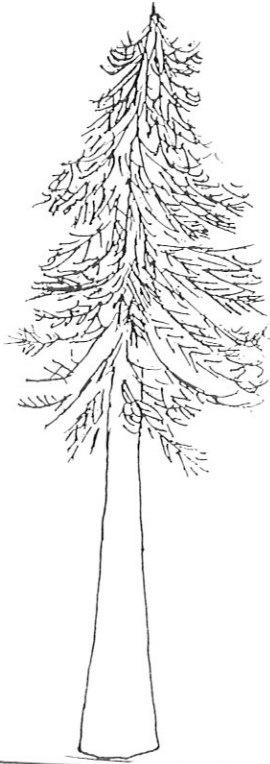
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-Amin

Douglas Fir

Pseudotsuga menziesii



Location in the Oaks: You can find a Douglas Fir near the duck pond.

The Bark: The bark of a young tree is smooth and gray with blisters on an older tree. The bark is thick and reddish-brown from the outside and brown beneath.

The Needle: The leaves are linear, 1 1/4 inches long, blue green, soft, and nice to touch.

The Wood: The wood is very important to people. Douglas Fir is an important timber tree. It is a strong durable wood and has many uses. This is one of the most important trees in the Pacific Northwest. People use it for Christmas trees and for timber.

The Flower: The flower of a Douglas Fir is yellow and green. The male flower is yellow beneath the shoot. The females are green and mixed with pink at the tip.

The Cone: The cone is red with three bracts projecting from between the scales.

Size: The tree is about 100 to 250 feet tall and 8 feet in diameter.

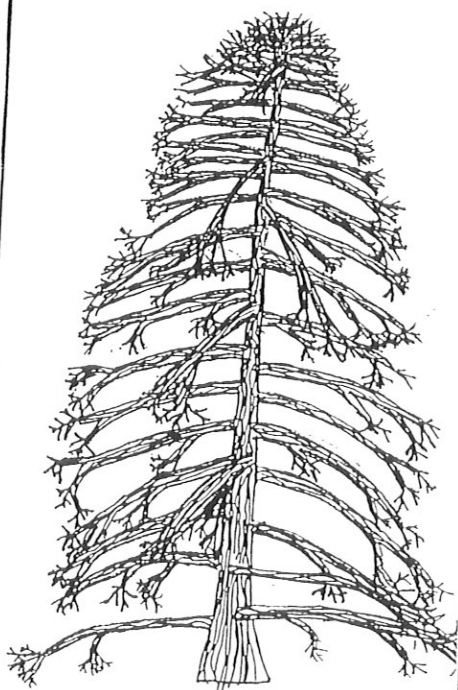
Other Locations: Douglas Firs grow in North America, China, Japan, and Taiwan.

Other Interesting Facts: The Douglas Fir is one of most useful trees in the world. The Douglas Fir can grow 1 to 2 feet a year. The Douglas Fir is important to America because of the timber industry.

-Peter

Eastern Larch

Larix laricina



Location in the Oaks: There are many Eastern Larches located between the tennis courts and the highway.

The Bark: The bark of a larch is reddish-brown, thin and scaly. The bark on younger branches of a larch is reddish, as is the inner bark of older wood.

The Needles: The needles on older branches of larches are arranged in tufts on short spurs that line the branches. On the younger ones the needles are arranged spirally down the

stems. The needles are three sided, soft, one inch long and are bright green from early spring through summer. In the fall, the needles on the older branches turn a bright golden-yellow. They grow in clusters of 15 to 25 on short projections that remain on the branch even after the needles fall off.

The Wood: The wood of the larch is Algonquin wood which means "wood used for snow shoes." The wood is heavy and durable. It is mainly used for pulp, but can also be used for poles, posts and fuel.

The Flowers: In the early spring before the cones, there are showy, reddish-purple, female flowers on the larch. The flowers are about 1/2 an inch tall and sit right on the branch. The male blossoms are separate and inconspicuous.

The Pine Cones: After the tree turns 20, it starts to get lime-brown cones that stand directly on the branch for several years. The small, round, seed cones are red at flowering and turn brown with age.

The Twigs: The twigs have horizontal or slightly slanting branches.

Size: When young, larches grow around 2 to 3 feet a year. It becomes 40 to 60 feet tall after about 30 years.

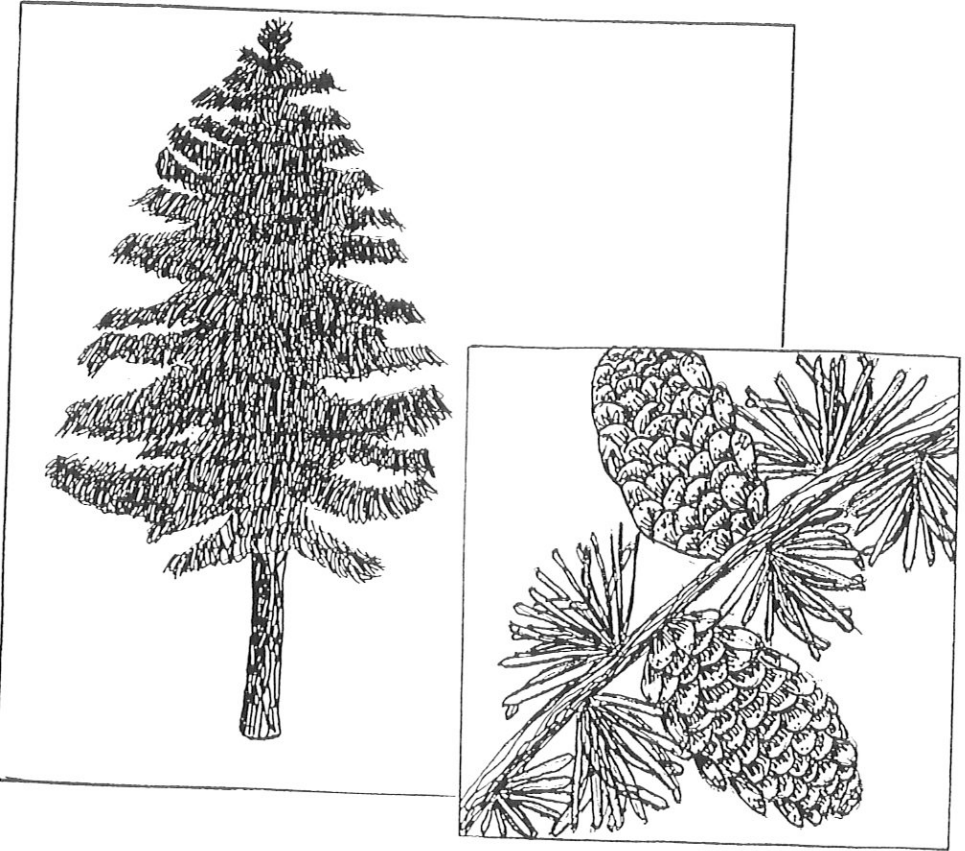
Other Locations: The larch is a northern species and normally grows east of the Rocky Mountains.

Other Interesting Facts: Some native groups chewed the resin to relieve indigestion. The pine needles fall off in the winter, so technically they are deciduous unlike most pines.

-Matt

European Larch

Larix decidua



Location in the Oaks: Five European Larch trees are located in the Oaks. Three of the Larches are located southeast of the baseball field, beside Deering Avenue. One is located southwest of the Barking Squirrel Restaurant. The Larch can also be found southeast of the new road.

The Bark: European Larch trees have gray bark that becomes red-brown and scaly. The bark of a European Larch was once used for tanning and dyeing. It has medicinal properties and is mainly used in veterinary practice.

The Leaves: Like the Pine, the European Larch has needles about one and a half inches long. The needles are green, and turn yellow in the fall.

The Wood: Wood from a Larch is very strong. It is used to build posts, barges, etc.

The Flowers: European Larches have two types of flowers. A male flower is yellow and it droops. Female flowers are red and upright.

The Cone: The cone on the Larch is an egg-shaped, brown cone about one and a half inches long. The cones mature within a year.

The Twigs: Twigs that come from the European Larch are gray or yellowish, with many dark brown spurs or short-sided twigs.

Size: The European Larch can reach 70 feet to 130 feet in height. The average tree size is 2 feet in diameter.

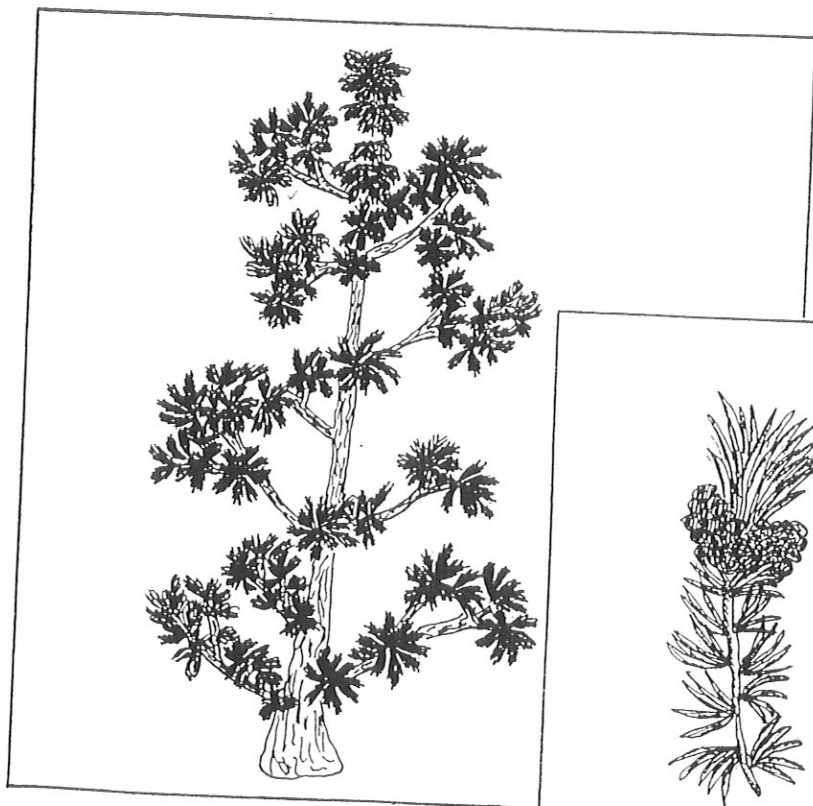
Other Locations: The European Larch is also located in Central Europe, Canada, and Asia.

Other Interesting Facts: The European Larch grows in soil that is cool and humid.

- Melissa

Japanese White Pine

Pinus parviflora



Location in the Oaks: The Japanese White Pine is located near the baseball field.

The Needles: Growing in clusters of five, the needles only get 2 1/2 inches long. They are green to blue in color.

The Cones: The cones are green, ripening to reddish-brown. They are 1 1/2 inches to 4 inches long. The scales on these cones are leathery.

Size: The tree only grows to be 20 to 80 feet in height. The annual growth rate is 12 inches. The spread is 40 feet.

Other Locations: This tree is only native to Japan and China.

Other Interesting Facts: This tree belongs to the Pinaceae family. It is a slow growing tree. This tree is also known as the "Five Needle-Pine". The Japanese White Pine has a very graceful silhouette.

-Lisa

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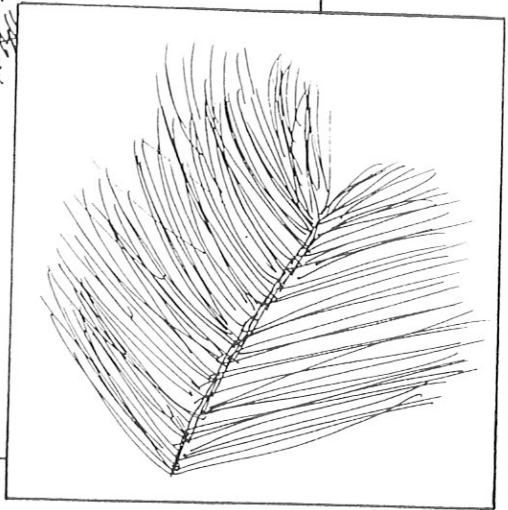
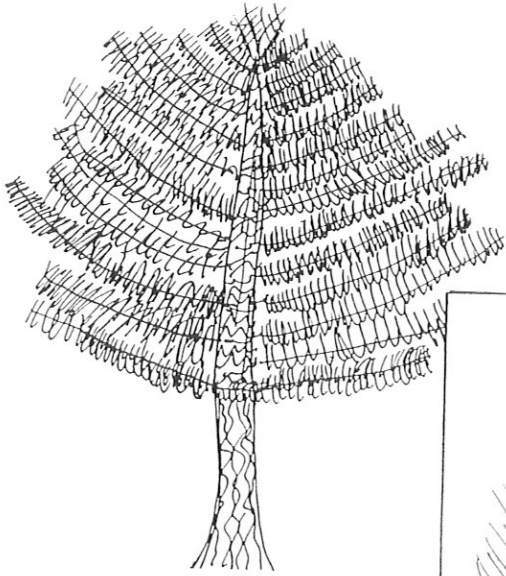
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-Lisa

Norway Spruce

Picea abies



The Bark: The bark is red-brown to gray. It peels in thin strips and cracks into fissures.

The Leaves: The needles are slender and rigid. They grow to 3/4 of an inch long and are four-sided with a sharp point at the tip. These leaves are dark green, spreading beneath smooth brown shoots.

The Cones: The Norway Spruce has a cylindrical brown hanging cone that grows up to 15 centimeters long. This cone is thin and slightly pointed. It is the largest cone of the spruces.

The Twigs: The twigs are reddish brown and slender . They are generally hairless with rough peg-like bases.

The Size: The Norway Spruce can grow to 100 feet tall. Its spread can be 25 to 35 feet.

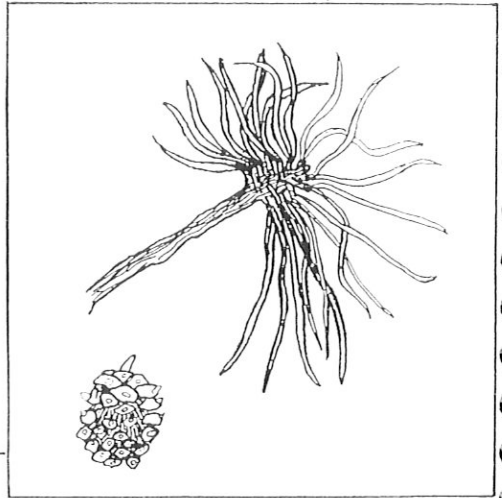
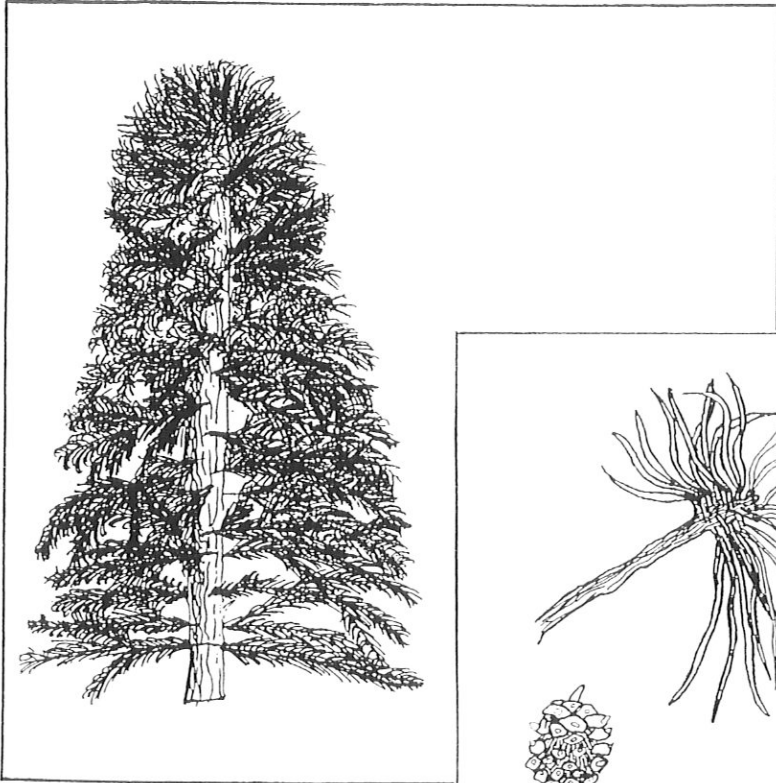
Other Locations: They are located in the mountain forest, in damp soil. They are found in the Northeast, the Rocky Mountains, and the Pacific Coast region.

Other Interesting Facts: The Norway Spruce is a fast growing tree. You can find them in dwarf varieties. This tree is often used as a Christmas tree.

-Shireen

Scotch Pine

Pinus sylvestris



Location in the Oaks: The Scotch Pine is located near the end of the ravine that is closest to Deering Avenue.

The Bark: The bark of the Scotch Pine is thin and scaly. The lower part of the tree is a reddish-brown color, and it gets to be a bright orange-red at the top. The bark tends to be darker on older trees.

The Needles: The needles of a Scotch Pine are stiff, slightly flattened, evergreen and twisted. They are a yellow-green

color and grow in bundles of two. They are from one and a half inches to three inches long.

The Wood: The Scotch Pine, like other conifers, is a softwood tree. This tree is one of the most important European timber trees.

The Pine cones: The pine cones of a Scotch Pine have long, flat-topped scales, tipped with a slender prickle. The younger pine cones are a blue-green color with brown-tipped scales. As the pine cone reaches maturity it starts to open, and it becomes a reddish-brown, egg-shaped cone.

The Twigs: The twigs and branches of the Scotch Pine branch off of it from all sides. As the tree gets higher, the branches become more round and irregular.

Size: The Scotch Pine grows to be from 66 to 130 feet tall. Its trunk is about two feet in diameter and gets bigger as it ages. The circumference is about six feet.

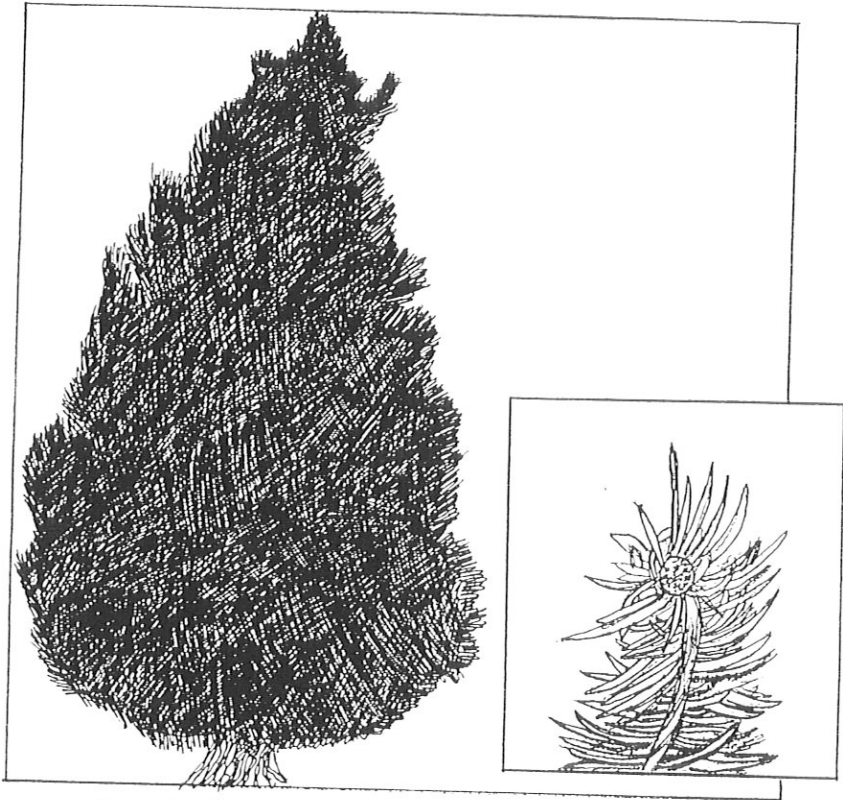
Other Locations: The Scotch Pine is native to the Scottish Highlands and grows all throughout Europe and down to North West Asia. It was naturalized in the United States and Canada, and now grows from Maine to Iowa.

Other Interesting Facts: The Scotch Pine is one of the most important European timber trees. In the United States, they are mainly used for Christmas trees. Injury is usually caused to this tree by pine shoot beetles and pine shoot moths, and also by pine weevils. The Scotch Pine can grow in any soil from loam to sand, and they are known to be able to withstand city smoke.

-Matt .

Serbian Spruce

Picea glauca



Location in the Oaks: It is located by the Brighton Avenue entrance near the bridge behind the rock wall in the middle of the mulch patch.

The Bark: The bark of the Serbian Spruce is a brownish-purplish color, and when it breaks off of the tree it cracks into square plates.

The Needles: The needles are a bluish-green color on the top with two white bands on the underside, about 3/4 of an inch long.

The Flowers: The flowers are listed as males and females. They are both red and borne in separate clusters on the same plant in the spring.

The Fruit: The fruit of the Serbian Spruce is a narrow egg-shaped cone that is a purple brown color. It grows to be about 2 1/2 inches long.

The Twigs: The Serbian Spruce has orange-brown twigs which are slender, hairless, and rough with peg-like bases.

Size: The Serbian Spruce grows about 55 feet up and 20 feet across where it first starts bunching out. It is in the shape of a pyramid.

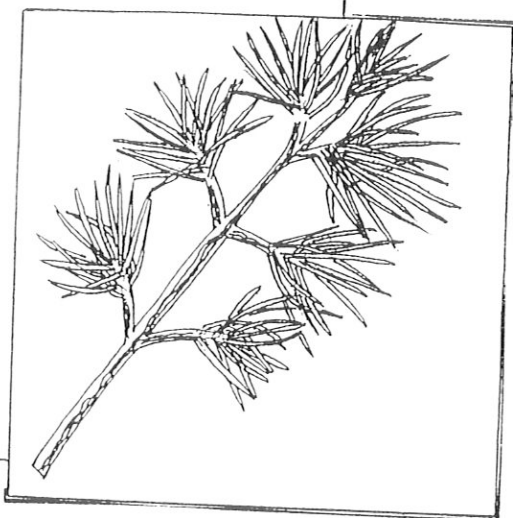
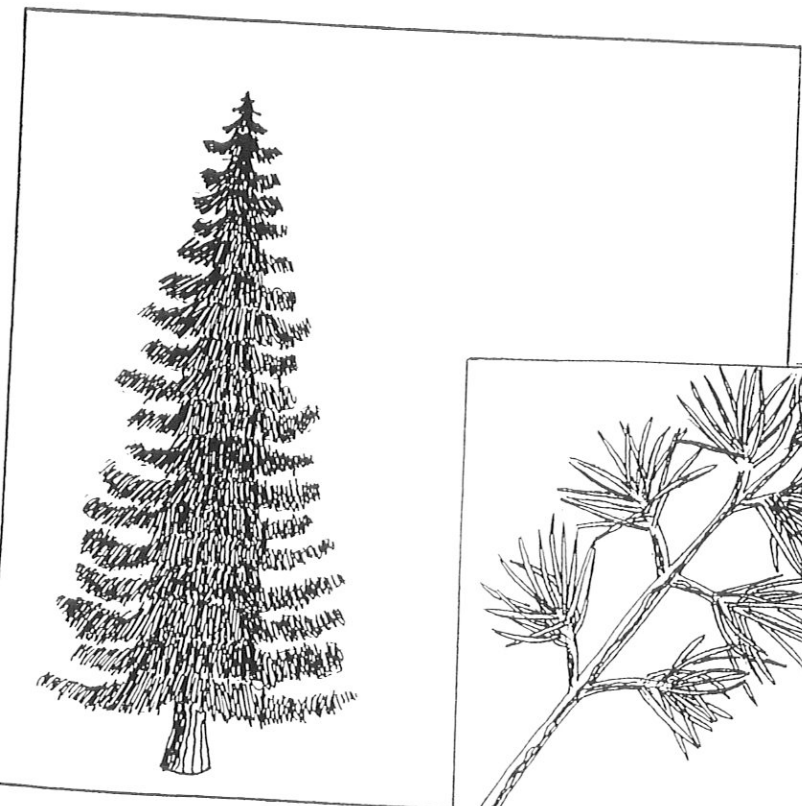
Other Locations: Other locations include Bosnia-Herzegovina.

Other Interesting Facts: The hardiness zone of a Serbian Spruce is 5 to 8. It needs full sun to light shade to grow. It is also adaptable to most kinds of soil, but thrives best in well drained soils.

