

"Into The Woods..."



**A Field Guide to the Trees, Plants, and Birds
of Baxter Woods**

**Windsor 7 Students
King Middle School
2000**



“Into the Woods.....”

Introduction

Long before Mayor James Phinney Baxter purchased the woods with the desire to create a sanctuary within the bustling growth of Portland in the late 1800's, these woods were the grounds for the F.O.J. Smith "castle." As you walk through the forest, there are still great stones that were part of Smith Castle, strewn about as if, after his death, Smith's restless soul picked up his home and flung it across his property.

After Smith's death, Baxter bought the property and later willed it to the city as a beautiful place, an oasis to be held sacred in the ever-changing modern world.

Walking through the great hemlocks and oaks, hearing my classmates' voices echoing within the forest, an image of a girl running to a secret spot filled my imagination.

A blur of pink chiffon,
Is all that suggests a moment is stolen.
Streaking past great hemlocks and oaks,
One destination in mind, one thought
Fueling pounding feet.

Glancing around her own favorite place,
A place to hide from the outside world,
A place to run from the smothering and the work,
A place to cry and be comforted only by the breeze,
And the ever-forgiving willow.

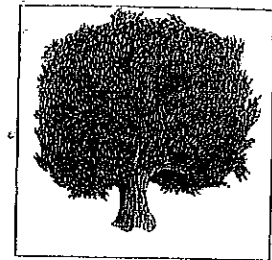
And then it is upon her,
Taking over her body in a wave of heat,
It lifts her from the ground,
Shaking her like a rag doll,
She struggles for breath,
Trying to gulp in air through
Tight and swollen lungs,
But the sickness* is too much for her.
It closes over her, and with one last desperate gasp,
She is gone.

A soft breeze stirs the surface of the water,
And whispers a secret in the child's ear.
But she can not hear it.
The willow, the weeping willow
Sees the child, the one she holds so dear
In a peaceful sleep on a small bed of moss
Just the right size.
She reaches out to her body, still alive with soul,
But not with real life.

Now I sit here smiling up at the willow,
Just a care-free child myself,

And I know that the little girl,
Preserved by the willow tree,

Is looking down at me,
And she is smiling, too.

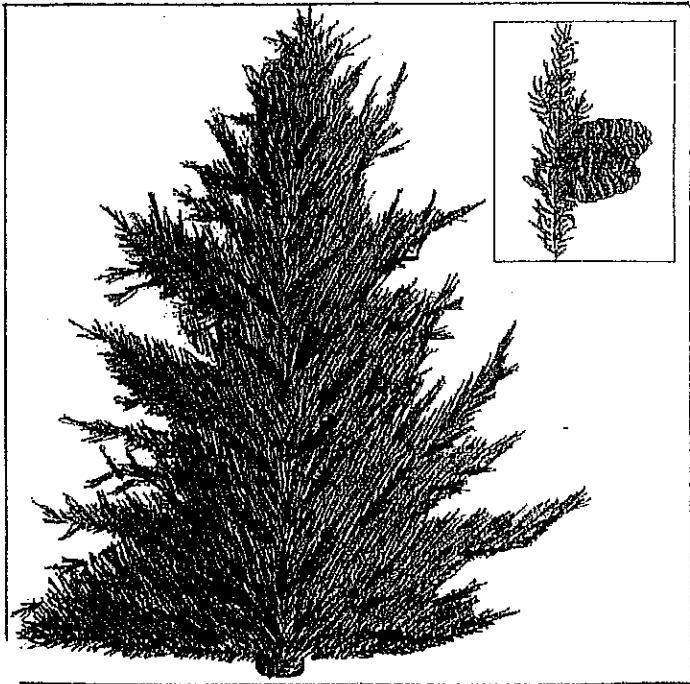


Riley Rose

* Children died of diphtheria at the turn of the century.

Balsam Fir

Abies balsamen



Description:

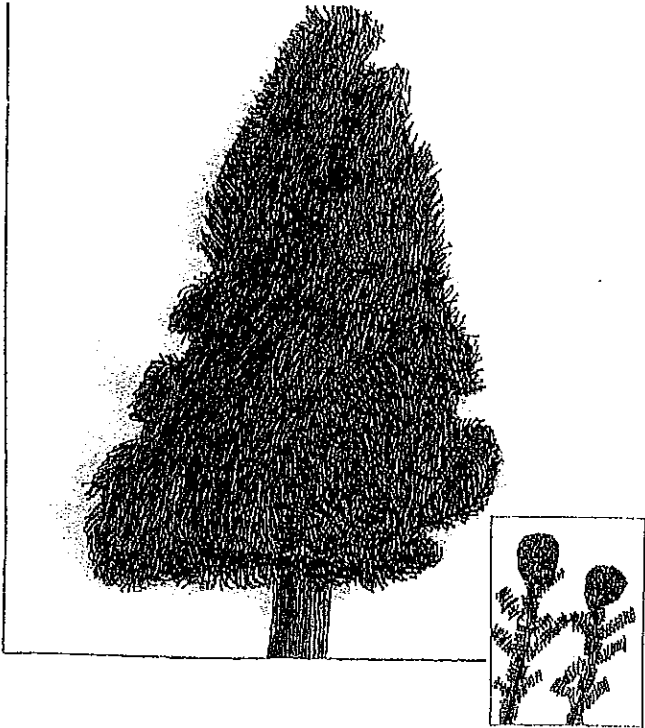
- **Needles:** The needles are flattened and narrow, and have a blunt tip. They grow $\frac{3}{4}$ to $1 \frac{1}{2}$ inches long. The needles are semi-flexible and dark shiny green on the upper surface. On the lower surface they have two white bands.
- **Trunk:** The tree is usually 40 to 60 feet tall. The trunk of the Balsam fir is 1 to $1 \frac{1}{2}$ feet in diameter. The trunk has smooth, greenish gray bark, on which there are numerous raised blisters filled with a clear, sticky, and fragrant sap.

- **Root:** The Balsam fir is a coniferous tree. It has one large central root and smaller roots spread out in a diameter of 40 meters. The tree prefers moist soft soil.
- **Cone:** Cones appear on branches in late spring and by fall the 2 to 4 inch, purple-tinted cones stand erect like candles among the upper branches. The male and female cones grow in different clusters along the tree. The female cone is much larger than the male cone. The male cone is more moist and greener than the female.
- **Seed:** Winged brownish purple seeds about $\frac{1}{2}$ inch long fall out of the cone when the right temperature has been reached.
- **Habitat:** This fir grows in the New England area and southern Canada. It is usually found on mountain ranges and by rivers, lakes, and streams where the soil is soft and moist.
- **Uses:** The trees are rarely used for lumber because the wood is light, weak, and soft. It is most popular as Christmas trees.

-zachary

Eastern Hemlock

Tsuga canadensis



Description:

- **Needles:** The needles are shiny dark green on top with a yellowish color underneath. The needles are flat and stiff. The needles are $\frac{3}{8}$ to $\frac{5}{8}$ inches long. They have rounded tips and grow singly rather than in clusters.
- **Trunk:** The tree is softwood. The wood is poor quality and knotty. The bark can range from purplish-gray to cinnamon brown. The bark has scaly ridges. The tree is 60 to 70 feet tall and 2-3 feet in diameter.

- **Cone:** The cone is brown and small. The cone is $\frac{5}{8}$ and $\frac{3}{4}$ inches long. The cone grows downwards from the ends