-Brian

Swiss Stone Pine

Pinus cembra



Location in the Oaks: The Swiss Stone Pine tree can be found to the right of the Deering Avenue gate.

The Bark: The bark of the Swiss Stone Pine tree is dark gray and dark brown. The bark is also very scaly.

The Needles: The needles on a Swiss Stone Pine tree grow to about three and a half inches. They grow in clusters of five and are green on the outside and bluish-grey on the inside.

The Flowers: There are two different kinds of flowers. The male flowers are purple and then open into yellow, and the female flowers are purple and open into red.

The Fruit: The fruit looks like an egg-shaped cone. It can grow up to three inches long. It starts out a purplish-blue color and ends up a reddish-brown color. It never fully opens.

The Twigs: The twigs are long and thin, with bushels of needles sticking out.

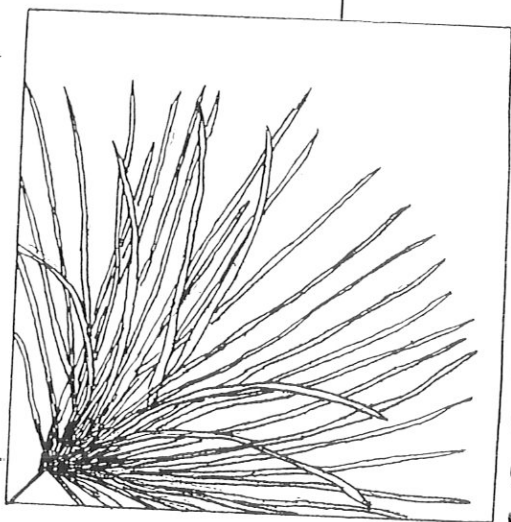
Size: The average height of the tree is about sixty-five feet. The span across the entire tree (including the branches) is about twenty feet.

Other Locations: Swiss Stone Pine trees are typically found in mountain ranges. They are mostly found in the Alps region of Europe and Asia.

-Will

White Pine

Pinus strobus



Location in the Oaks: You will find one White Pine near the Rose Garden. Another location for the White Pine is southwest of the Barking Squirrel.

The Bark: The bark of a young White Pine is smooth and thin. It is green with a reddish brown tinge. The bark of an old White Pine is from 1-2 inches thick, very dark, and divided into broad, flat ridges.

The Leaves: The leaves of a White Pine are needle-like,

slender, very flexible, and from 3-5 inches long. They grow in clusters of five. The outer surface is grayish-green and the inner surface is gray-white.

The Wood: The wood is light in color and durable, except when in contact with the soil. It is soft, not heavy, and is easily worked.

The Flowers: The male flowers are yellow, and the female flowers are pink. They are in separate clusters on the young shoots in the early summer.

The Fruit: The fruit of a White Pine is a cylindrical, curved, hanging cone that grows from 4-6 inches in length. The color of the cone is green, ripening to pale brown. It is borne on a long stalk. It takes the cone two years to mature. The cone opens to discharge the seed shortly after ripening in late August or September.

The Twigs: The twigs on a White Pine are dark brown, very stout, and end with their needle-like buds.

Size: The height of a White Pine is from 90-164 ft. tall. The shape is narrowly conical, and the diameter of the trunk is from 3-4 ft. or more.

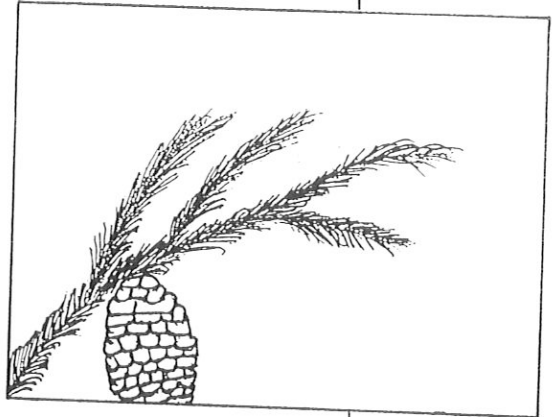
Other Locations: The native region of the White Pine is Eastern North America and Canada.

Other Interesting Facts: The White Pine is also known as Soft Pine, Pumpkin Pine, Sapling Pine, and Weymouth Pine. The best development of White Pines is in Maine. Because of the large number of White Pines in Maine, it is known as the Pine Tree State.

-Malt

White Spruce

Picea glauca



The Bark: The bark of a White Spruce tree is scaly and grayish brown.

The Leaves: The leaves of this tree are four sided, stiff and sharp. They are arranged in a spiral on the twigs. The leaves do not smell good when they are young, but more pleasant when they are older.

The Wood: The White Spruce wood is used commercially.

The Flowers: The only flowers that the White Spruce have are pine cones. The pine cones are brown and stiff.

The Twigs: The twigs have no hairs on them.

Size: The White Spruce Tree can grow up to 40 meters in height and 1 meter in diameter.

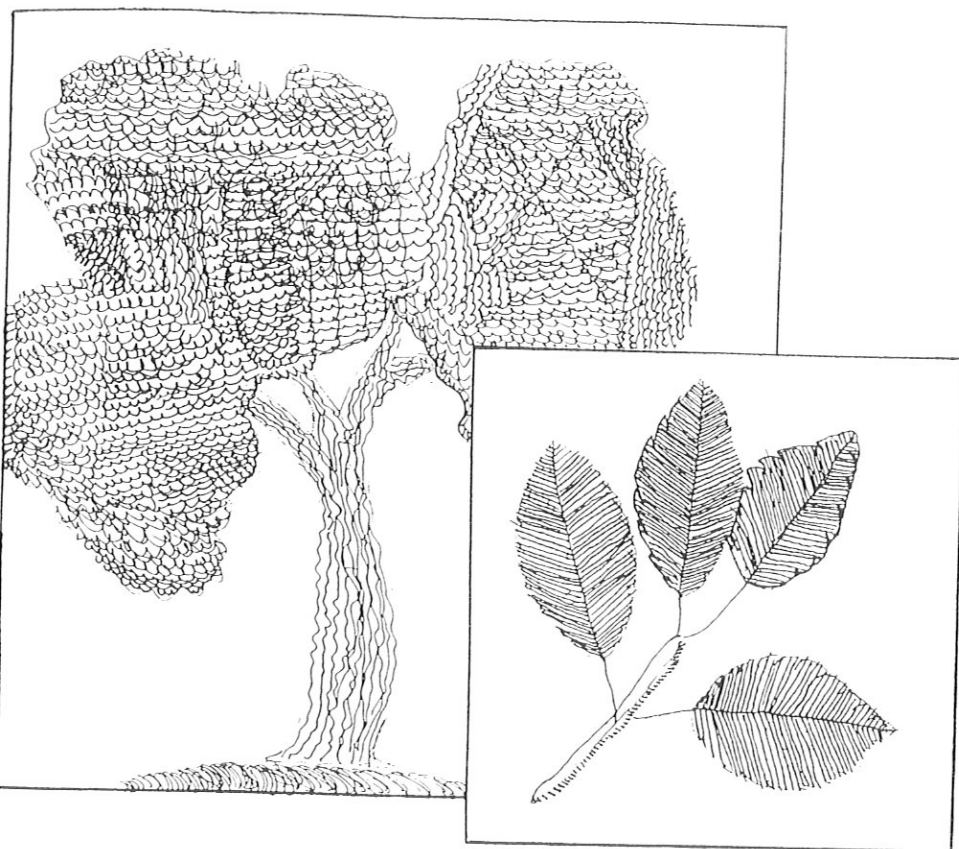
Other Locations: The White Spruce tree can be found through the interior of British Columbia. It grows from sea level to mid-elevations. This tree can grow in a variety of environments. It is often found with aspen, birch, and willow.

Other Interesting Facts: The White Spruce is a large tree with a narrow crown. The leaves can be blue. It grows throughout Maine and Canada.

-Derek

American Apple Tree

Genus malus



Location in the Oaks: This tree can be found across the street from the Barking Squirrel, near the rose bushes.

The Bark: The bark is rough, brown, scaly, and after a year the bark starts to break off.

The Leaves: The leaves of an apple tree are fine-toothed. They are simple and ovate.

The Wood: The wood of an apple tree is hard, light, and sometimes smooth.

The Flowers: The flowers are bisexual. The flowers are usually white and are in clusters of four to seven.

The Fruit: The fruit is sweet and edible. The fruit is also a pome (a false fruit). They are green or yellow to red and have five leathery chambers (loculi). Each fruit normally contains two seeds.

The Twigs: The twigs are slightly stout, hairy, and reddish-brown.

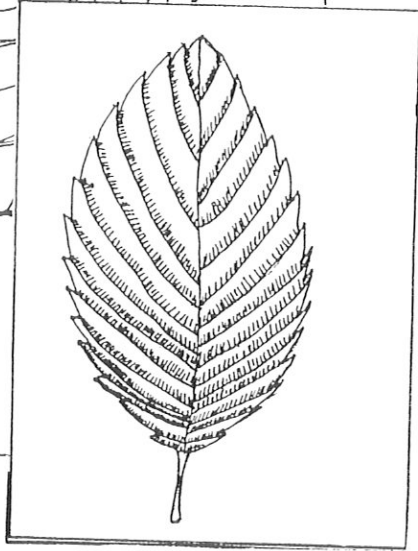
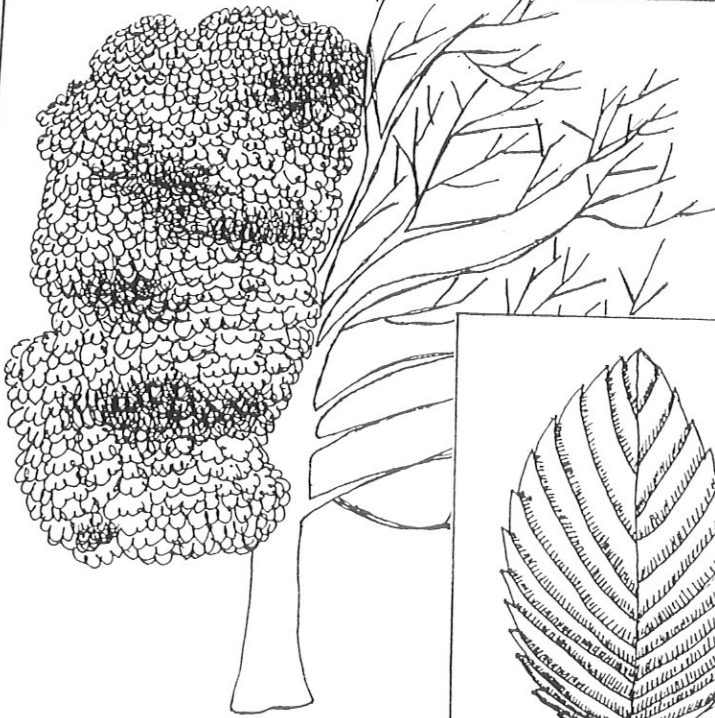
Size: An apple tree can grow to be about twenty to thirty feet tall.

Other Interesting Facts : The apple tree is often found in fields. They are also food to some animals that like taking the apples off the tree.

-Ashlee

American Beech Tree

Fagus grandifolia



Location in the Oaks: The American Beech can be found south of the Rose Garden

The Bark: The bark is light grayish-blue. It is smooth and commonly blotched.

The Leaves: The leaves are two to six inches long, and one to two and a half inches wide. They have large teeth among the margins. The crown is round and broad. The leaves are a glossy green color. In the fall they turn yellow and then

brown. They can sometimes stay on the tree during the winter.

The Wood: The wood is tough and strong. It is used for flooring and to build furniture.

The Flowers: There are male and female flowers that grow on the same tree. Usually male flowers bloom on a different tree, but on the American Beech tree the male and female flowers bloom on the same tree. Male flowers hang in clusters below the branches in yellowish balls. Female flowers are very small, surrounded by reddish scales.

The Fruit: The husk is 3/4 inches long. Enclosed are one to three small edible nuts.

Size: The American Beech Tree grows to be 60 to 100 feet tall. It is 2 to 3 feet wide.

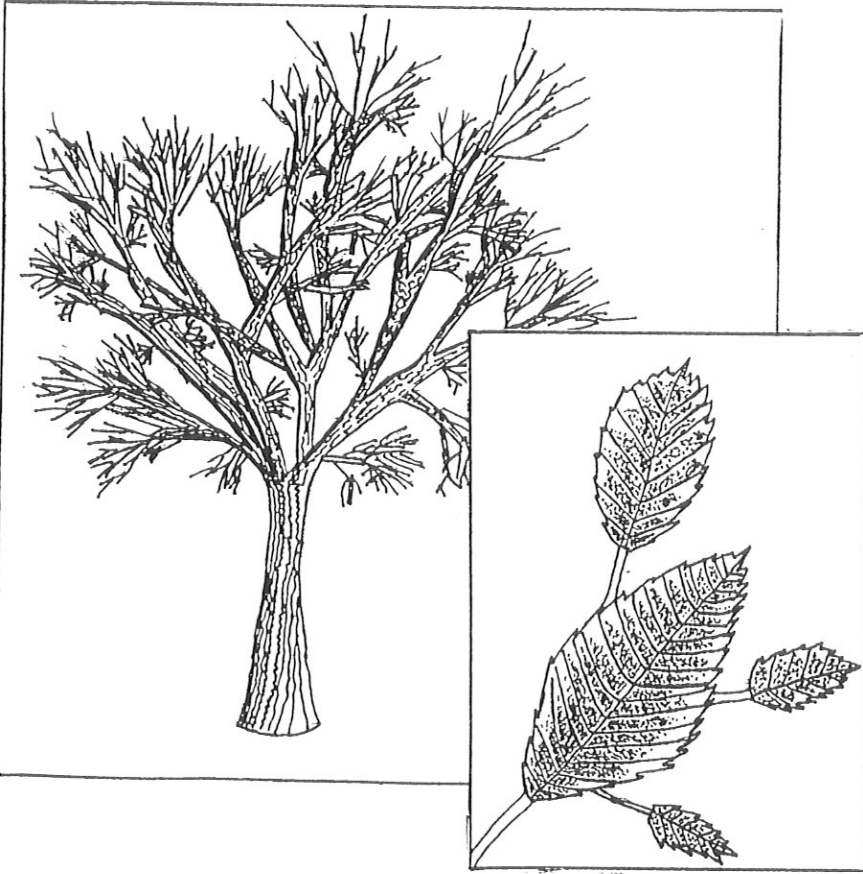
Other Location: You can find American Beech trees in woods with rich soil.

Other Interesting Facts: The tallest American Beech tree was found in Ohio. It grew to be 130 feet tall. Birds, deer, turkey, bears and squirrels feed on the nuts. The branches spread horizontally. The roots spread wide. The American Beech grows best in soils with large amounts of surface moisture.

- Liz

American Elm

Ulmus americana L.



Location in the Oaks: The few American Elms located in Deering Oaks are southeast of the Rose Garden. The city believes that at one time there may have been as many as twenty to thirty American Elms in Deering Oaks. During the mid sixties (1965-1967) the tree disease known as Dutch Elm ravaged most of Maine, and as a result almost 92% of all the elm trees in the state had to be cut down.

The Bark: The bark of an American Elm is grayish-brown

to light gray. The bark turns into deeply furrowed, forking, scaly ridges.

The Leaves: The leaves of the American Elm are elliptical, abruptly long pointed, and doubly saw-toothed. The leaves have a base that is rounded with both sides unequal, and have many straight parallel side veins, which are very thin. The leaves are dark-green, hairless or slightly rough above, paler with soft hairs beneath. The leaves turn bright yellow in the fall.

The Wood: The wood of the American Elm is light brown, tough, and hard. The American Elm's wood is used for making wooden barrels, farm tools, fence posts, hockey-sticks, furniture, and boats.

The Flowers: The flowers of the American Elm are greenish, about .33 mm wide, and are usually clustered along the American Elm's twigs in early spring.

The Fruit: The fruit of the American Elm contains flat, one sided keys called "samaras" which are deeply notched with points that curve inward.

Size: The American Elm can reach a maximum height of 120 feet. However, the average height of 100 feet is more likely. The American Elm also has an average diameter of 4 feet.

Other Locations: The American Elm can be found in Saskatchewan and in Florida.

Other Interesting Facts: The American Elm is regarded as a handsome and graceful tree. The American Elm is usually wider than it is tall, giving it a somewhat comical appearance.

-Alexander

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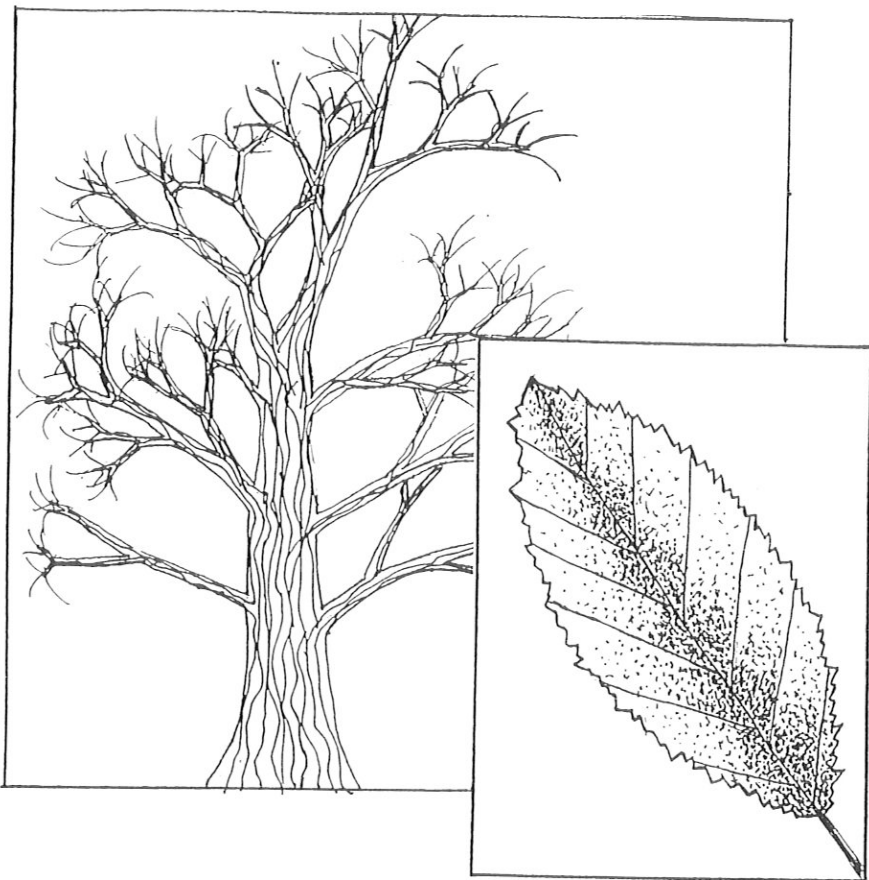
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-Alexander

American Hornbeam

Carpinus caroliniana



Location In The Oaks: The American Hornbeam is located on the edge of the road near the Barking Squirrel.

The Bark: The bark of the American Hornbeam is blue-gray, has grooves, and is thin and smooth.

The Leaves: The leaves of the American Hornbeam are elliptical, and are sometimes mistaken for birch leaves. They are 2 to 4 inches long and 1 to 2 inches wide. The leaves are

dull green above and yellow-green below. They turn orange to red in autumn.

The Wood: The wood of the American Hornbeam is short, muscular, and smooth. It's not particularly useful, but is sometimes used to make levers, hand tools, and fuel.

The Flowers: There are two types of flowers on the American Hornbeam. The male is one and a half inches long and yellowish. The females are small, green, and are borne separately on the same plant in spring.

The Fruit: The fruit is a nut with two or three lobed, green, bracts. They are clustered catkins three inches long.

The Twigs: The twigs are brown, slender, shiny, reddish-brown, and slightly zigzag. They have many small, pale lenticels.

Size: The American Hornbeam grows up to 30 to 40 feet tall, and the trunk can be 1 to 2 feet in diameter.

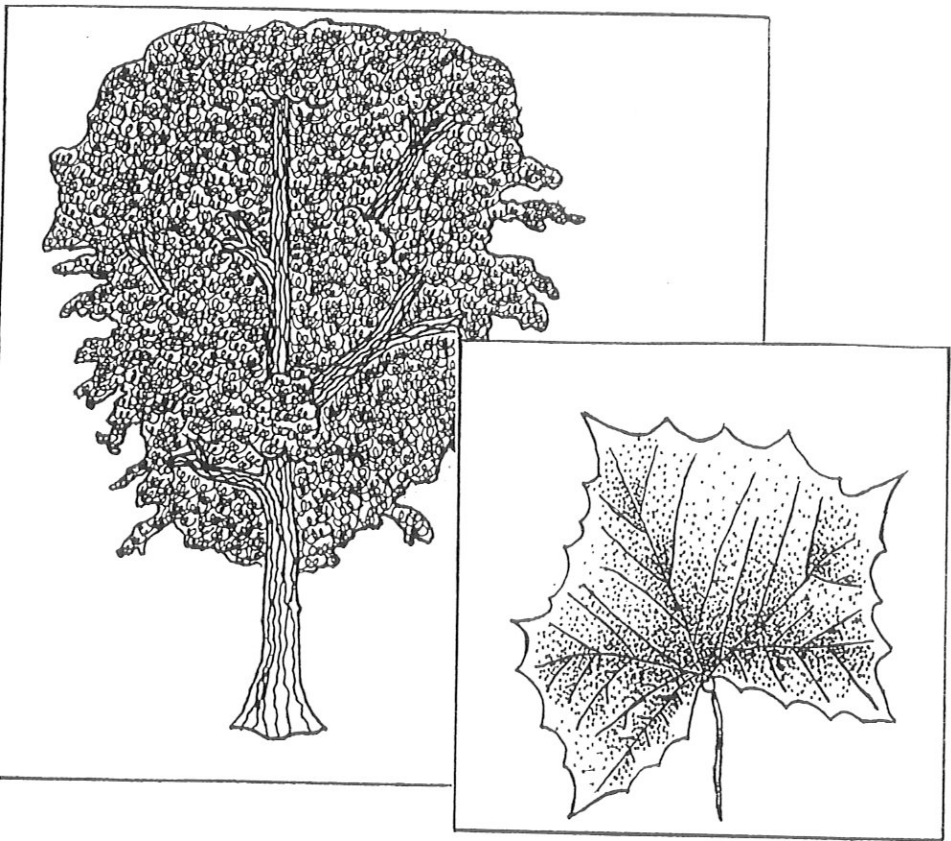
Other Locations: The American Hornbeam can also be found in moist woods, riverbanks, and swamps.

Other Interesting Facts: It grows slowly and best in rich, moist soil.

-Caroline

American Sycamore

Platanus occidentalis



Location in the Oaks: The Sycamore is located near the Rose Garden.

The Bark: The Bark is rough, flaky, and grayish-brown in color. During the winter, many of the younger Sycamores' bark pieces flake off, leaving the tree a prime target for disease and infections.

The Leaves: The leaves grow on alternate sides of the twig. They are broad and grow to be 4 to 8 inches wide and 3 to 5

inches long. The leaves have jagged toothed edges. The American Sycamore is a deciduous tree.

The Wood: The wood is heavy and hard. It is coarsely grained and is very hard to split. It is used for furniture, interior siding, and musical instruments.

The Flowers: The flowers of the Sycamore are very small. The males are yellow and the females are red. The flowers grow in small groups-males in one group, females in another on one tree.

The Fruit: The fruit is brown and grows in a round dense cluster, about one inch across.

The Twigs: The twigs are thin, zig-zagged, yellowish-brown, and have smooth bark.

Size: The average height of a Sycamore tree is 120 feet. The diameter is five to seven feet.

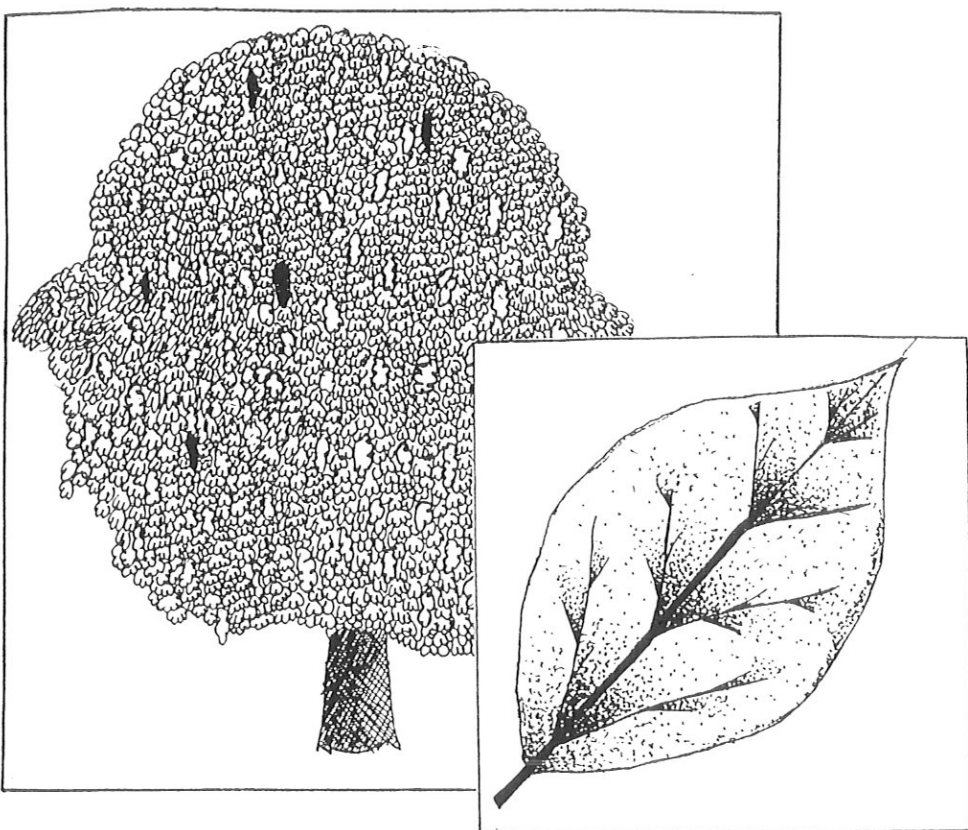
Other Locations: American Sycamores grow all around eastern North America.

Other Interesting Facts: American Sycamores are also known as Button Hole, Button Wood, and American Plane Tree.

-Thomas C.

American Yellowwood

Cladrastic lutea



Location in the Oaks: Two American Yellowwoods are located near the rose garden.

The Bark: The bark is very thin, gray (sometimes brown), and is very smooth. It somewhat resembles a beech tree.

The Leaves: The leaves of the American Yellowwood can grow up to 13 inches long and 2 1/2 inches wide, but are usually about 6 inches long. They have a pointed tip, and are covered with short silky hairs.

The Wood: The wood of an American Yellowwood is very brittle, and the trees are often damaged in storms.

The Flowers: The flowers of an American Yellowwood are white and pink. They grow in panicles that can be as small as 8 inches, or can get as big as 15 inches. These beautiful flowers bloom in late May and all of June. After a couple of months the flowers turn into long, light brown pods. These pods can be as small as 3 inches or as big as 5 inches.

The Fruit: The fruit has short-stalked, compressed seeds. The seeds are 3 to 4 cm long, and there are 4 to 6 in a pod. The fruit is dark brown.

The Twigs: The twigs are slender, and somewhat zigzag. The twigs are brown. Each twig can have from 3 to 5 panicles of flowers.

Size: The mighty American Yellowwood can grow up to a mammoth 80 ft. tall and can be up to 40 to 55 ft. wide at the base.

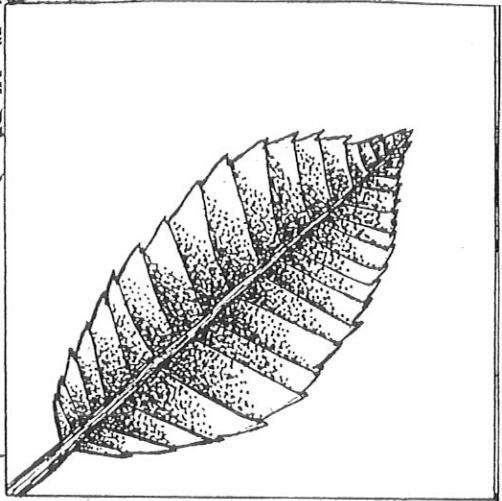
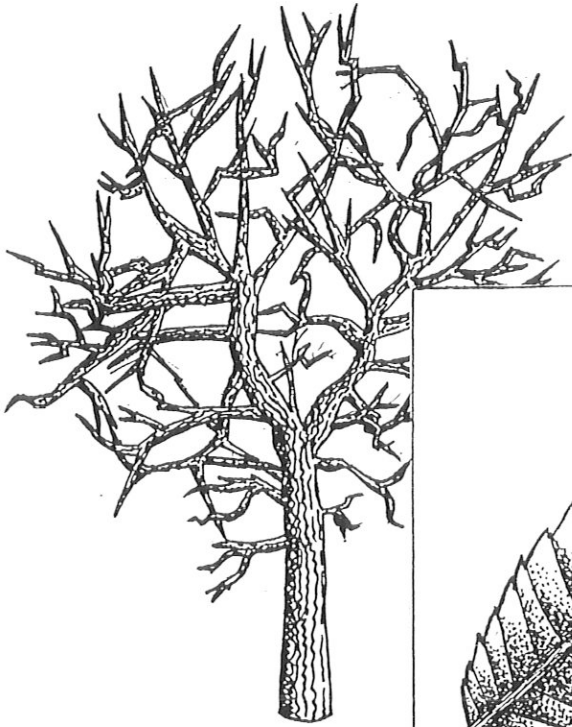
Other Locations: The American Yellowwood is native to North Carolina, Tennessee, Kentucky, Alabama, and Missouri, but this tree can be planted almost anywhere in the world.

Other Interesting Facts: There are four species of the Yellowwood. Two of them can be found in China, one can be found in Japan, and the other in America. An unusual thing about a Yellowwood tree is that it can grow in almost any soil.

-Daniel

Black Cherry

Prunus serotina



Location in the Oaks: There is only one Black Cherry in Deering Oaks. This tree is located just north of the rose garden on the east side of the Oaks.

The Bark: The bark of a Black Cherry is usually dark gray and smooth, with horizontal lines. If it is an older tree, the bark may become irregularly fissured and scaly, exposing reddish-brown inner bark. The bark of these trees is usually bitter and aromatic.

The Leaves: Black Cherry leaves are usually about 2 to 5 inches long, and 1 1/2 to 2 inches wide. These leaves are elliptical and narrow. They are a shiny, dark green above, and are light green and hairy underneath. These leaves turn yellow to reddish brown in autumn.

The Wood: The wood of a Black Cherry tree is very valuable and is used for furniture, paneling, scientific instrument handles, and children's toys.

The Flowers: The flowers of this tree are white and hang in very dense, drooping spikes. Each flower is about 3/4 of an inch in diameter, and has 5 rounded petals. They flower in late spring.

The Fruit: The fruit of this tree is a cherry, approximately 3/4 of an inch in diameter. The skin is dark red and can be almost blackish in color. The cherries are slightly bitter but are edible. This tree's cherries mature in late summer and are often used to make wine or jelly.

Size: These trees are usually 40 to 60 feet tall and 2 feet in diameter. However, depending on the tree's age, it may be as much as 80 feet in height and 3 feet in diameter. These trees usually have an irregular, oblong crown.

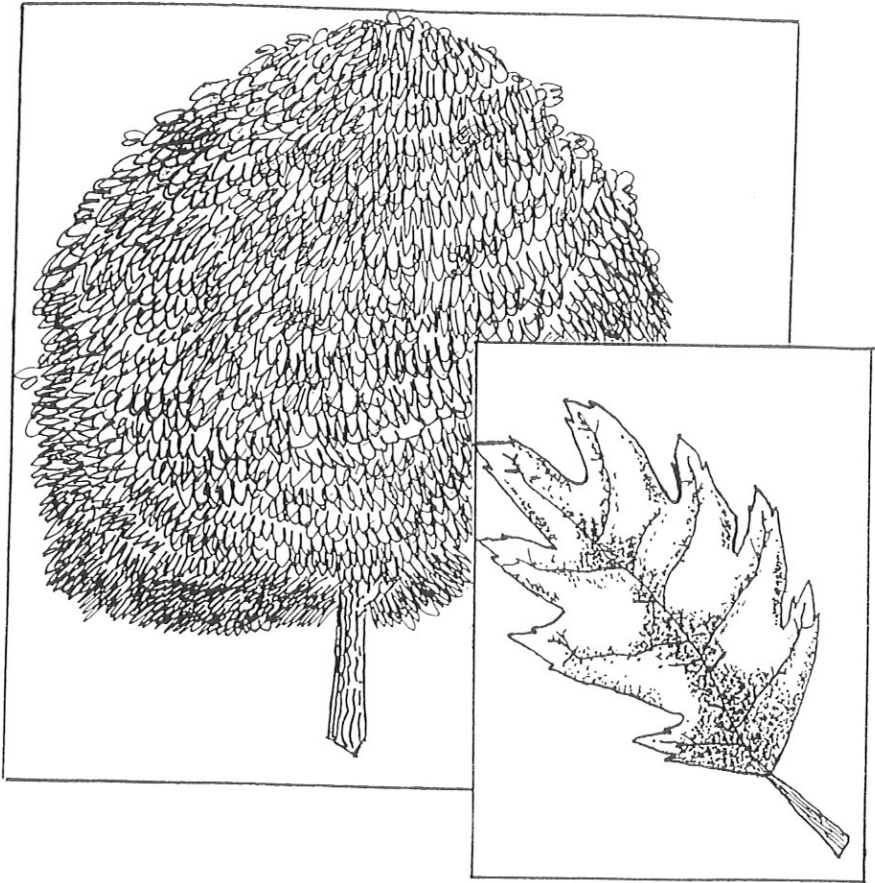
Other Locations: These trees grow from southern Quebec and Nova Scotia, south to Florida and eastern Texas, north to Minnesota.

Other Interesting Facts: Wild Cherry Syrup, a cough medicine, is obtained from the bark of the Black Cherry tree.

-Jil

Black Oak

Quercus velutina Lam



The Bark: The bark of a Black Oak is light black to a darkish gray. There are longitudinal ridges in it. The bark is also furrowed.

Leaves: The leaves of a Black Oak tree are usually seven lobed. The leaves are broad. They are thick and leathery. The Black Oak trees leaves usually widen at the tip. This tree has many different types of leaves. The leaves are ovate to

elliptical. The leaves grow to ten inches long and six inches across.

Wood: The wood of a Black Oak is heavy, hard, and strong. It is used for general construction, interior finish and furniture.

Flowers: The males are a yellowish-green color. They are drooping catkins. The females grow separately on the same plant in late spring.

Fruit: The acorn of a Black Oak tree has an ovoid shape. The acorn of a Black Oak tree can be 0.5 to 0.8 of an inch long. The acorns have deep bowl-like scaly cups.

Twigs: The twigs are rough and sometimes a little mossy. In the winter the twigs are rather stout and reddish .

Size: The Black Oak tree grows from fifty to eighty feet tall. The Black Oak tree can be one to three feet in diameter.

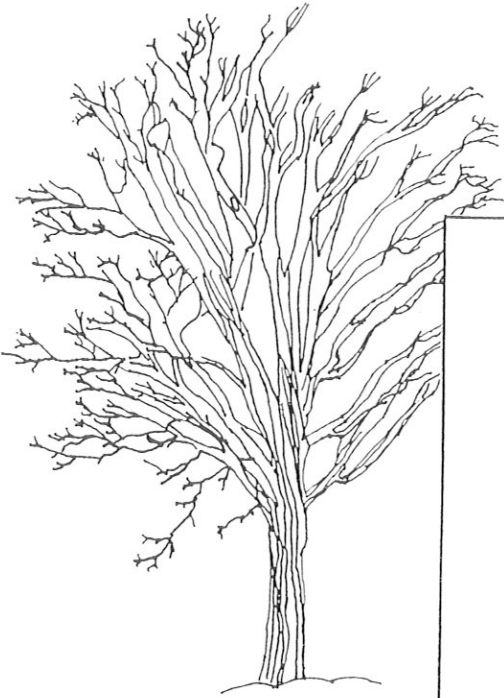
Other Locations: The Black Oak is found in North America and mostly in dry places.

Other Interesting Facts: The Black Oak tree's habitat is dry woods or sand dunes.

-Matt

Bur Oak

Quercus macrocarpa



The Bark: The bark is light gray, very thick, and rough. The bark is deeply furrowed with ridges, and broken into plate-like scales.

The Leaves: The middle of the leaf is cut nearly to the midrib. The upper half of the leaf is deeply lobed. Leaves and acorns are both distinctive. Leaves are up to ten inches long.

The Wood: The wood on this oak is very durable, hard, heavy, and very strong. It's used for everything except plywood, furniture, and flooring.

The Fruit: An acorn is the fruit on this tree. The acorns are two inches long, and look like enclosed cups. The cups are rimmed with a fringe of scales.

The Twigs: The twigs are rather stout, yellowish, and sometimes a light brownish color. They are narrow with ridges.

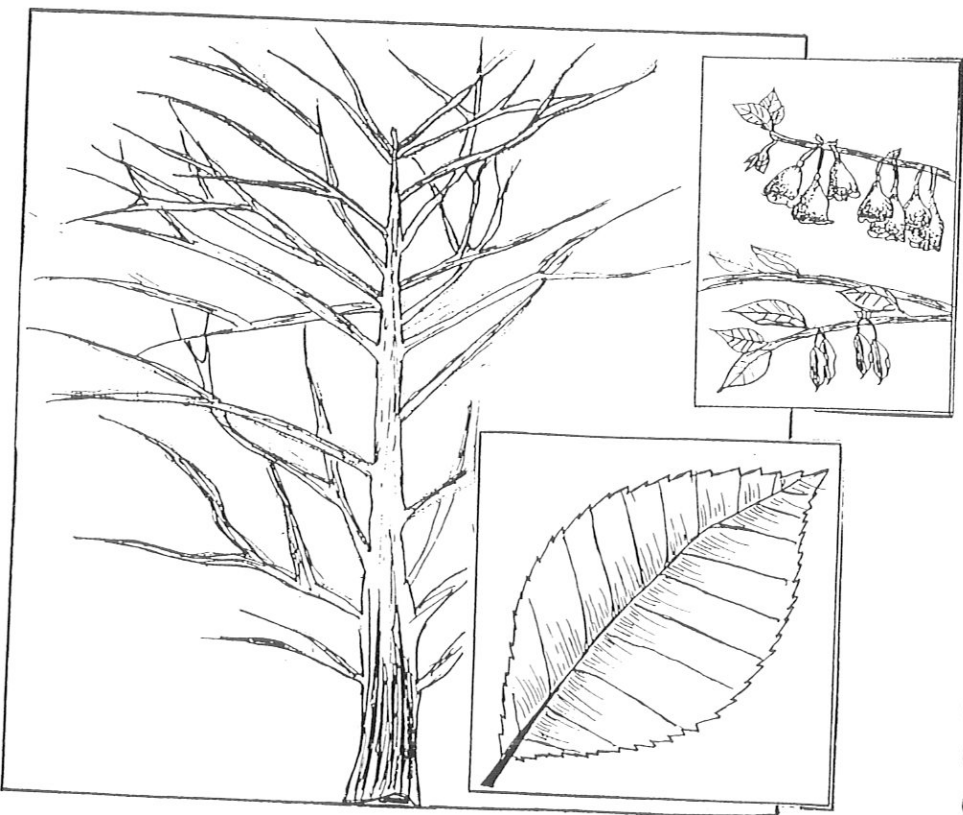
Size: The size of the Bur Oak is commonly sixty to eighty feet tall, and the trunk of the tree is two to four feet wide. The branches on this tree can be as short as five feet and as long as twenty five feet!

Other Locations: You can find the Bur Oak in the woods, near sandy soil, and swamp marshes on the coastal plain.

Josh

Carolina Silverbell

Halesia carolina L.



The Bark: The bark of the Carolina Silverbell is reddish-brown, with broad and scaly ridges.

The Leaves: The leaf of the Carolina Silverbell is 3 to 6 inches long and is pointy. The color of the leaf is dull green, and it is hairless on the top. It is covered with white hairs when it is young. The leaves turn yellow in autumn.

The Wood: The wood of the Carolina Silverbell tree is used for lumber, but because of limited supply it is not used often.

The Flowers: The Carolina Silverbell has bell-shaped flowers. They are 1/2 of an inch long with four lobed white flowers, which sometimes appear slightly pink. It has two to five clusters of flowers that hang on the twigs of the tree. The flowers open in mid-spring.

The Fruit: The fruit of the Carolina Silverbell has a pod-like shape from 1 to 2 inches long. It has four long broad wings which are pointed. The color of the fruit is dark brown and the inside is very dry. The fruit contains 1 to 3 seeds which remain closed and attached during the winter.

The Twigs: The twigs of the Carolina Silverbell are brown and slender. When they are young their hairs are shaped like stars.

Size: The height of the Carolina Silverbell is about 30 feet tall.

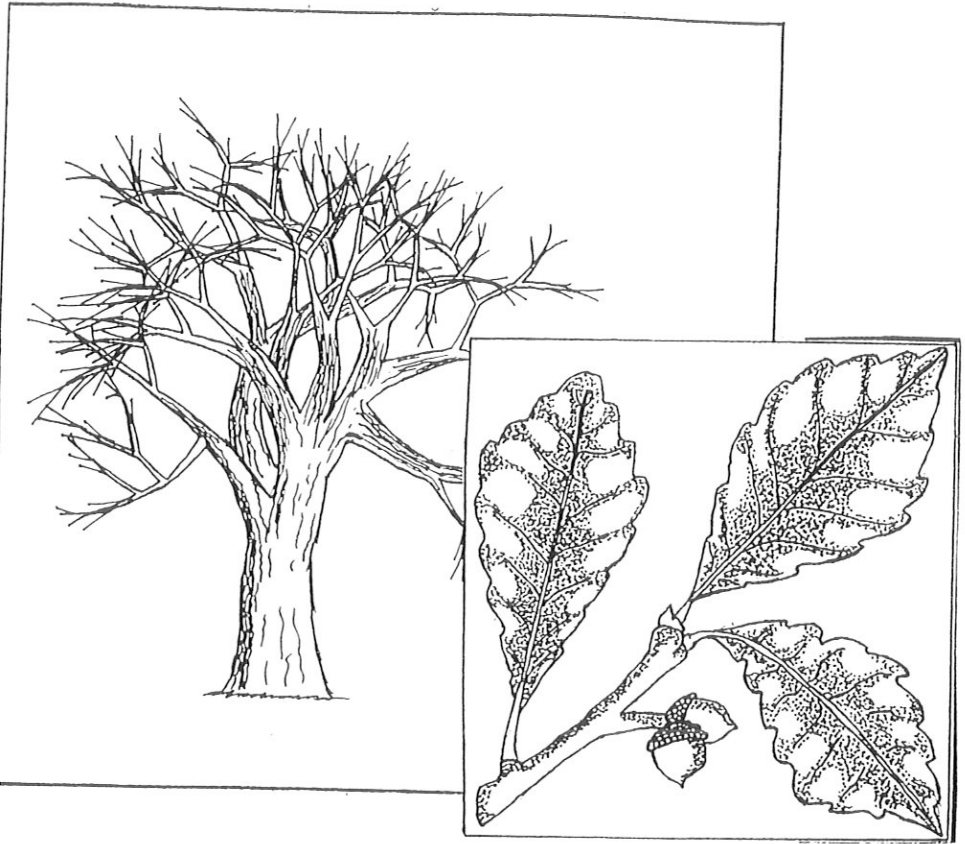
Other Location: Carolina Silverbells can be found in South Carolina to Florida. They are also located in the Appalachian Mountains and Great Smoky National Park and in Illinois.

Other Interesting Facts: The tree is mentioned in a Christmas Carol called "Silverbells." The Carolina Silverbell is known as the "Mountain Silverbell" in the Appalachians.

-Thuong

Chestnut Oak

Quercus prinus



Location in the Oaks: Chestnut Oaks are located right outside of the southeastern side of the Oak Grove.

The Bark: The color of the bark is dark brown to black. It is deeply rigid, and furrowed. It's the most valuable bark in the oak family. It is used in tanning leather.

The Leaves: The leaves are 4 to 8 inches long, 1 1/2 to 3 inches wide with 10 to 16 large rounded teeth. They are

deciduous and turn yellow in the fall. In the summer, they are shiny green above and dull gray-green underneath.

The Wood: The wood is heavy, hard, strong, close grained and deeply rigid. It is sometimes marked as White Oak lumber. It is used for railroad ties, posts, and fuel.

The Fruit: The fruit are short stemmed oval acorns 1 to 1.5 inches long with the lower third covered by a thin scaly cup. They are the most important source of mast along our mountain ranges. These acorns are a valuable food for the Gray Squirrel, Black Bear, White-tailed Deer, Wild Turkey, and other wildlife.

The Twigs: The twigs are rather stout and have varying colors such as light orange-brown to reddish-brown. The twigs are cone shaped, pointed, and often downy towards the tip.

Size: They grow 50 to 60 feet tall, and 2 to 3 feet in diameter.

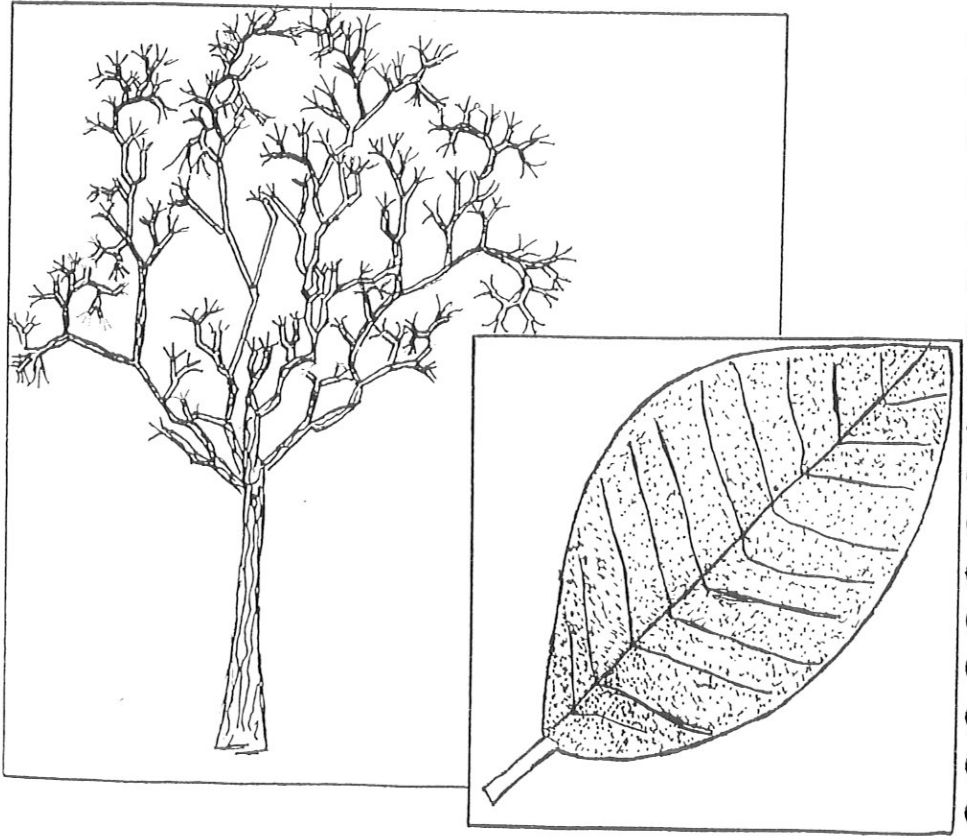
Other locations: Chestnut Oaks grow in many places such as Southern Maine, Southern Ontario, Ohio Valley, Tennessee, Georgia, Alabama, and mostly along the Appalachian Mountains.

Other Interesting Facts: Chestnut Oaks are also referred to as Rock Oaks because they prefer dry rocky soil. The yearly growth rate is 12 to 18 inches. They also have a spread of 65 feet.

-Anthony

Cucumber Magnolia

Magnolia acuminata L.



Location in the Oaks: A sapling Cucumber Magnolia will be planted near Park Ave.

The Bark: Cucumber Magnolias have rough, dark brown bark. As this magnolia gets older, this bark gets rougher, which shows its age.

The Leaves: The Cucumber Magnolia's leaves are broadly oval to ovate in the outline. The leaves are from 5 inches to 10 inches long and from 3 to 6 inches wide.

The Flowers: These flowers are about two inches long. They have three sepals and six greenish-yellow petals. These flowers can be canary yellow or orange.

The Wood: The Cucumber Magnolia has a light, soft kind of wood that is also durable. The wood is mostly used for furniture, interior finishes, siding and wooden ware. The trunk of this tree is straight.

The Fruit: The knobby, green fruit clusters are about two-three inches in length.

The Twigs: The twigs are moderately stout and smooth. These twigs are mostly glossy. They are an olive-brown color to a pale reddish-brown color, with small pale lenticels and they have prominent stipule scars around these leaves at the nodes.

The Size: The size of an average Cucumber Magnolia is about 60-90 feet tall with the circumference of the tree ranging from 2-4 feet.

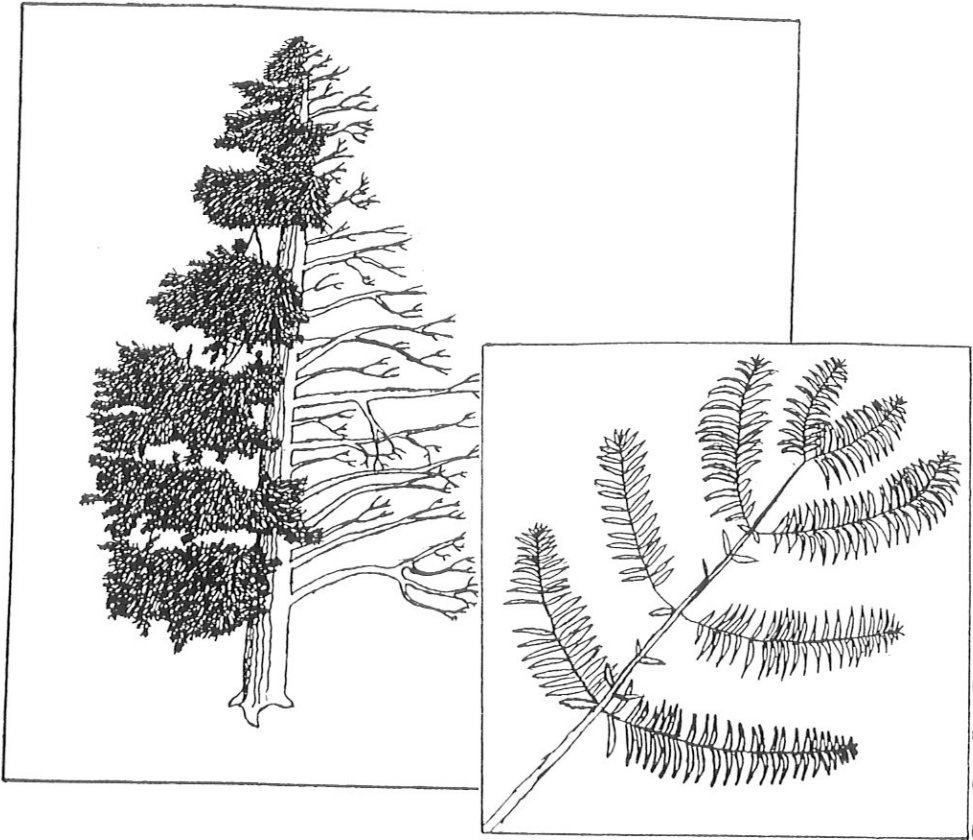
Other Locations: The Cucumber Magnolia is found in Ontario, New York, down though Florida, around Louisiana and Missouri.

Other Interesting Facts: The buds are pale greenish and densely covered with silky hairs. These buds are just about 3/4 of an inch long. This tree is also known as Cucumber Tree and Mountain Magnolia. The Cucumber Magnolia is a tree that grows very fast

-Dean

Dawn Redwood

Metasequoia glyptostroboides



Location in the Oaks: The Dawn Redwood is located near the Deering Avenue entrance.

The Bark: The color of the tree's bark ranges from orange-brown to red-brown. The bark peels vertically in long stringy flakes.

The Needles: The needles are the most interesting of all the Dawn Redwood's features. Although most needle-covered trees are conifers, which mean they keep their leaves all year

long, it is not the same with the Dawn Redwood. Instead, it is deciduous, which means it loses its needles during the winter. The needles grow up to 1 inch long and are soft and flattened. The needles emerge early in the year. They are pale green, and become dark green later on. In autumn they become orange, yellow, or pink.

The Wood: Its wood is formed in long, thick strips going in a vertical direction, just as the bark does.

The Flowers: The tree's flowers are separated in clusters on young shoots; males in one bunch, females in the other. The male flowers are yellow, while the females are green.

The Fruit: The cone is about 1 inch long. It is green when unripened, and brown when ripened.

The Twig: The twig of the Dawn Redwood is covered with a feathery foliage of highly dense needles.

Size: Unlike its close relative, the California Redwood, the Dawn Redwood grows to only 130 feet tall, a smaller height compared to that of the California Redwood. Its spread is about 40 feet.

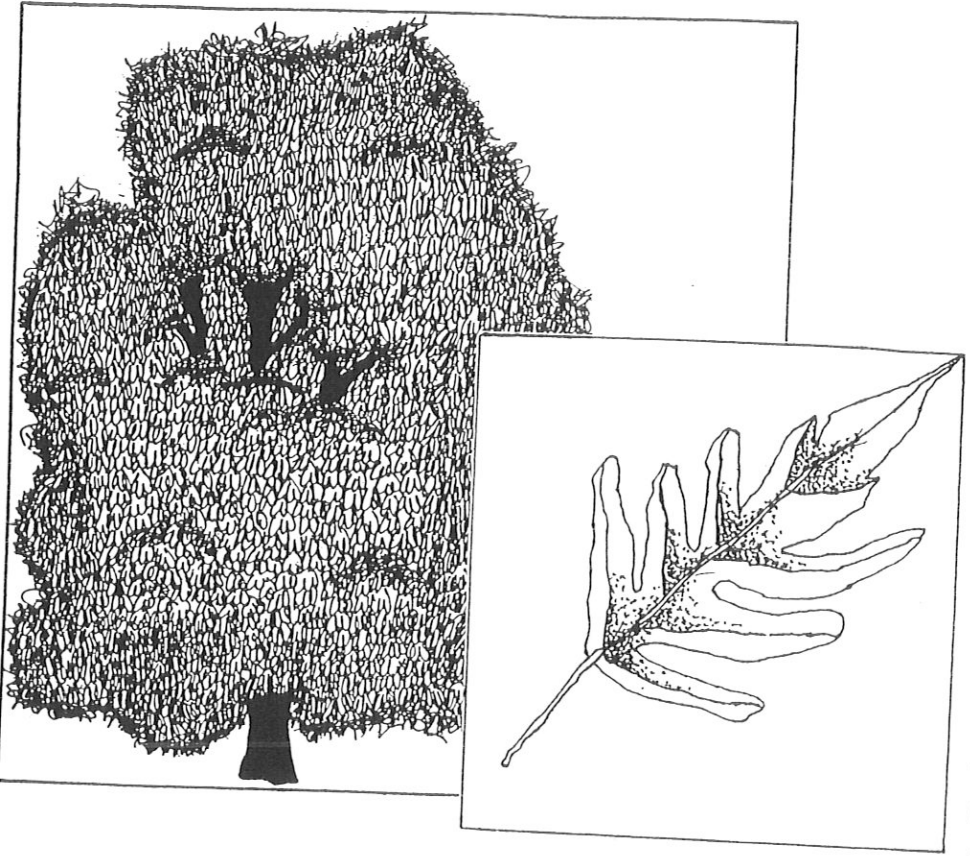
Other Locations: You will also find this tree in southwest China. It has spread throughout the world since it was discovered there in 1945.

Other Interesting Facts: The tree was thought to be extinct and was studied through fossils until a live Dawn Redwood was discovered in 1945 in an isolated valley in southwest China. The Dawn Redwood has been around since the Cretaceous Period (136 million years ago).

-Dana

European Beech

Fagus sylvatica



The Bark : In the winter the bark is the color of an elephant's hide. It can also be very smooth. In the spring, it is a light brown and in summer it is a really dark brown.

The Leaves: When the tree first buds the leaves are a coppery-purple. As the tree matures the leaves become a dark maroon-purple. The leaves are textured and very delicate. They are like a fern but not part of the fern family. The leaves are elliptical in shape with a wide spread of toothed margins,

making them easy to identify. Beech tree leaves grow from 2 to 5 inches long and 1 to 3 inches wide. Because of the sun in the spring, the leaves turn to a nice dark green and then back to the purple in the summer and winter. It is a great sight to look at because of its beautiful green foliage. The veins on the leaves are very hairy.

The Flowers: The flowers emerge at the same time as the leaves do. They are yellow-green in color and long stemmed. They produce edible nuts covered with a husk and spines.

The Twigs: The size of the twigs can grow from 50 to 60 feet long depending on the age of the tree. The lowest branches will touch the ground most of the time.

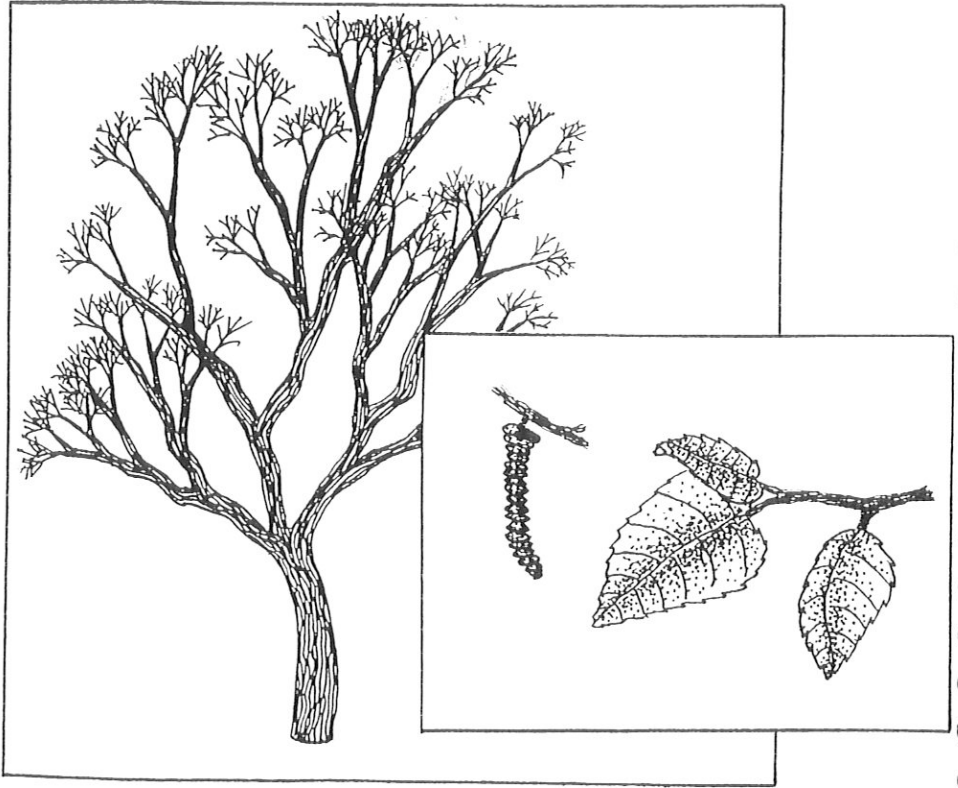
Size: The tree itself can grow from 45 to 100 feet tall and the canopy can grow from 35 to 75 feet wide.

Other Interesting Facts: The Beech family grows very slowly. In order to live they need sunny and moist locations with light soil. They need a lot of space and can live to be about 250 years old. The oldest and largest beech has been found in the United Kingdom. It is 400 years old and 140 feet tall. There are over 600 different species of beech trees. Only one - sixth of these are native to North America. Beeches are deciduous trees. The roots tend to be very shallow so most only live to be 275 years old.

- Rene M.

European Hornbeam

Carpinus betulus



The Bark: The bark of the European Hornbeam is fibrous. It has a color of light brown. It is thin and shreddy. The bark is finely fixed into long narrow scaly ridges.

The Leaves: The European Hornbeam has alternating leaves that are two to five inches long and one to two inches wide. They are saw-toothed and they have many straight parallel side veins. These leaves have hairy stocks. They turn yellow in the autumn.

The Wood: This species is also called iron wood for its extremely hard tough wood, which is used for tool handles, small wooden articles, and fence posts. Although planted as an ornament, the European Hornbeam is growing in utility.

The Flowers: The flowers of the European Hornbeam are tiny and they grow in two and a half inch clusters. These flowers are one half to three-fourths of an inch in length.

The Fruit: The European Hornbeam has fruit that are one and a half to two inches (four to five centimeters) in length and three-fourths to one inch in width. It is cone-like and it hangs in clusters. The cones mature in late summer. They are composed of many flattened, small, egg-shaped, brown nutlets that are papery and sock-like.

Size: This tree grows to be twenty to fifty feet tall. It has a diameter of three tenths of a meter. The spread of the tree is thirty-five feet. Its annual growth rate is less than twelve inches. The form of this tree is rounded.

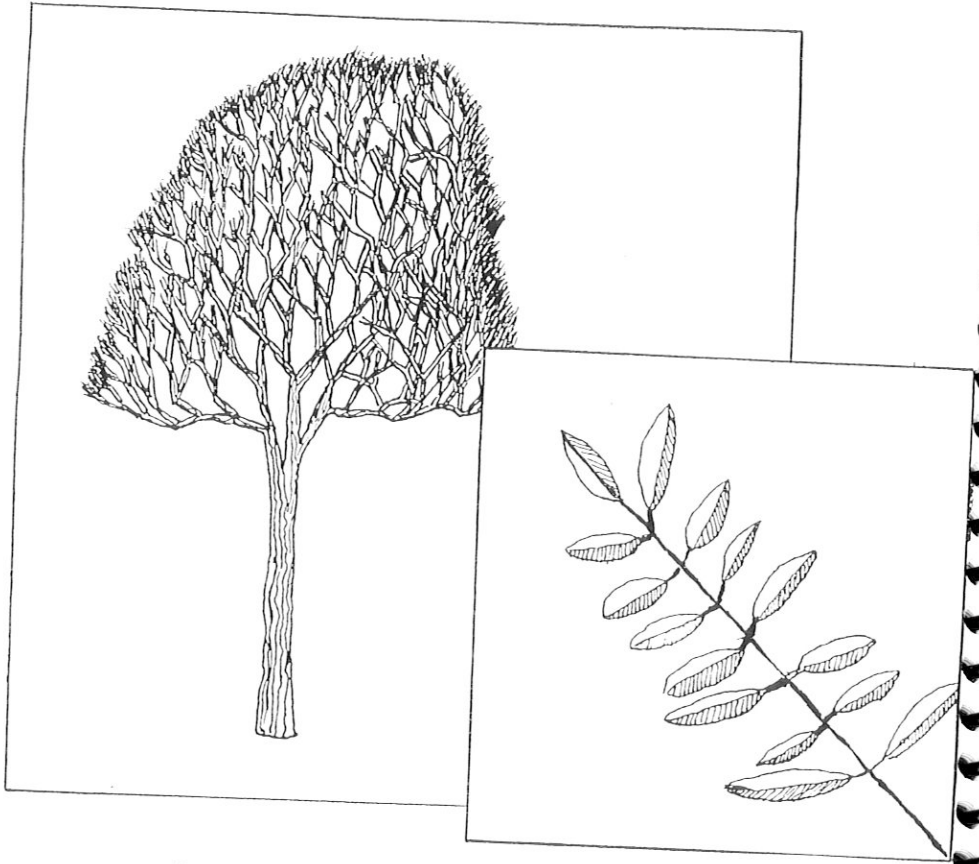
Other Locations: The European Hornbeam lives in the understory of moist hardwood forests. They can also be found in mixed deciduous forests, such as pine, oak, and hickory forests.

Other Interesting Facts: European Hornbeams may be low branched, have yellow fall color, and enough pruning tolerance to be used as a hedge plant. The tree is valued for its adaptable nature, particularly in urban settings. The nutlets and buds are eaten by wildlife such as bobwhites, pheasants, grouse, ptarmigan, deer, and rabbits. Other related European trees were originally used in yoking oxen and were known as yoke-elms or hop hornbeams.

-Jerra

European Mountain Ash

Sorbus aucuparia L.



Location in the Oaks: The Mountain Ash is located southeast of the Barking Squirrel, in the Rose Garden.

The Bark: The bark of the Mountain Ash is a pale gray color. It is usually smooth, but it can become fissured with age. It is said to be very aromatic.

The Leaves: The leaves are of the pinnately compound variety. They are 4 to 8 inches long. The leaves are oblong, or

lance shaped, and are short, pointed, and saw-toothed, except near the base. They have no stalks. There are small white hairs on the bottom, and they are a dull green color on the top.

The Flowers: The flowers are around $\frac{3}{8}$ of an inch wide. They grow in clusters of 70 to 100 flowers. Each cluster is around 3 to 6 inches wide.

The Fruit: Each fruit grows to be about 1.5 inches long. They grow in hanging clusters. They are similar to small apples, having a bright red skin and a bitter pulp. They mature in late spring.

The Twigs: The twigs are short and stout. They are covered with little white hairs in the early stages of their maturity.

Size: The Mountain Ash can grow as tall as 20 to 40 feet and is usually one foot in diameter.

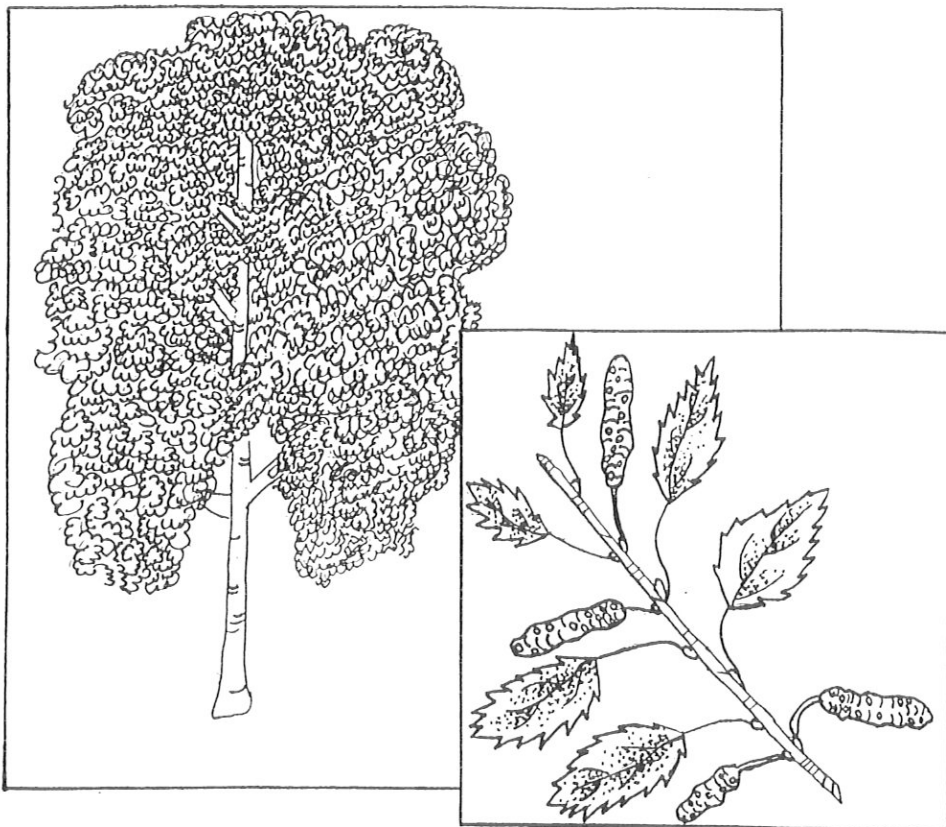
Other Locations: The tree can also be found in Eurasia, Alaska, Southern Canada, Minnesota, and California.

Other Interesting Facts: The Latin species name means "to catch birds," which refers to the former use by fowlers of the sticky fruit which was spread on branches of trees to catch birds.

- Alex

European White Birch

Betula pendula



Location in the Oaks: The European White Birch can be found on the Deering Avenue side, near the stone entrance. There are two European White Birch trees and one Paper Birch in this area.

The Bark: The European White Birch has a smooth, flaky white bark that peels off in strips. At the base, the bark becomes deeply fissured exposing a blackish inner bark.

The Leaves: The European White Birch has egg-shaped or triangular leaves. They are 1 to 3 inches long and 1 to 2

inches wide. These leaves are pointed at the top and almost straight at the base. There are 6 to 9 veins on each side. The buds are shiny with a gummy substance making the leaves feel sticky to the touch in early spring. Once the leaves have lost their sticky texture, they become a dull green on the top and paler beneath. These leaves turn yellow in the fall.

The Wood: The European White Birch produces a hardwood commercially valuable in Europe.

The Flowers: In the early spring, the flowers on the tree are very tiny. Flowers of the male tree are yellowish in color with two stamens and many long catkins near the tip of the twigs. The flowers of the female tree are greenish, and the catkins grow short and upright.

The Cones: The European White Birch has cones that are cylindrically shaped. They are 1 to 2 inches long. The cones hang in slender stalks made up of two winged nutlets and three lobed leaves, maturing in the fall.

The Twigs: The twigs of the European White Birch are slender and drooping with tiny resin gland dots.

Size: The European White Birch can grow from 50 to 60 feet tall. Its diameter can be 1 to 2 feet.

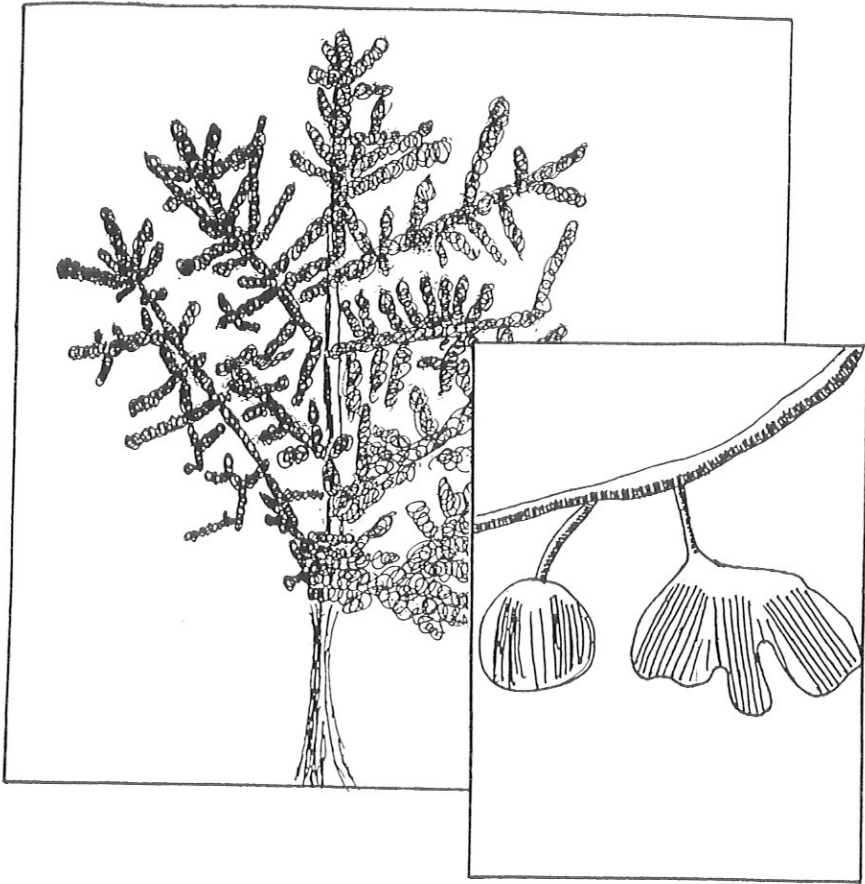
Other Locations: The European White Birch is native to Europe and to Asia and is frequently planted in the United States.

Other Interesting Facts: The waterproof bark of the European White Birch is used in many villages for roof tops. It is also used for many liquid containers. The oil found in the European White Birch is used in the tanning process of Russian leather.

- Sarah E.

Ginkgo

Ginkgo biloba



The Bark: The bark of the Ginkgo tree is brown with narrow, open cracks when the tree is young, and it is gray and rough in its older years.

The Leaves: The leaves are about three inches long. They have a v-shaped cut and have numerous veins separating from the base. They are carried singly on long shoots and are clustered on short sides of the shoots, too. Their colors are matte green, turning bright green in the fall.

The Flowers: The flowers of this tree are medium to large in

size. The flowers are very hard to see on both the female and male trees. For this reason, it is very hard to tell when the male trees bloom. (Most greenhouses do not sell female trees in Maine, but they do have a very noticeable bloom due to the unpleasant scent of the fruit falling to the ground.) Most trees do not bloom, but when they do, it occurs in March through April.

The Fruit: The fruit on this tree is called Dioecious. It is about one inch long. They appear orange-yellow when they are ripe. The fruit is a fleshy, plum like seed with an edible kernel. Male trees have cones and females have seeds at the end of each flower stock. The seeds are eaten in the Far East. When the fruit is ripe, it falls to the ground giving an unpleasant odor.

The Twigs: The twigs are light green to light brown in color. They appear hairless, long and stout.

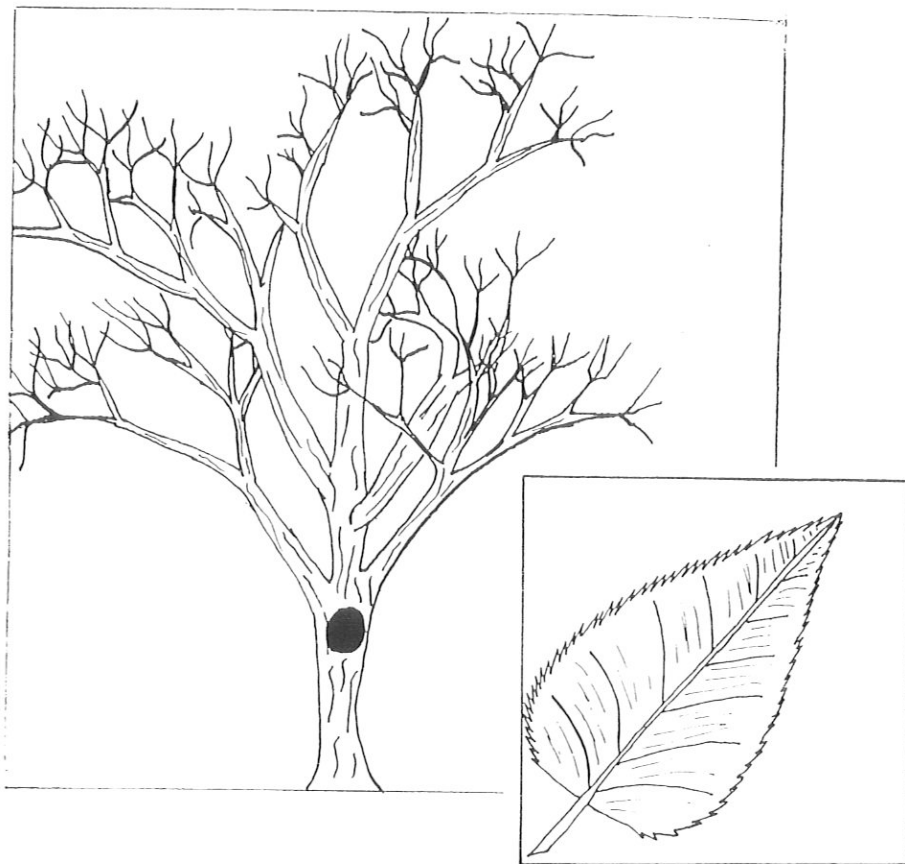
Size: Ginkgo Bilobas usually grow to a height of 100 feet, with a three foot diameter.

Other Locations: This tree is native to southeastern China and Japan. They are plentiful in moderate climates and are commonly planted in Europe and North America.

Other Interesting Facts: The Ginkgo biloba is the only remaining species of the Ginkgo. They have many purposes, such as being used to landscape monastery and temple grounds in China and Japan for centuries. The Chinese also used tree extracts for medical purposes. The United States has also found this tree useful. Scientists have discovered a compound found in the tree that may treat asthma and other ailments. Ginkgo received its name from the Chinese and means the “sliver fruit” or “white nuts”. Some Ginkgos are believed to be more than 1000 years old.

Gray Birch

Betula populifolia



Location in the Oaks: They are located by the entrance way on Deering Avenue.

The Bark: The bark is white with black marks under the branches. It peels and is black underneath.

The Leaves: The leaves are egg-shaped and triangular. They grow to 3 inches long and have sharply toothed points.

The Wood: The wood is a hard solid wood, growing weaker with age. Birds and other animals will live there for a period of time until the tree starts to rot. The wood of the Gray Birch can be used to make toothpicks, spools and paper pulp.

The Twigs: The twigs are slender, reddish to orange and brown or sometimes so coated with grayish film that they appear gray.

Size: The trees grow to a height ranging from 20 to 30 feet. The trunk diameter is from 6 to 12 inches.

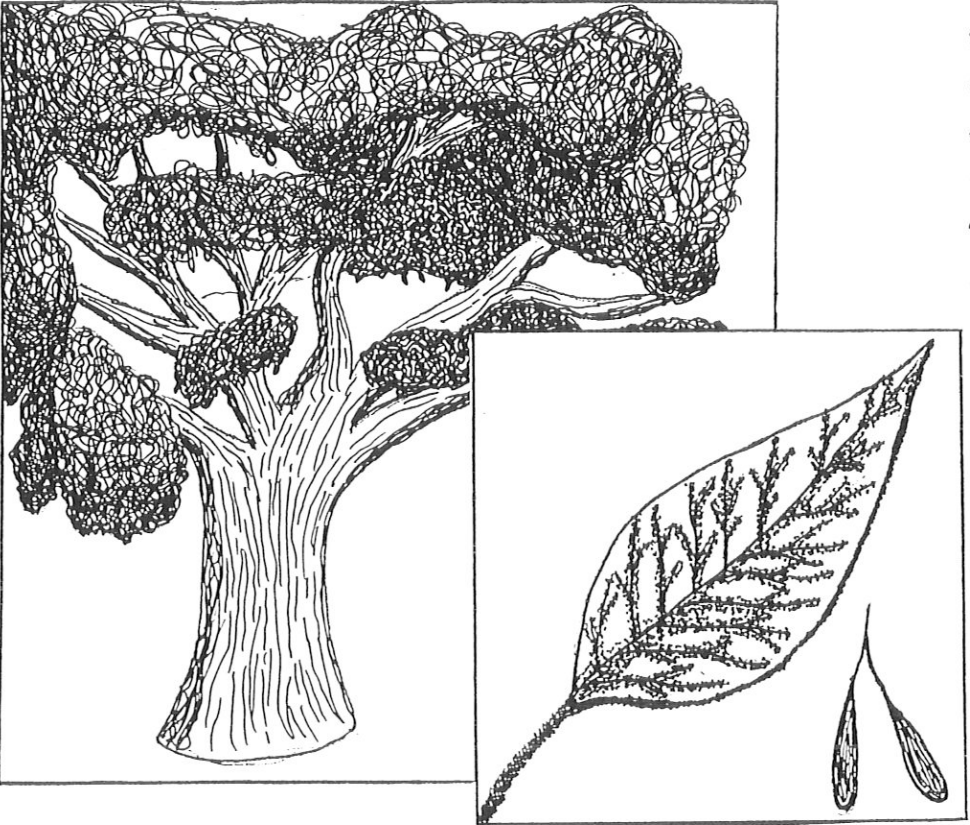
Other Locations: They grow in the mountains from Nova Scotia in Canada to N. Carolina. The Gray Birch frequently grows by lakes, streams, rivers and very damp areas.

Other Interesting Facts: It is a fast growing tree. The Gray Birch is sometimes called Poplar Birch, Old Field Birch, White Birch, and it is also called the Yellow Birch. Sometimes a tree is cut down by beavers in the wild.

-Virgil

Green Ash

Fraxinus pennsylvanica



Location in the Oaks: The Green Ash can be found near the Barking Squirrel, across the crosswalk. You can tell where it is because of its tall trunk and droopy branches.

The Bark: The bark is very narrow with joined ridges that weave and blend throughout the bark. It has a dark, rich gray-brown color.

The Leaves: The leaves are a bright green. Their undersides are very soft, with small furry hairs. The bright green leaves also help to distinguish a Green Ash from a Red Ash. The

broad leaves are compound and alternate from left to right. The leaves range anywhere from six to nine inches long, with leaflets three to four inches long. They also tend to be very droopy and hang low.

The Wood: The wood is used for many things, from a baseball bat to a shovel or a hoe. It can also be made into furniture, oars, skis, and rake handles.

The Flowers: Both the male and female flowers are very small. The flowers grow in tight tiny clusters with no petals. They can be a green or purple color and are located close to the twig.

The Fruit: The fruit can only be found on the female tree. They are flat and narrow and seem to look like a tear drop on its side. The seed of the fruit can be found at one end, most likely the smaller end.

The Twigs: The twigs grow to be very slender or stout. Just like the bark, it has a gray brown color.

Size: The Green Ash can grow anywhere from sixty to a hundred feet tall, when given proper treatment.

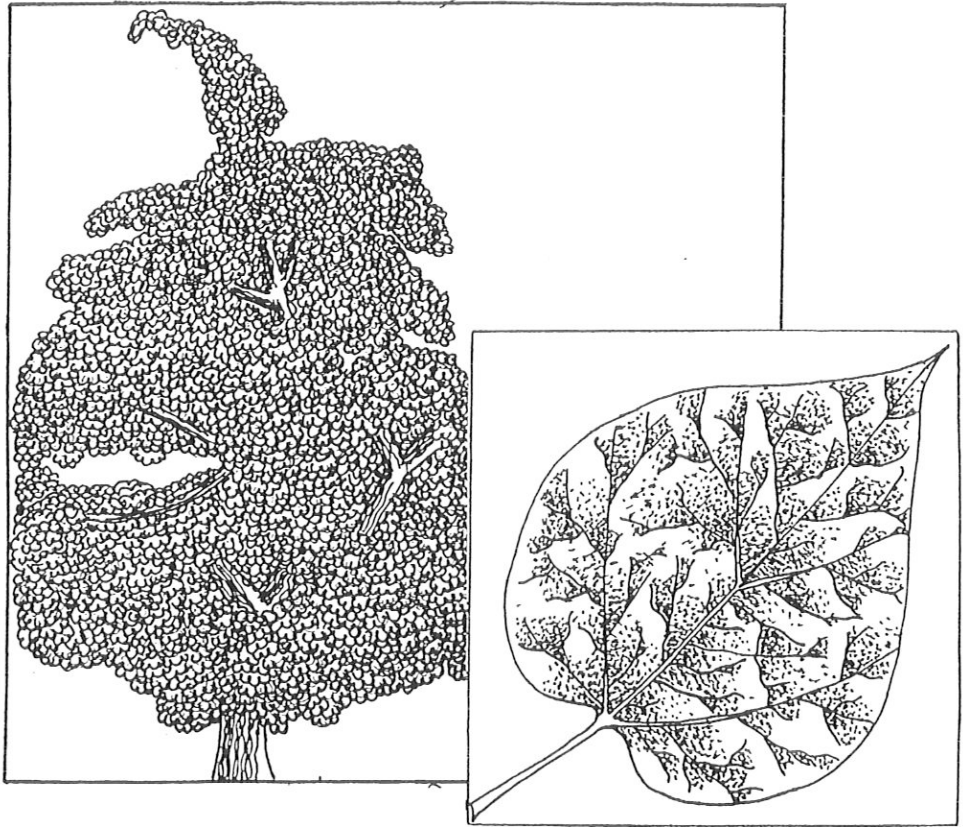
Other Locations: The Green Ash can grow in North America, but can also grow in the soils of Europe and Asia.

Other Interesting Facts: Their seeds grow rapidly and can be spread by wind, water and birds. Besides their interesting way of reproducing, Green Ash trees seem to be able to adapt to high amounts of water and flooding very well.

-Kristin

Hardy Catalpa

Catalpa speciosa



Location in the Oaks: There are many Hardy Catalpa trees in the Deering Oaks. A good place to look for them is on the southern side of the Oaks, close to the sidewalk along Park Avenue. There are also two Hardy Catalpas located very close to the bandstand.

The Bark: The bark of the Hardy Catalpa tree is thin and is a brownish-gray to a silverish-gray color. It is smooth, but with age becomes covered with scaly plates and ridges.

The Leaves: Hardy Catalpa trees have heart-shaped leaves that are 6 to 12 inches long, and 4 to 8 inches wide. The top

side of the leaf is dull green, and the underneath side of the leaf is pale green, covered with soft tiny hairs. The leaves turn to a blackish color in autumn.

The Wood: Hardy Catalpa wood can be a chocolate color or a reddish-brown color. It is soft, light weight but is strong and durable. It is mostly used in cabinetwork.

The Flowers: Hardy Catalpa trees produce flowers which are 2 to 2 1/2 inches long and wide. The five rounded fringed petals form a bell-shape. The Catalpa flowers are white and have two orange stripes on the outside. On the inside there are purple spots and lines. The flowers bloom after the tree's leaves do. They grow in branched upright clusters which are 5 to 8 inches long and wide.

The Fruit: A narrow beanlike fruit grows on the Hardy Catalpa tree. They are 8 to 18 inches long and 1/2 to 5/8 of an inch in diameter. The Catalpa fruit is a dark brown capsule, which splits into two pieces. Inside this thick walled pod there are a lot of light brown, flat fringed seeds with two thin papery wings. This cigar like fruit matures in autumn and during winter it stays attached to the tree.

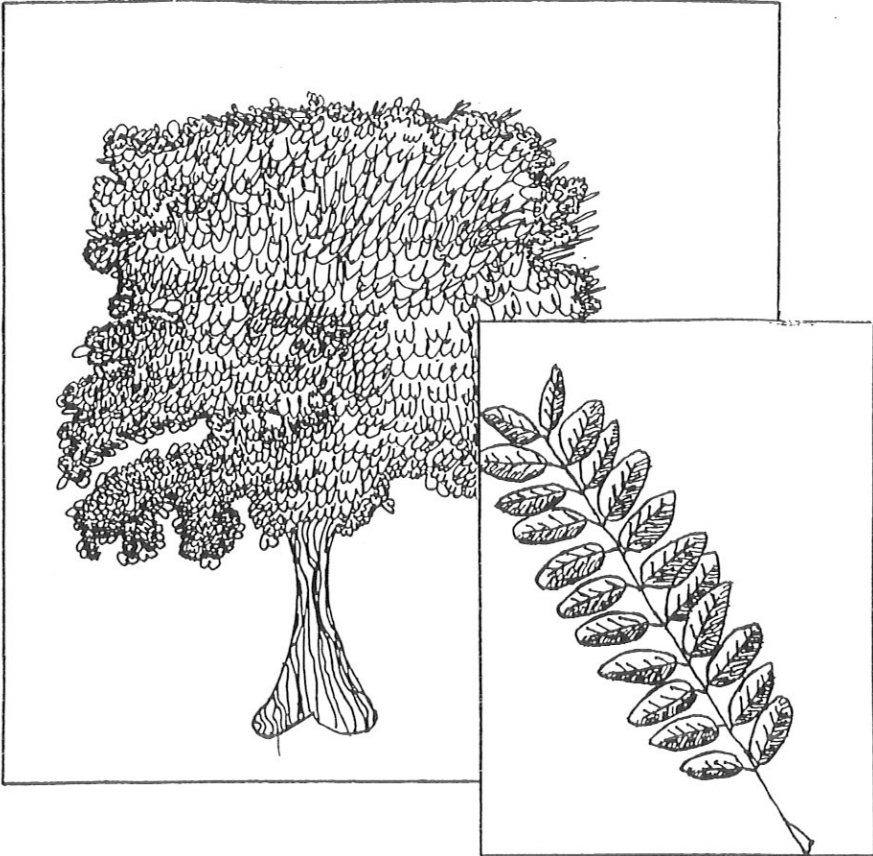
Size: Catalpas can grow to be 50 to 80 feet tall. They have a diameter of about 2 1/2 feet.

Other Interesting Facts: Hardy Catalpas have short trunks, which most often grow crooked. The stout branches are spread apart, giving the Hardy Catalpa a round full crown. Hardy Catalpa gets its name "Cigar Tree" and "Indian Bean" because of its unique fruit. Hardy Catalpas belong to the Bigonia family (Bignoniaceae).

-Chelsea

Honeylocust

Gleditsia triacanthos



The Bark: The bark is divided into long ridges. The surface of the bark has small scales.

The Leaves: The leaves are alternate and compound. They are 4 to 8 inches long and have 18 to 28 leaflets. The leaves are oval shaped with very fine teeth.

The Wood: The wood has a rough grain. The wood is hard, strong, and very durable in contact with the soil. In Maine, it is often used for fences and posts.

The Flowers: The flowers are borne in slender clusters from 2 to 2 1/2 inches long. They appear in June when the leaves are almost fully grown. Male and female flowers are produced separately on the same tree.

The Fruit: The fruit is a long, twisted bean pod which turns dark when it is ripe. Inside is a sweet green pulp. The fruit is a shiny, reddish-brown, flattened pod that is 12 to 18 inches long. The walls are thin and tough.

The Twigs: The twigs are smooth and zigzag in shape.

The Size: The tree eventually reaches a height of 50 to 60 feet.

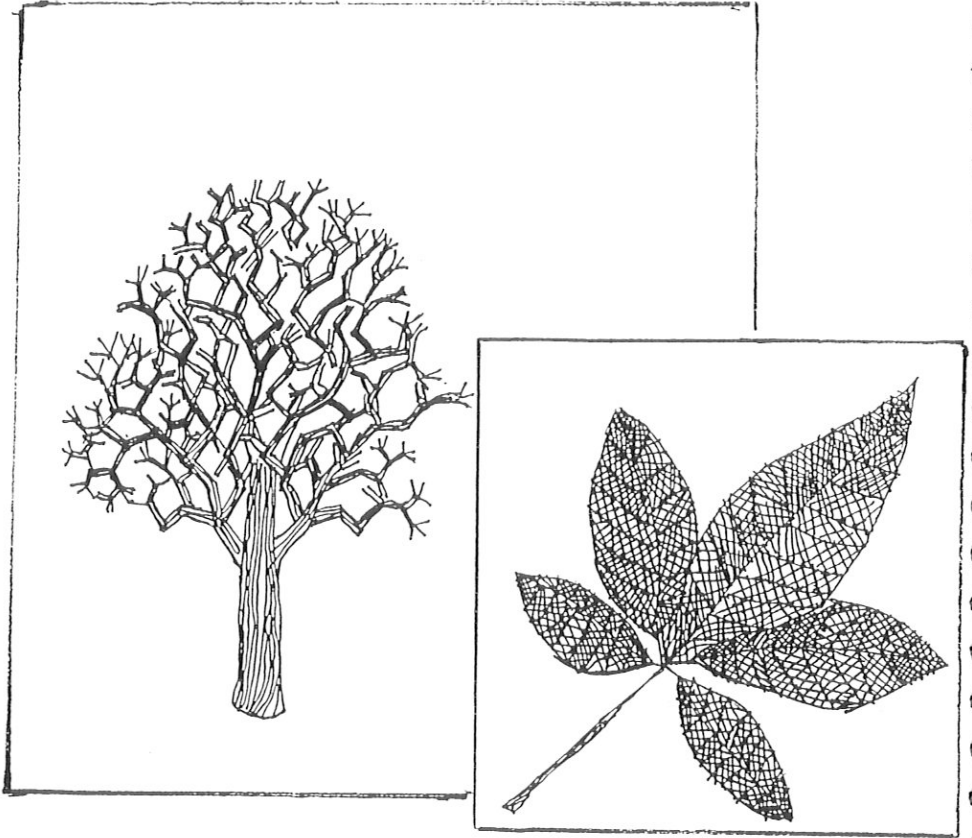
Other Locations: The Honeylocust grows in open, sunny places.

Other Interesting Facts: The scientific name came from the Greek words "tri," meaning three and "acantha," meaning thorn, because the trees can be very thorny.

-Dora

Horse Chestnut

Aesculus hippocatanuml



The Bark : The bark of the Horse Chestnut tree is dull brown and thin. The trunk of it becomes rougher from shallow furrows and low ridges, which are covered with thin scaly plates.

The Leaves: The leaves of the Horse Chestnut tree have large, sticky buds that contain tightly packed material for an

entire season's growth. As the days go by in the early spring, the coating on the buds melt, and protective scales start to spring back. During that short period of time, the cells in the buds expand rapidly. Within the space of two weeks, the leaves of the Horse Chestnut tree start to grow beautiful white flowers, making it a favorite for ornamental planting in parks and along streets.

Wood: In Europe, the wood is used by wood carvers. It has been recommended as one of the key species of international wood.

Flowers: The bud of the Horse Chestnut tree contains immature leaves folded inside a protective case. The white flowers of the Horse Chestnut bloom every May and June. The tree starts to open its clusters in late spring or summer. The leaves consist of five to nine leaflets.

Fruit: The fruit of the Horse Chestnut tree is a thick, leathery, round, and spiny capsule about 2 inches in diameter. The fruit contains from one to three large smooth, shiny brown nuts.

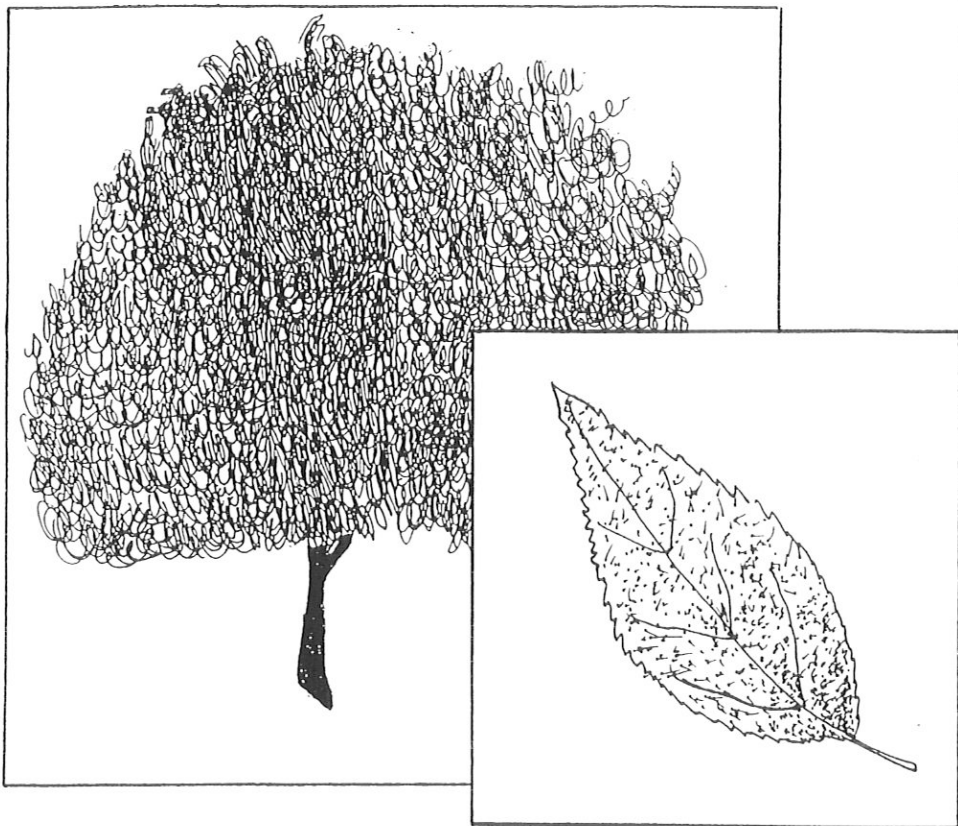
Size: The Horse Chestnut tree grows to about 40 to 60 feet tall.

Interesting Facts: The nuts of the Horse Chestnut tree contain a prickly husk and are edible. The roasted chestnuts sold on city streets, are a different variety of nuts and are related to the Beech Nut, not the Horse Chestnut. In many parts of the world, people believe a polished chestnut of any variety is good luck. The Horse Chestnut was originally imported from Europe. There are about 15 species of Horse Chestnut trees. The branches of the Horse Chestnut tree make a shady area.

-Jamal

Japanese Crab Apple

Malus floribunda



Location In The Oaks: Crab Apple trees can be found near the Rose Garden. When you go near the Rose Garden you will find a row of three trees. Those are Crab Apple trees.

The Bark: The bark is a brownish-purple, which flakes in thin pieces with age. This bark is an orange/ brown color when freshly exposed.

The Leaves: The leaves are sharply toothed and dark green. They are also smooth on top.

The Flowers: The flowers are one inch across and their color is a deep red before they open. However, when the bud opens the colors changes to a pale pink, which turns to almost white.

The Fruit: The fruit is rounded and yellow, and it is 3/4 of an inch across. They hang in clusters.

The Twigs: The young branches are fuzzy and reddish-brown.

Size: A Japanese Crab Apple is between 17 feet and 25 feet tall. The distance across the crown is about 15 feet.

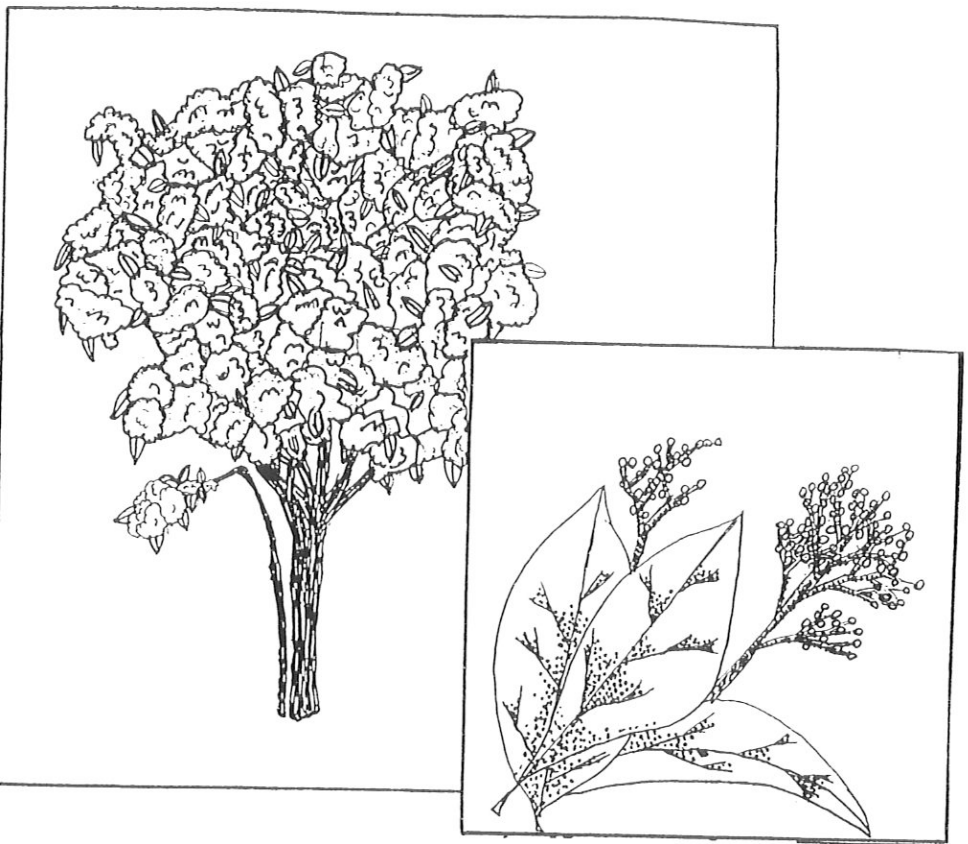
Other Locations: They are found in cities, along the seashore or in containers. They grow in Japan and need full sun to grow.

Other Interesting Facts: There are four major diseases this tree can get. They are apple scab, fire blight, cedar apple rust, and powdery mildew.

-Mike

Japanese Treelilac

Syringa reticulata



Location in the Oaks: The Japanese Treelilac is found along Deering Avenue, on the eastern side of the park.

The Bark: The bark of the Japanese Treelilac is quite dark, resembling the bark of Cherry Trees.

The Leaves: The leaves of a Japanese Treelilac are dark,

glossy and green. The leaves sometimes turn a light yellow in the fall.

The Flowers: The flowers are a creamy-white color. They bloom in June and stay in bloom for a long time. They stay through winter unless cut off. These flowers are quite fragrant.

The Fruit: The fruit on a Japanese Treelilac is a capsule that turns from a light green to brown as it matures.

The Twigs: The twigs of a Japanese Treelilac are brown, long and skinny.

Size: A Japanese Treelilac grows to a height of fifteen to thirty feet. The width is twelve feet. The shape of the tree is oval.

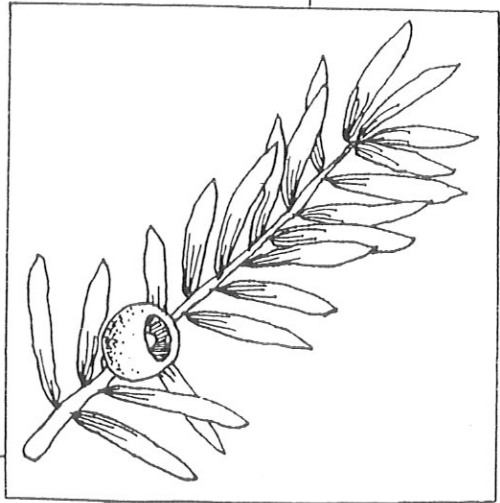
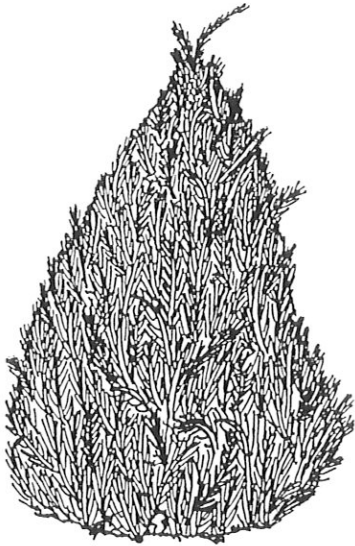
Other Location: This tree can also be found in Japan.

Other Interesting Facts: The scientific name means "growing along streets."

-Annie

Japanese Yew

Taxus cuspidata



The Bark: The Japanese Yew's bark is reddish-brown to purple. It has a texture that is somewhat scaly.

The Needles: Their twigs are thin and slender with needles that are dark green, with a lighter green to yellow on the underside. The needles are one inch long and are often rigid. They are arranged in opposite pairs along the twigs.

The Flowers: The flowers are unisexual and only the females can produce the berry.

The Fruit: The Japanese Yew has berries that can only be eaten by certain birds in the winter, when the berries are good and ripe. The berry, technically called an aril, is grape-sized, juicy, and bright red. It is shaped like a little cup around a black seed. One very important thing that everyone should know about yews is that the berries are extremely toxic if you eat them.

Other Locations: The Japanese Yew, also called Spreading Yew, can also be found in such places as Japan, Eastern China, and some parts of the Northern Hemisphere.

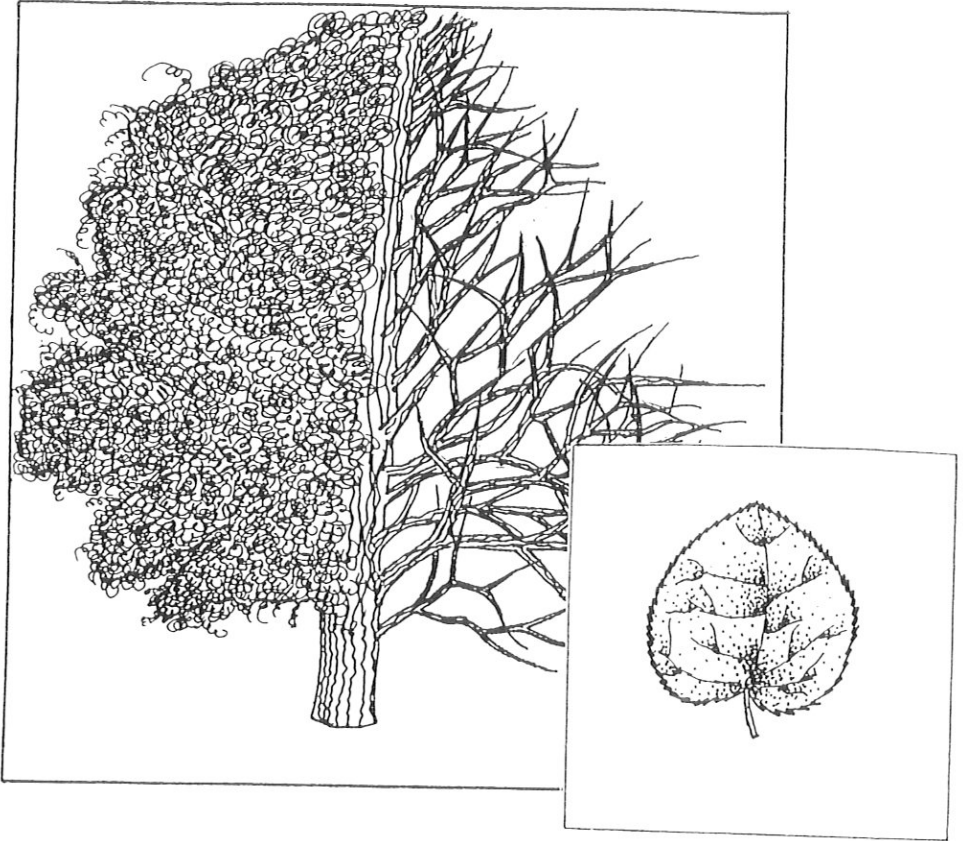
Size: This tree or shrub, depending on the cultivator, may grow up to 50 feet. It can grow very fast. For it to do so, it's best grown in rich, well-drained, acidic soil.

Other Interesting facts: Most people get confused with the English Yew and the Japanese Yew. You can tell which is which by seeing which one is hardier and fast-growing. That one will be the Japanese Yew. To tell the difference between a female and a male flower in a yew tree, you notice that the females have pointed buds and the males have rounded buds. If you want to grow a Japanese Yew, you can get the best results if you set the new plants in a mixture of two parts soil and one part peat moss and soak it thoroughly. These trees can grow in the shade or sun. They should be planted in early spring. Unlike most plants or trees, these trees are better grown in colder climates. If you do a good job in nurturing the tree, it may grow for about one hundred years.

-Rachel

Katsura Tree

Cercidiphyllum japonicum



Location in the Oaks: The Katsura Tree is located on the State St. side of the Deering Oaks, almost directly across from the bridge and is only 5-6 years old.

The Bark: The bark of the Katsura Tree is a gray-brown color and can sometimes be furrowed and flaking. This bark is slightly shaggy, but beautiful through all four seasons.

The Leaves: The Katsura's leaves are two to four inches long

and wide, and take the shape of a heart. When the leaves are young, they are a bronzy-purple color and grow jagged teeth. In the fall the leaves of the Katsura give off a spicy odor of cotton candy.

The Flowers: Flowers of the Katsura Tree are small and do not have petals. They are borne in the leaf axils, on separate plants, and the sexes are on separate trees.

The Wood: The wood of the Katsura is strong, being that of the deciduous family. This tree has several trunks, but produces one main trunk. The Katsura contains a shallow root system and is considered hard to transplant. Trunks of the young Katsura may sun-scald or split in cold climates. The timber coming from this tree is fine-grained and is used for making furniture and interior buildings

The Fruit: The fruit of this tree is small, curved, and has a green pod. This fruit is developed from female flowers and has many winged seeds. The pod of the fruit is scented and takes a green to yellowish color.

The Size: The Katsura has a very broad shape and spreads widely. This tree can grow 40-60 feet high and to some, it is considered a very bushy tree.

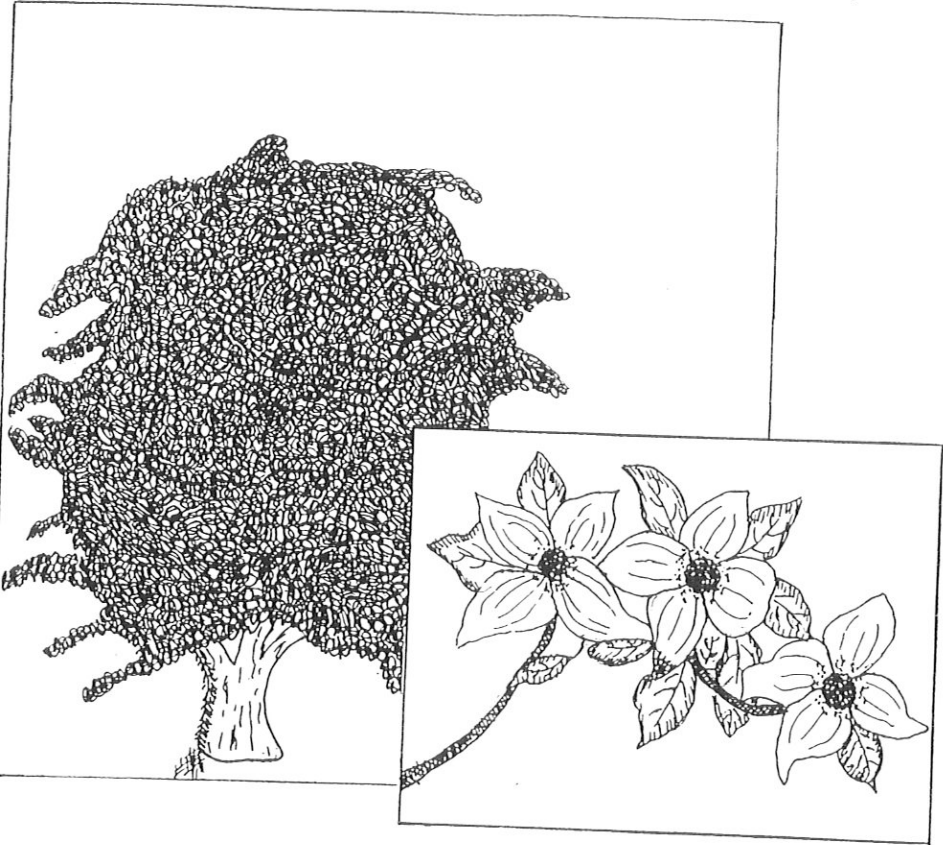
Other Locations: The Katsura is native to Japan and China, but it can also be found in high mountainous areas such as the Himalayas. This tree is considered ideal for woodland areas.

Other Interesting Facts: The Katsura has been known to be an ornamental tree and is grown around the world for its handsome foliage. Planted only in spring, this tree is found to be fairly pest free.

-Krista

Kousa Dogwood

Cornus kousa



Location in the Oaks: The Kousa Dogwood can be found by the duck pond.

The Bark: The bark peels in oddly shaped patches and it is pale underneath. When it is young, it usually is a light brown color, and as it ages it turns gray, tan, or a rich brown. The bark looks like a big jigsaw puzzle when it gets wet.

The Leaves: The leaves are oval shaped with a point at the end. These leaves are simple and opposite leaves. They have

an entire margin and accurate venation. They unfold in the spring before the flowers. At the end of the summer, they start to turn from a shiny dark green, with some tufts of golden brown hair, to a scarlet color at the beginning of fall.

The Flowers: The flowers bear on the upper side of its branches. They are pale flowers that have a color of creamy to snowy white. They range from 2 to 4 inches across. They end up covering the entire tree in late May to early June.

The Fruit: The fruit ranges from 1 to 1 1/2 inches across. They are a red fruit with a yellowish color inside and contain small stony pits which ripen in late summer to early fall. These small fruits look like they are big raspberries. They are an edible fruit eaten by many animals.

The Twigs: The twigs are horizontally shaped and are slender. They have a color of light brown.

Size: The size of this tree ranges from 15 to 30 feet high. It may spread 8 to 10 feet wide.

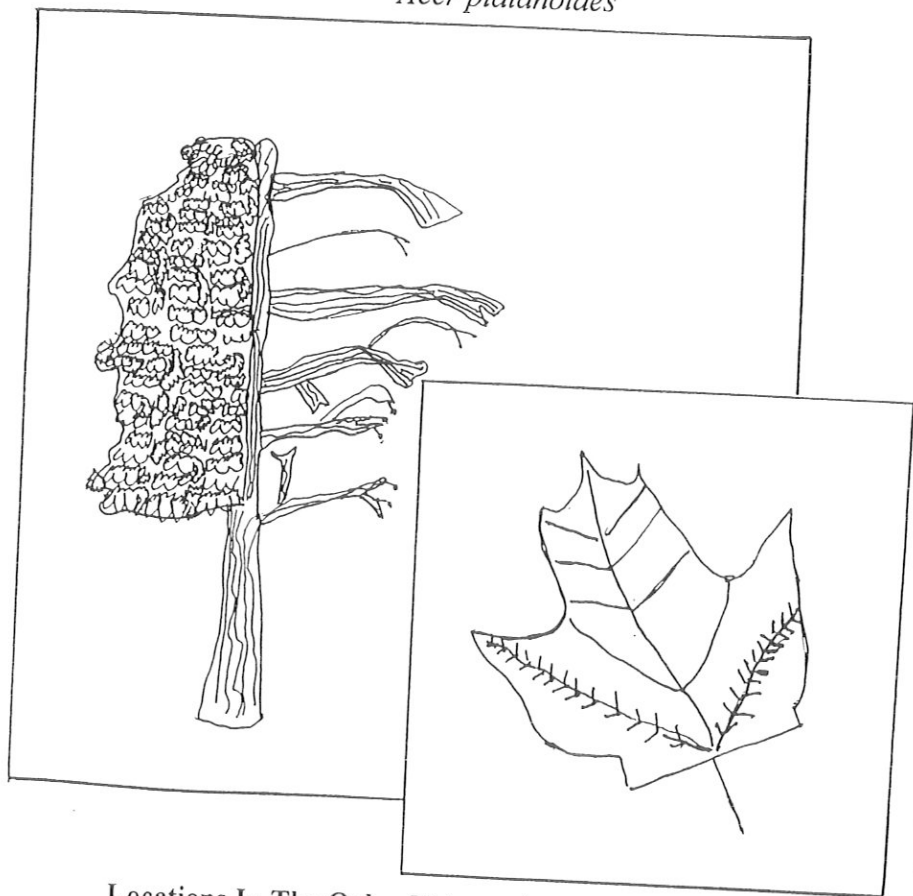
Other Locations: This tree is native only to three places, which are Korea, Japan, and China.

Other Interesting Facts: The tree usually hides in the shadow of a Cornus Florida, which is another kind of dogwood. It prefers to have moist, acid, well-drained soils in partial shade. The Japanese name for this tree is Yama Boushi.

-Lisa

Norway Maple

Acer platanoides



Locations In The Oaks: This tree is found south east of the barking Squirrel.

The Bark: The bark of a Norway Maple is a pale gray color and is smooth in many parts.

The Leaves: The leaves of a Norway Maple are bright and green, and when mature, they become smooth on the sides. The leaves turn yellow or sometimes red in the autumn. Milky fluid comes out of the stems of the leaves when squeezed.

The Flowers: The flowers are small and bright yellow-green. They are borne in strange clusters in spring and then the young leaves come.

The Twigs: The twigs are smooth ,more or less shiny and greenish to brown in color.

Size: A Norway Maple grows to a height of eighty feet (twenty-five meters) and annual growth is about 12 to 18 inches. Its spread is eighty feet when rounded.

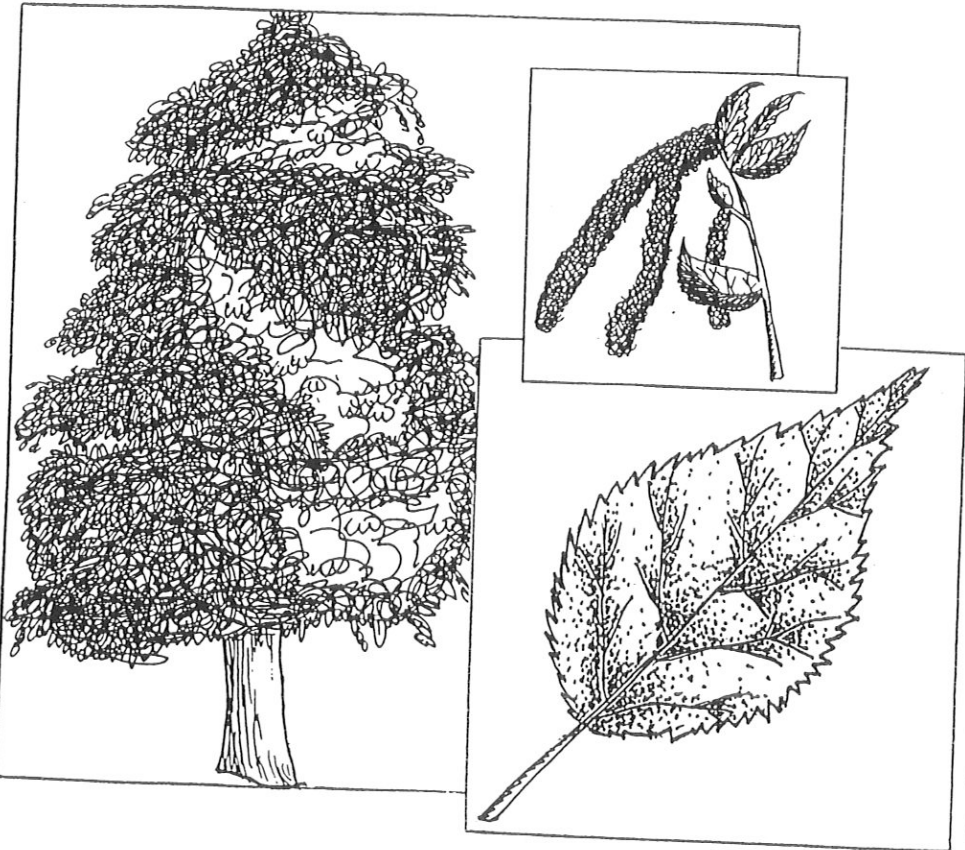
Other Locations: These trees are often found in parks and along sides of the road.

Other Interesting Facts: The fruit of a Norway Maple has large spreading wings that can spread to two inches. The family that it belongs to is Aceraceae. The tree is deciduous.

-Jorge

Paper Birch

Betula papyrifera



Location in the Oaks: In the Oaks, the Paper Birch is located on the Deering Avenue border, across the road from King Middle School. It is also located on a hill of the ravine.

The Bark: The bark of the Paper Birch is smooth and thin. It has long horizontal strips that separate into smaller papery strips and reveal the orange inner bark. When the tree is a sapling, the color is a brownish-bronze. When the tree matures, it grows into a chalky white.

The Leaves: The Paper Birch is a deciduous tree, which means the tree loses its leaves every winter. In the spring and summer, the oval leaves are dark green on top and light green and yellow on the bottom. They are 2 to 3 inches long and 1 1/2 to 2 inches wide. They have double toothed margins and 5 to 9 veins on each side.

The Wood: The Paper Birch is a hardwood tree. It is used in many wood works such as veneers, cabinets and interior finish. The wood is also used for paper pulp, wooden ware and novelties.

The Flowers: The flowers of the Paper Birch are called catkins. Catkins grow at the end of the twigs and droop down in clusters. The catkins are tiny in early spring, but then grow to be 1 1/2 to 2 inches long. The male catkins are yellowish with two stamens, many in long drooping catkins near the tip of the twig. The female catkins are greenish in short, upright groups on the back of the same twig.

The Fruit: The fruit of the Paper Birch develops and ripens in leafy clusters, husks, cone-like strobiles, or in nutlets.

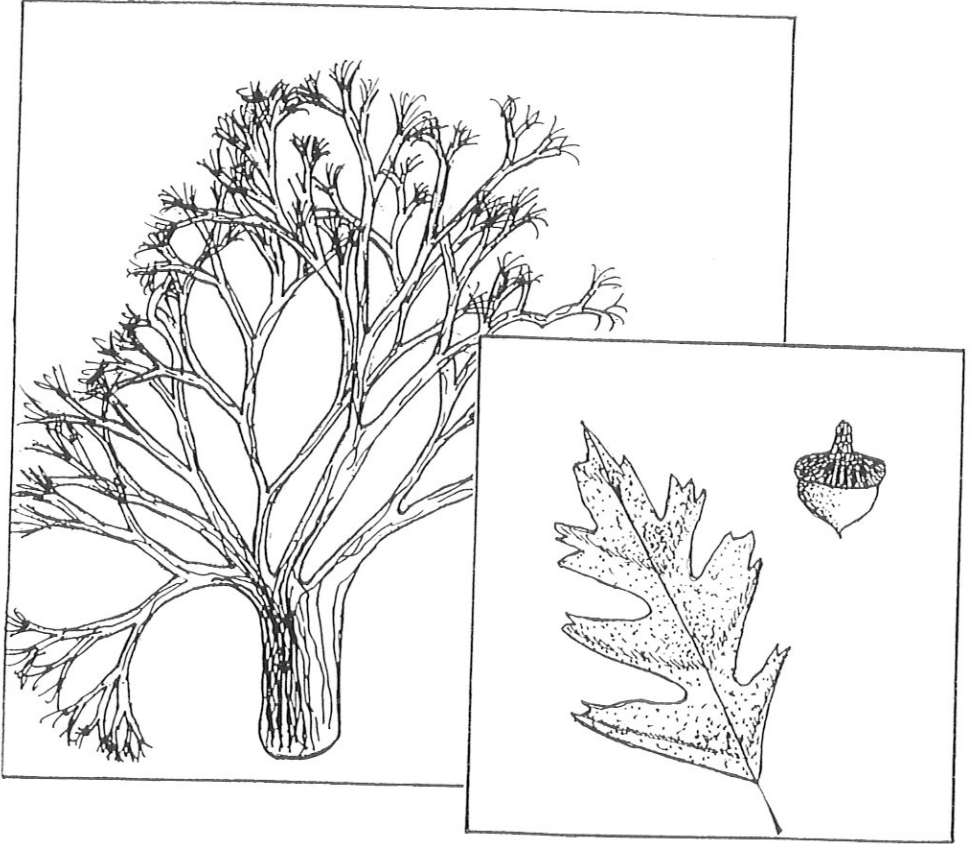
Size: The Paper Birch grows to a height of eighty feet, with a diameter of two feet.

Other Locations: The Paper Birch is located all across North America.

Other Interesting Facts: Paper Birches are given the name "invader" because they invade old filled-in bogs and swamps and take over where other trees are located.

-Nancy

Pin Oak
Quercus palustris



The Bark: The bark is very heavy and is also very thick. It is very hard and is used for things like fuels. The bark of a Pin Oak is a reddish-brown.

The Leaves: The leaves on a Pin Oak are green in the summer and are a reddish-yellow in the fall. The leaves are about 1 to 4 inches long and about 2 to 4 inches wide. The leaves of this tree are deciduous.

The Wood: The wood on a Pin Oak is very heavy, hard, strong and close-grained. The wood is used for fuel and distillation.

Size: The Pin Oak stands about 60 to 100 feet tall. The trunk is about 1 to 2 feet in diameter. The branches hang about 6 to 8 feet off the ground.

The Twigs: The twigs are heavy, and the bark is very thick. The twigs grow very slowly during the fall and the winter. They grow very fast during the summer because of the sun and the rain.

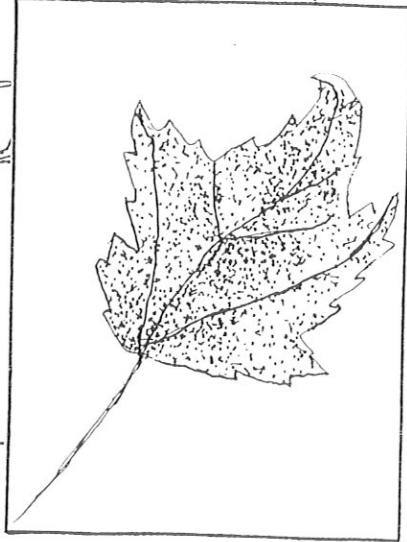
Other Locations: The Pin Oak is located in very unique places. They can grow in swampy places, in woods and in southeastern Canada and in the eastern part of the United States.

Other Interesting Facts: The Pin Oak is in the Fagaceae family.

-Bobbie

Red Maple

Acer rubrum



Location in the Oaks: The Red Maple is located in front of the tennis courts and beside the playground.

The Bark: The bark is light gray when it is young and dark gray when it is older. The bark is smooth.

The Leaves: The leaves are dark green and smooth above. They are blue white with hairs on the veins underneath. These leaves turn red or yellow in the autumn. They are 4 inches

long and almost the same across. They have 3 to 5 toothed lobes and they are broad leaves.

The Wood: The wood is sometimes used for furniture.

The Flowers: The flowers are small and red on the slender stalks. They are found in dense places on the shoots in early spring.

The Fruit: The fruit has red wings and is about $\frac{3}{4}$ of an inch long. The seeds mature in the spring or the fall.

The Twigs: The twigs are red. They are slender, smooth, and are dotted with pale lenticels.

Size: The Red Maple is 80 feet tall. The spread is about 40 feet wide.

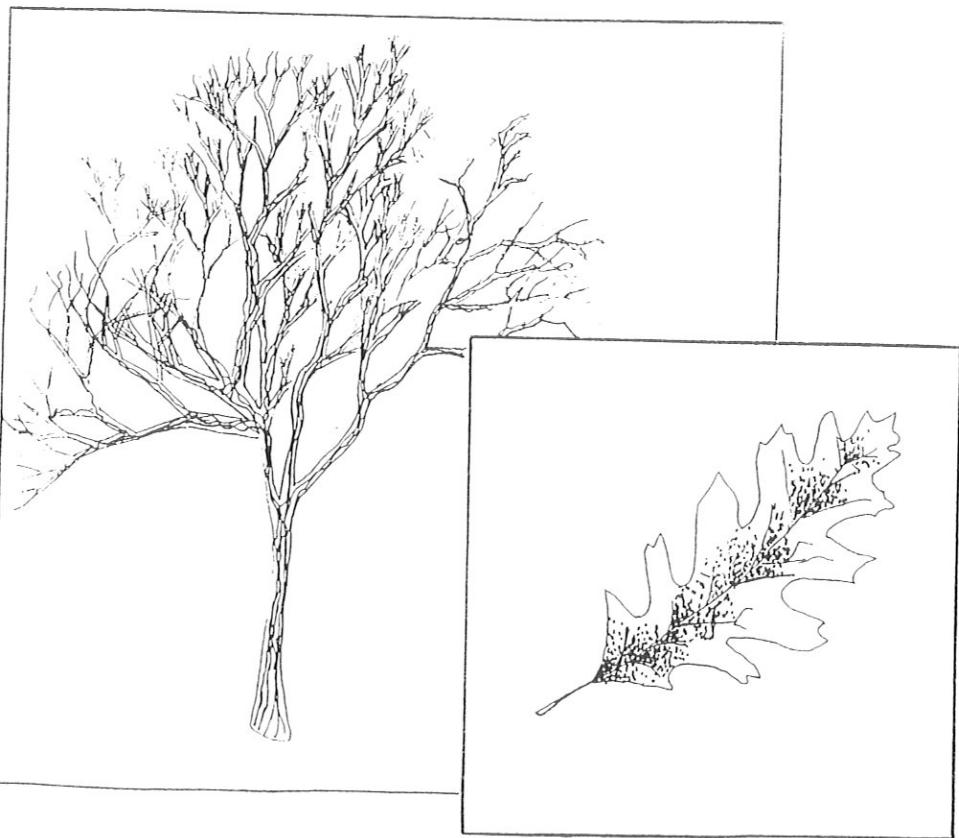
Other Locations: The Red Maple is found in moist ground. Red Maples are found in Eastern North America. They can grow in almost any soil, as long as it is moist.

Other Interesting Facts: The Red Maple is a fast growing tree. This tree is the first tree to get fall colors in autumn. The Red Maple should be planted in spring.

- *Delh*

Red Oak

Quercus rubra



Location in the Oaks: The Red Oak can be found all throughout the Deering Oaks. It is mostly found near the playground.

The Bark: The bark on the Red Oak is usually a very dark grey or a black. It is rough and furrowed into scaly ridges. The inner bark is reddish.

The Leaves: The leaves have bristle-tipped teeth. The leaves

are usually dull light green beneath and dull green on the top. It is hairy on the top of the leaves.

The Wood: The wood of the Red Oak is good for making furniture, flooring, railroad cross ties, mine timbers, fence posts, pilings, and pulpwood. It is the most important lumber species.

The Fruit: The fruit of the Red Oak is an acorn. The acorn is 1 1/4 inches long. It has an egg shape. The color of the acorn is a reddish-brown.

Size: The Red Oak is a fairly large tree. It grows to be about 60 to 90 feet tall. The diameter is 1 to 2 1/2 feet.

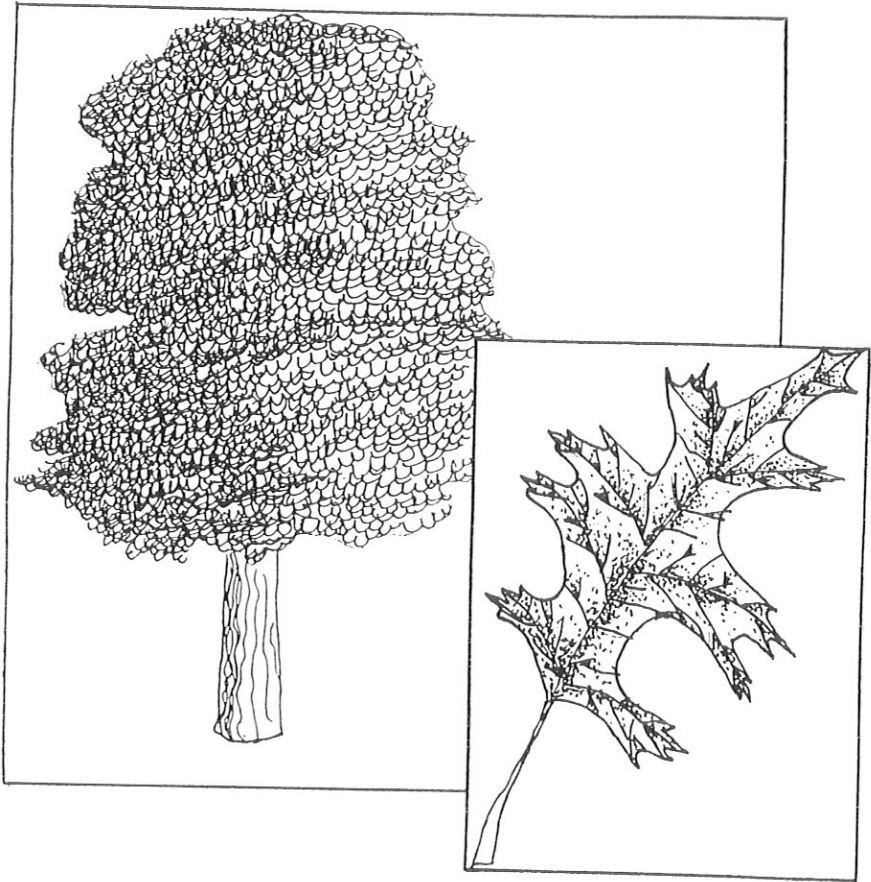
Other Locations: The Red Oak can also be found in the eastern part of North America and Canada. The Southern Red Oak can be found in the southern states.

Other Interesting Facts: The Red Oak is similar to the Black Oak and the Scarlet Oak. The Red Oak also grows very rapidly. The Red Oak has very large spreading branches. It is perfect for shade and a perfect street tree.

-Keith

Scarlet Oak

Quercus coccinea



Location in the Oaks: The Scarlet Oak located in Deering Oaks is the largest in Maine. You can locate it by the playground and near the fence along the tennis courts.

The Bark: The bark of a Scarlet Oak is dark brown or gray, with a reddish inner bark. It is grooved with shallow, smooth ridges that occur with age.

The Leaves: The deciduous, deeply lobed leaves of a Scarlet

Oak are usually hairless, although there can be tufts of hair near the veins. In the fall these leaves are a beautiful scarlet red. They are usually compared to the leaves of a Northern Red Oak.

The Wood: The Scarlet Oak's wood is heavy, strong, and hard. It is used in furniture and marketed as Red Oak.

The Fruit: The fruit of a Scarlet Oak is an acorn. The acorn's cup is very thick, brown, and nearly hairless. The acorns are bowl-like and are 1/4 of an inch deep and about 5/8 of an inch in diameter.

The Twigs: The twigs are blunt with buds in the summer and slender, reddish-brown sticks in the winter. They are hairless, but the buds can be hairy and a little scraggly.

Size: This type of oak can grow fifty to seventy feet tall and one to three feet in diameter, but is a medium size tree. The trunk is one to two feet around. Some Scarlet Oaks can reach a height of one hundred feet tall.

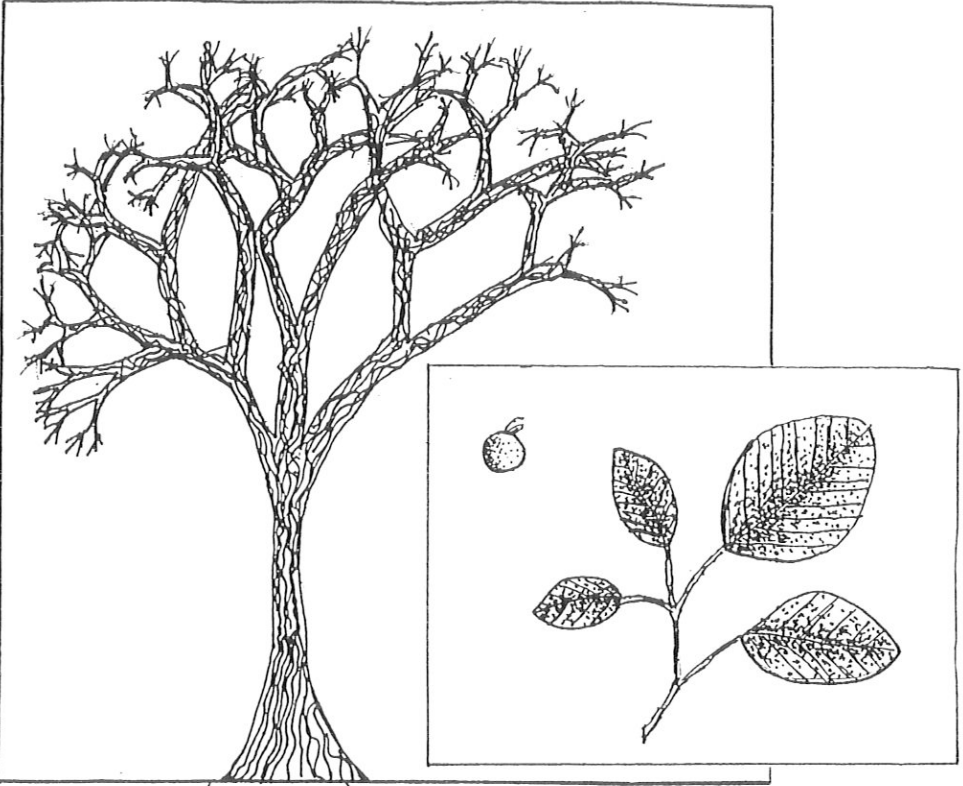
Other Locations: The Scarlet Oak is not only found Deering Oaks. They can also be found in other parts of Maine, Ontario, Michigan, Missouri, New Jersey, Maryland, Georgia, Mississippi, Arkansas, and also in the Appalachian Mountains. They also like to grow in mixed forests, ridges, or slopes and also places where there is poor or sandy soil.

Other Interesting Facts: Scarlet Oaks are best known for their brilliant autumn color. They are also part of a family known as the Fagaceae family, as are some other oaks. Scarlet Oaks also have an irregular spreading crown.

-Shaina

Serviceberry

Amelanchier arborea



The Bark: The bark of the Serviceberry is light gray and smooth, becoming furrowed into narrow ridges.

The Leaves: The leaves are 1-4 inches long, and 1-2 inches wide. They are pointed at the tip, and notched at the base. The leaves are dull green above and paler beneath, turning yellow to green in autumn.

The Flowers: The flowers of the Serviceberry are 1 to 1.5 inches wide. They have 5 slender white petals on thin stalks, in terminal clusters. These flowers bloom in the spring before

the leaves.

The Fruit: The fruit is 1/4-3/8 inch in diameter. It is shaped like a small apple, only it's purple. It is also edible, and is dry, juicy and sweet, with several seeds in early summer.

The Twigs: The twigs are a reddish-brown color. They are slender and often covered with white hairs when young.

Size: The size of this tree is 40 feet high, and a foot in diameter.

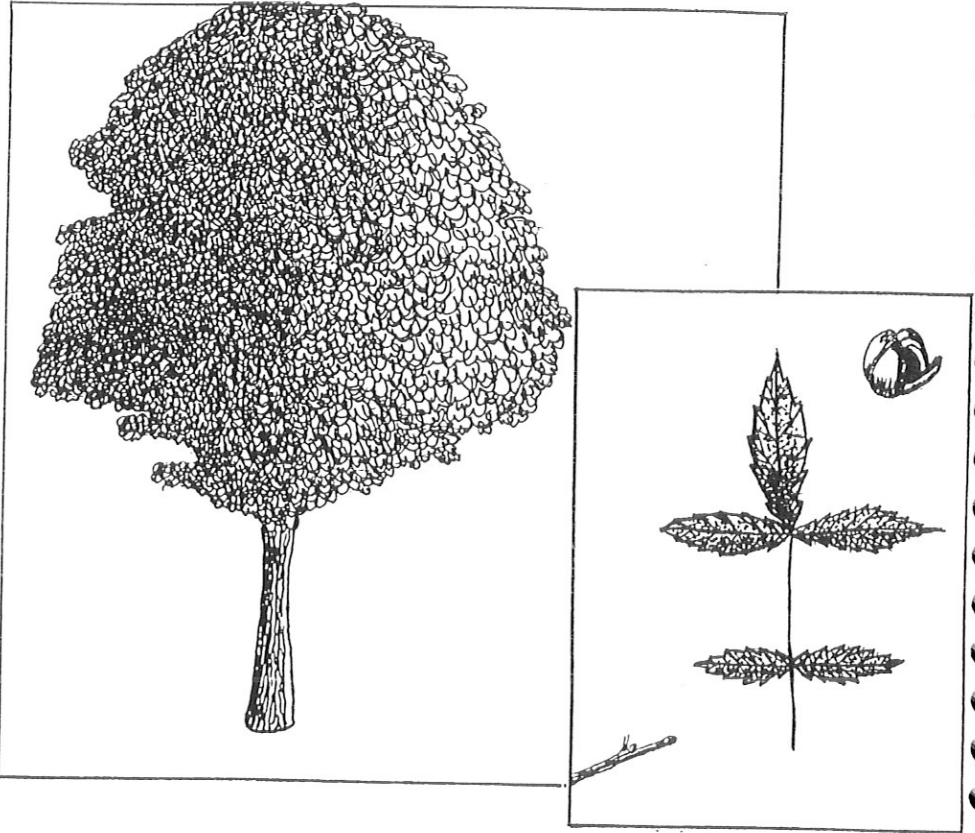
Other Locations: This tree is found in Newfoundland, Nova Scotia, Florida, Louisiana, Oklahoma, Minnesota, and in the Southern Appalachians.

Other Interesting Facts: The Serviceberry is sometimes called the Shadbush. The name Shadbush alludes to the fact that the showy masses of white flowers tend to occur at the same time that shad (fish) ascend the rivers in early spring.

-Sarah

Shagbark Hickory

Carya ovata



Location in the Oaks: My tree is located close to Deering Avenue, off the road closest to the park, near the baseball field.

The Bark: The bark is a light colored gray. It hangs in strips which peel away from the tree. This makes the tree look shaggy.

The Leaves: The leaves can get up to 15 inches long. There

are usually 5 to 7 hairless leaves. These leaves are mainly alternate and compound.

The Wood: The wood has ornamental beauty. It is also a better shock absorber than ash wood.

The Flowers: The flowers are tiny, with male and female stamens. The males usually have 4 stamens and the females have 2 to 5 stamens at the tip of the same twig. They sprout in the early spring into a greenish color before they shed pollen in the early summer.

The Fruit: The fruit on a Shagbark Hickory is a nut. It is an egg-shaped nut that grows up to 3 inches around and 2 1/2 inches long. They are a dark brownish-yellow before becoming dark brown to a blackish color. They are thick at the center, splitting at the base, and flat at the tip. These nuts also have an edible seed.

The Twigs: The tree has fewer twigs than other trees. They are lightly hairy and a light reddish-brown.

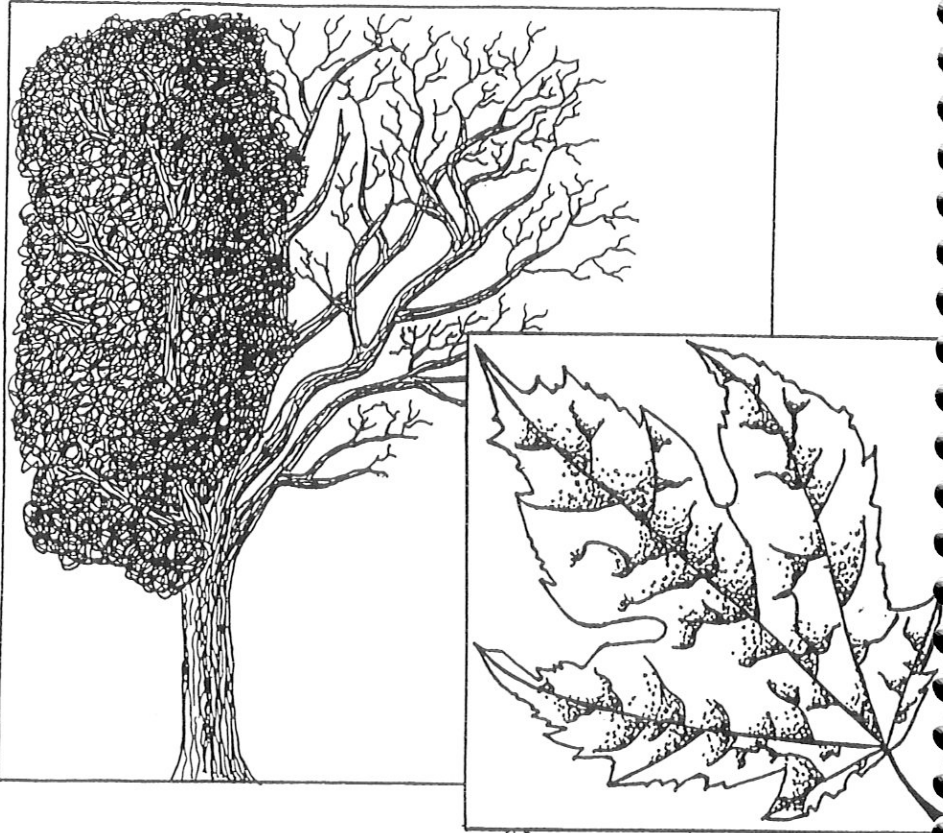
The Size: The Shagbark Hickory is unusually large. It grows up to 100 feet high and usually is 2 1/2 feet in diameter.

Other Locations: The location of the Shagbark Hickory varies. They are found in Minnesota, Nebraska, Maine, Quebec, Florida, Mexico, Georgia, Texas, and Michigan.

Other Interesting Facts: The Shagbark Hickory needs to have moist soil or they need to be in valleys or upland slopes in mixed hardwood forests.

Silver Maple

Acer saccharinum L.



Location in the Oaks: If you are facing the front of the bandstand, the Silver Maples are located directly to the right of it. They are easily identifiable with their silvery bark.

The Bark: On young Silver Maples, the bark is smooth, gray, and slightly tinged with red. On older trees, the bark is furrowed, reddish-brown in color, and separated into large thin scales, which tend to flake off leaving brown spots.

The Leaves: The Silver Maple's leaves are two to ten inches

long. The leaves are opposite. They have five deep lobes and irregular edges which are sharply toothed. The upper surface of the leaf is pale green and the lower surface is silvery white and sometimes hairy. In the fall, they turn a pale yellow.

The Flowers: The flowers of the Silver Maple open early, long before the leaves appear. They are arranged in clusters on short stalks. The flowers are usually greenish-yellow, but they can be pink or reddish.

The Wood: The wood of the Silver Maple is soft and easily worked. It is used to a limited extent for pulp.

The Fruit: The fruit is paired and greenish or reddish in color. It ripens in the spring from April to June. Usually, one of the pair does not fully develop.

The Twigs: The twigs of the Silver maple are chestnut brown and curve upward at a tip. They are slender, bitter tasting, and when broken, they give off an extremely unpleasant odor.

Other Locations: Silver Maples are found throughout the state of Maine, along the coast, and on sandy banks along streams.

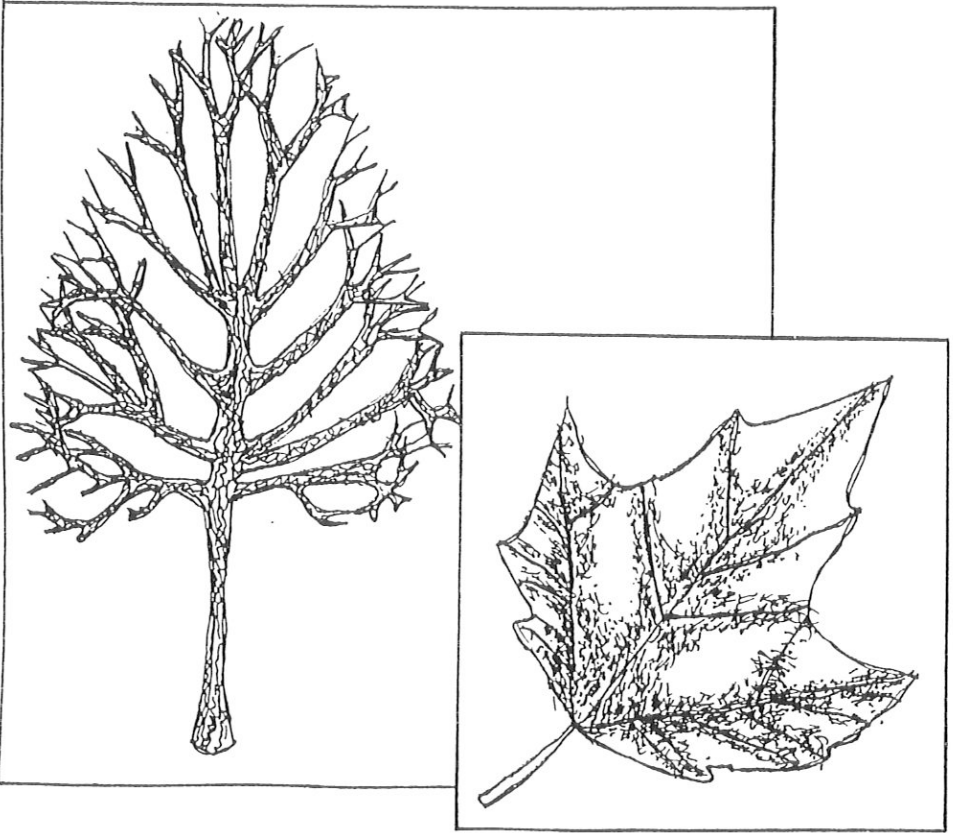
Size: Silver Maples usually grow to a height of forty to eighty feet with a diameter of one to three feet. They are considered tall trees.

Other Interesting Facts: The sap of the Silver Maple is sweet, but less sugary than that of the Sugar Maple.

-Lindsay

Sugar Maple

Acer saccharum



Location in the Oaks:The Sugar Maple is located north of the Rose Garden.

The Bark:The color of the bark is gray brown. When the tree is young the bark is smooth. When the tree is old the bark is furrowed and scaly.

The Leaves:There are 3 main lobes, 5 inches in length. There are teeth on the side. There are strong veins. The leaves are dark green. In the fall, they turn yellow, orange and red.

The Wood: The wood of the Sugar Maple is used for furniture and is also used to make flooring, boxes and crates.

The Flowers: There are greenish-yellow flowers that appear before the leaves come, and if you look at the tree from a distance it looks like a soft haze.

The Fruit: It is 1 to 1 1/2 inches long. It has a long wing. The fruit is brown with one seed. It matures in the fall.

The Twigs: The twigs are greenish to brown and they are thin.

Size: This tree grows from 70 to 100 feet tall. The trunk is 2 to 3 feet in diameter.

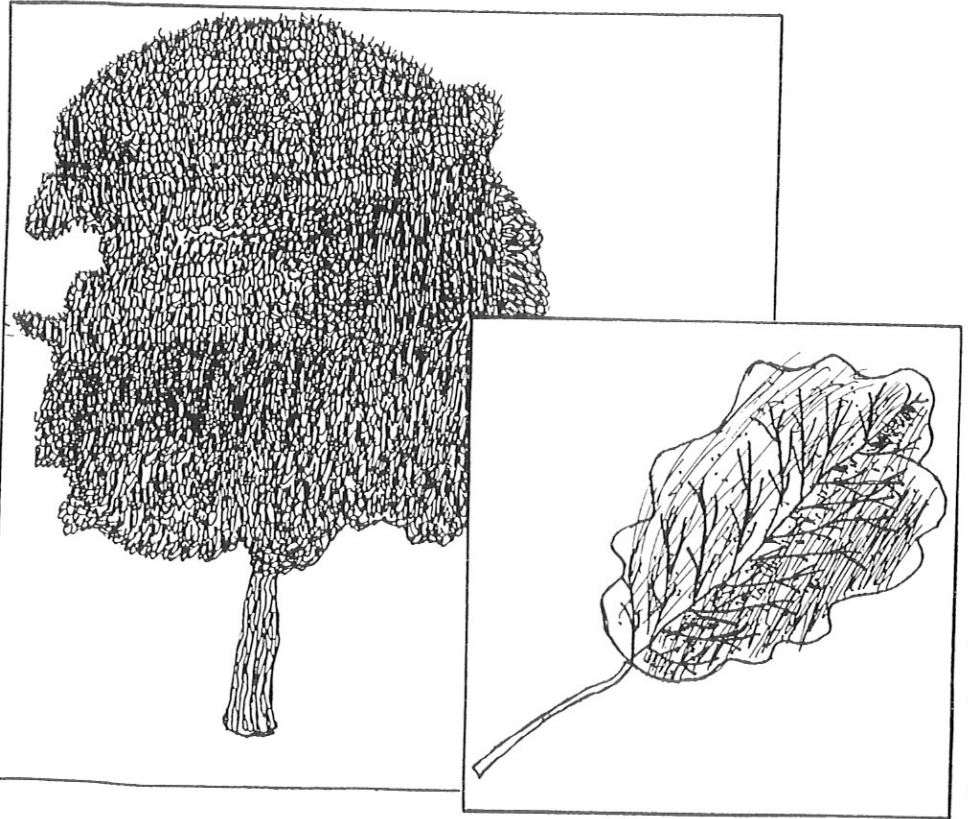
Other Locations: They are found in the northeastern section of the United States.

Other Interesting Facts: It makes a great lawn tree and a great tree for a park or golf course. It can also be called the Hard Maple or the Rock Maple. It needs moist soil. The boiled sap is used to make maple sugar and syrup. The Indians taught colonists how to do this. Each tree produces from 5 to 60 gallons of sap. It takes 32 gallons of sap to make one gallon of maple syrup.

-Brandon

Swamp White Oak

Quercus bicolor



Location in the Oaks: The Swamp White Oak is located in the western section of the Oaks, near the spot where the three roads come together in a triangle.

The Bark: The bark of a Swamp White Oak is brown-black and is very rough and scaly. As the bark grows older it becomes deeply ridged.

The Leaves: The leaves grow from five to six inches long and two to four inches wide. They are green, but turn red and then brown in autumn.

The Wood: The wood is very strong, heavy, and hard. It is used to make boats, posts, plywood, furniture, etc.

The Twigs: The twigs have a yellowish or a light orange color that changes to a reddish-brown bark.

Size: A Swamp White Oak can grow from 50 to 70 feet high and the trunk can be 2 to 3 feet wide.

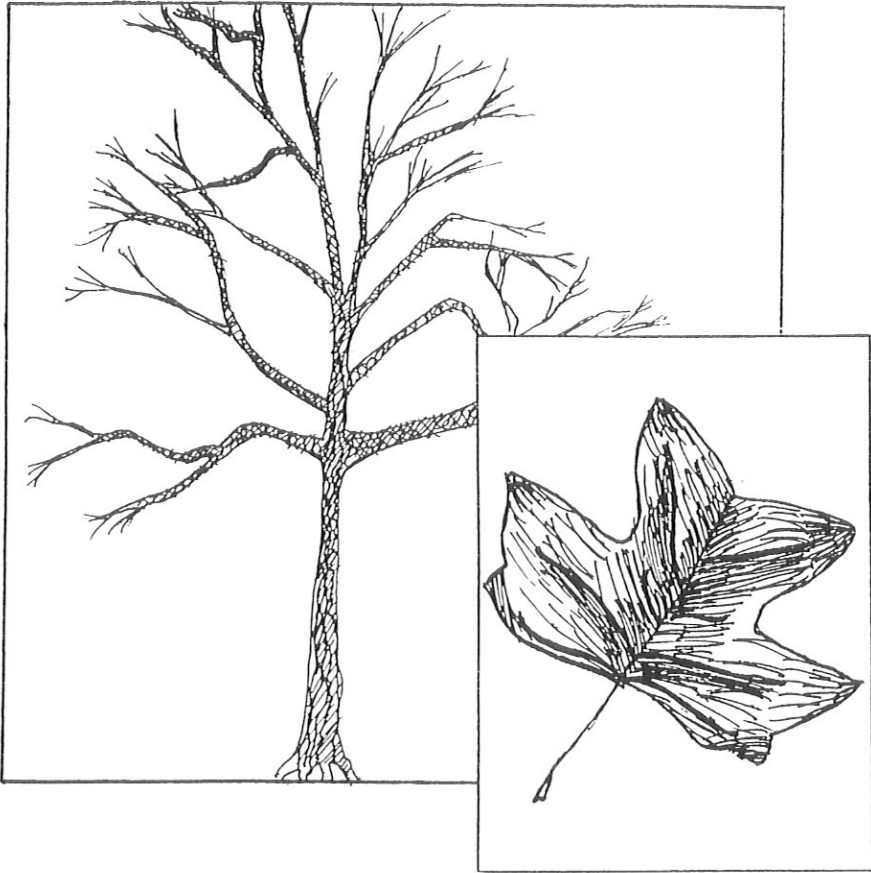
Other Locations: Swamp White Oaks stretch from Quebec to Michigan and from Georgia to Arkansas.

Other Interesting facts: The Latin name "*Quercus bicolor*" means two-colored.

-Adam

Tulip Tree

Liriodendron tulipifera



Location in the Oaks: The Tulip Tree is found along Deering Avenue.

The Bark: The bark of the Tulip Tree is gray-brown in color. While it is smooth when the tree is young, it becomes ridged and furrowed with age.

The Leaves: The distinct leaves of the Tulip Tree are easily recognizable because of their unusual shape. They are 4 to 6

inches long and are almost completely flat along the top. There are four lobes on the leaves, two on each side. Unlike most trees, there is no lobe along the top.

The Wood: Soft, light wood, like that of the Tulip Tree, is easily worked into a variety of things. It is commercially valued for things like plywood, furniture, boxes, and interior trim.

The Flowers: This tree got its name from its flowers. They are green and yellow and resemble tulips. They usually have a broad orange band around the base of the bloom. The flowers are 1.5 to 2 inches in diameter and have six petals.

The Fruit: The fruit that the Tulip Tree produces is cone shaped and contains overlapped winged seeds. It is pale brown when ripe, and looks like a shuttlecock. It falls apart one year after flowering.

The Twigs: The twigs found on the Tulip Tree are brown and stout. They are also hairless and are encircled by stipule scars.

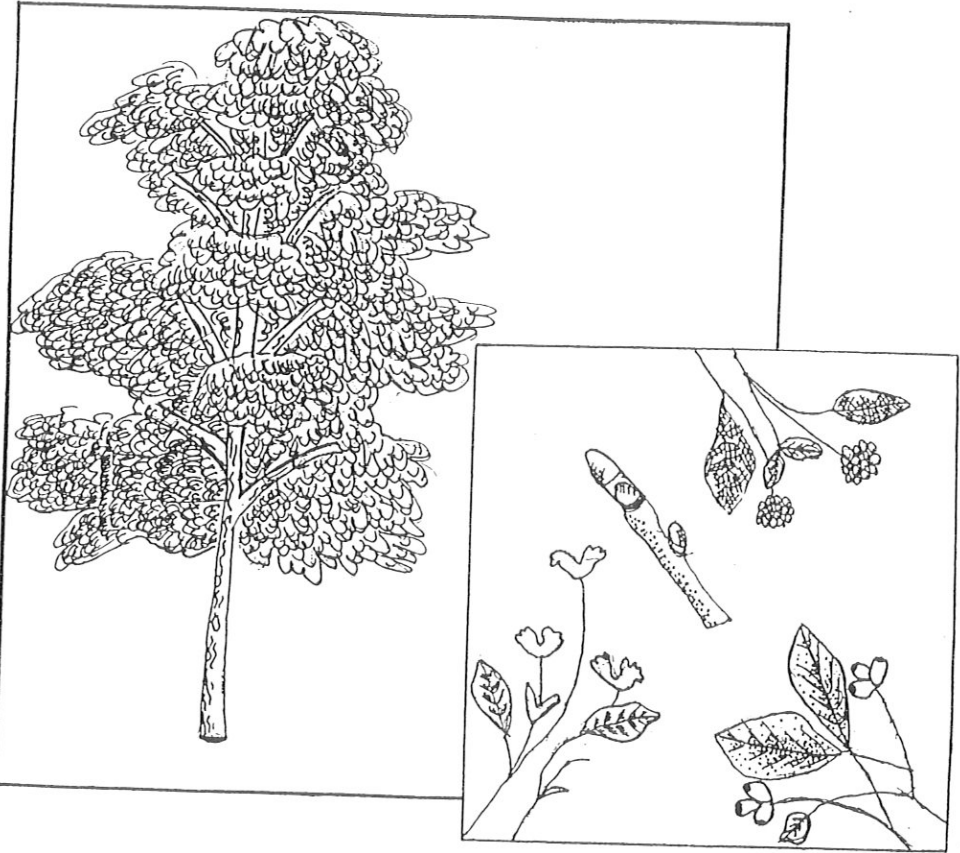
Other Locations: You can find the Tulip Tree growing naturally in places like the eastern United States and southern Ontario, Canada.

Other Interesting Facts: The Tulip Tree is also known as the Yellow Poplar, even though it is a member of the magnoliaceae family. This tree is often grown as an ornamental because of its resistance to disease and slightly pyramidal crown. In Maine, it blooms late spring through early summer. There are two large Tulip trees outside of Montecello, Thomas Jefferson's home. He called these the Junos of his garden

- *Kaitlin* .

Tupelo

Nyssa sylvatica



The Bark: The colors of the bark vary from dark gray to dark brown. It is usually vertically ridged, thick, broken into square plates, rough, and deeply cut into rectangular or irregular ridges.

The Leaves: The oblong leaves are usually 2 to 5 inches long and 1 to 3 inches wide. They are thick and often crowded on short twigs or clusters at the ends of the branches. These leaves are very noticeable, due to their

shiny green top and the pale and hairy bottom. In the fall the leaves turn fluorescent yellow, orange, scarlet, and maroon.

The Flowers: The males and females are both very small and green. The flower has 5 petals in separated long-stalked clusters.

The Fruit: The Tupelo has a bluish berry about $\frac{3}{8}$ to $\frac{1}{2}$ inch long. The fruit is blue-black or dark blue, elliptical, with thin, bitter or sour pulp. The fruit has thin flesh surrounding seeds.

The Twigs: The twigs are thin with a light brown color. Young twigs are greenish-yellow and eventually they become gray to reddish-brown on short hairy spurs.

The Size: The average height of a Tupelo is 50 to 100 feet. The most common height is 80 feet. The diameter is 2 to 3 feet.

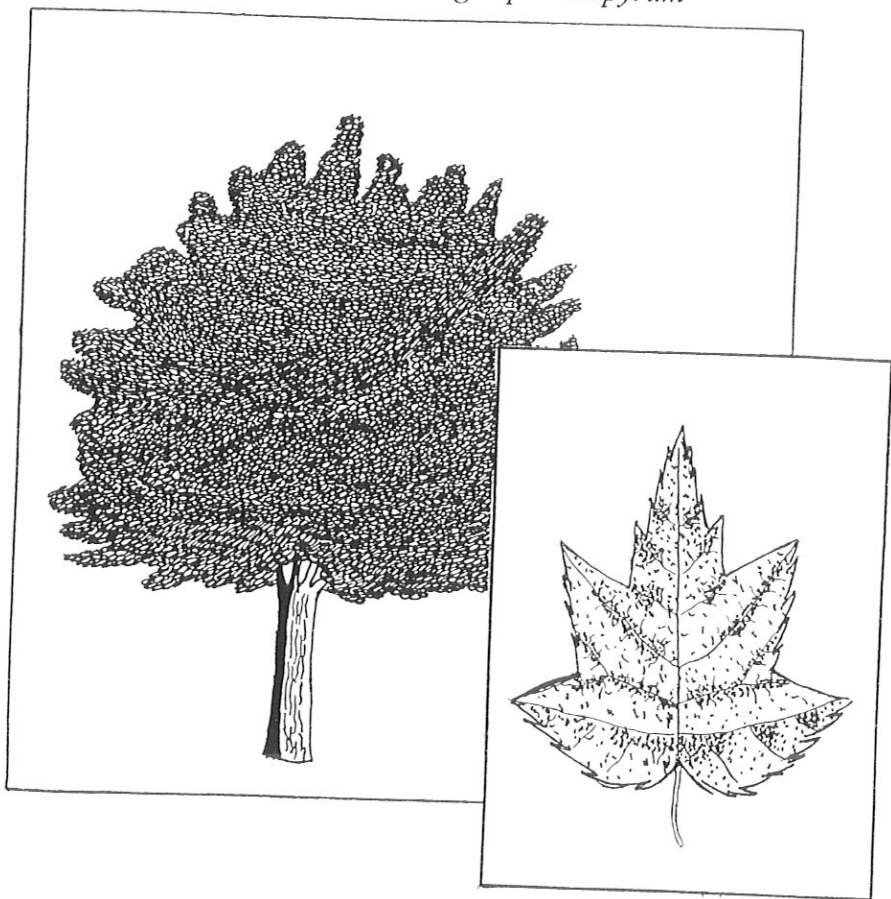
Other Locations: Tupelos are often found in deep, moist, hot places like the forest and swamps of dry places such as Ontario, Maine, Florida, Texas, and Michigan.

Other Interesting Facts: The Tupelo is also known as the Sour Gum Tree. There are many different types of Tupelos like the Black Tupelo, Bear Tupelo, Ogeeche Tupelo, and the Water Tupelo.

-Jamie

Washington Hawthorn

Crataegus phaenopyrum



Location in the Oaks: One Washington Hawthorn is located southeast of the rose garden. It is the southernmost tree in Deering Oaks. It is located on Park Avenue, near the intersection with Forest Avenue.

The Bark: The Washington Hawthorn has reddish-brown to grayish-brown bark. The bark of this tree is usually thin and scaly.

The Leaves: The leaves of a Washington Hawthorn tree are egg-shaped. They have three or five pointed, sharply toothed parts that are glossy dark green. The leaves are smooth and dark green above and smooth or partial hair beneath.

The Flower: The Washington Hawthorn's flower is 1/2 inches across, with five petals, in clusters. They bloom in May or early June. The petals are a white color.

The Fruit: This tree produces small round berries, about 1/4 inch in diameter. The fruit stays on all winter. They are orange and red in the fall.

The Twigs: This tree has dense twiggy branches with inch long thorns. On the twigs of a Washington Hawthorn there are white flowers and attractive fruit.

The Size: The Washington Hawthorn is usually about 40 feet high and is 20 to 25 feet wide.

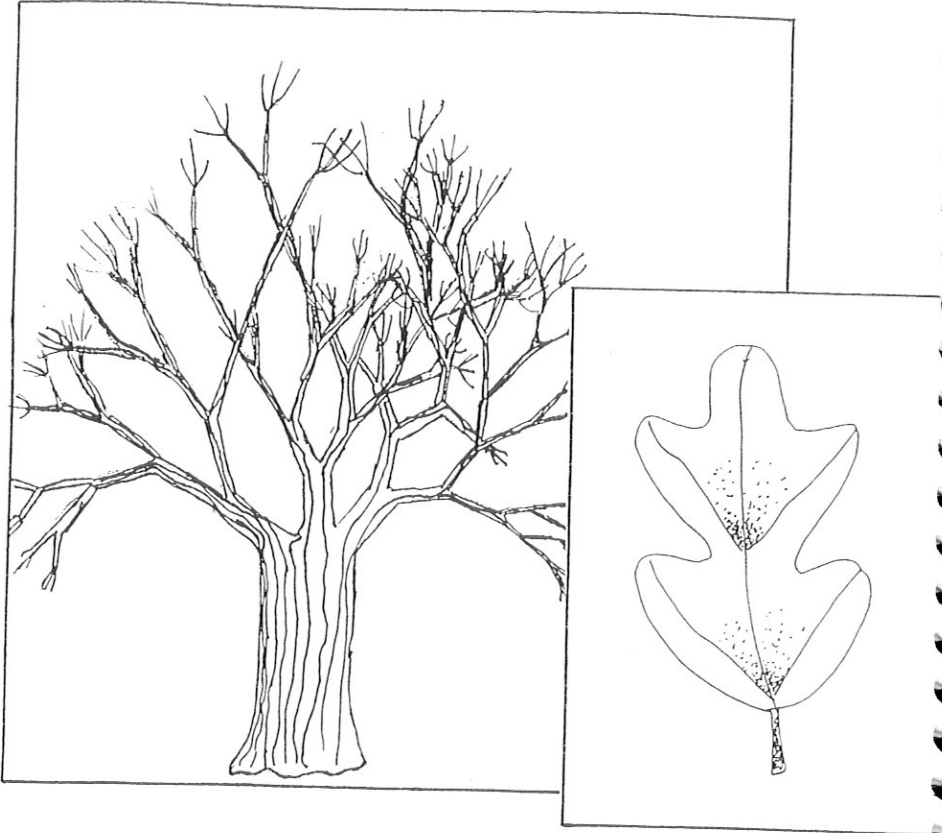
Other Locations: The Washington Hawthorn grows naturally in the southeastern United States. It grows in woods and thickets.

Other Interesting Facts: The Washington Hawthorn is a deciduous tree. It belongs to the Rosaceae family. There are more than 1,000 species of Hawthorn trees.

-Carlyle

White Oak

Quercus alba



Location in the Oaks: White Oak trees can be found in several places around Deering Oaks. You might want to look near the playground to see them.

The Bark: The bark is pale gray, scaly, and becomes fissured with age. That is what gives it its name. The bark goes 20 to 30 feet up the tree.

The Leaves: The leaves are 8 inches long, 4 inches across, and green in the spring and summer. In the fall the leaves turn red and fall off. There are 7 or 9 lobes on a leaf. They are normally large.

The Wood: The wood on the White Oak is called hardwood. It is used for building ships. It also makes good furniture.

The Flowers: The male flowers are yellow-green, drooping catkins. Males are born in groups. The females are born separately.

The Fruit: The fruit of the White Oak is an acorn. The texture is scaly and rough.

The Twigs: The twigs sprout out. Often they grow horizontally.

Size: This tree is normally 70 to 150 feet tall. When they grow in open areas they are smaller, and when they grow in enclosed areas they grow bigger and have a narrow crown.

Other Locations: The other common area for the White Oak is in dry areas, especially in the Northern Hemisphere.

Other Interesting Facts: It is the state tree of Connecticut, Illinois and Maryland.

-Dan

Glossary

Alternate Palmate: leaves or veins that are not directly opposite of one other

Catkins: a long flower cluster bearing crowded flowers and prominent bracts

Coniferous: mostly needle-leaved or scale-leaved chiefly evergreen, cone bearing trees or shrubs

Deciduous: falling off or shedding at a specific season or stage

Fissured: a narrow opening in a leaf

Furrowed: grooved or deeply wrinkled

Habitat: the area or type of environment where something/someone lives

Hybrid: produced by breeding two different species of plants

Lenticels: small pores or narrow lines on the stems of woody plants

Linear: very long and thin

Lobed: a rounded part of a leaf

Margin: the edge of a leaf

Ornamental: used to add beauty to the landscape

Opposite: leaves are opposite each other on a stem

Palmate: several leaves or veins point outward from a central point.

Pinnate: all main leaves and veins arise from the central shaft or midrib

Pistils: the female organ of a flower, including the stigma and ovary

Spiral: winding or coiling around a center

Stamens: a pollen-producing organ of a flower

Stipule: engraved with dots or short strokes instead of lines

Whorled: several leaves coming out from almost the same point on a stem

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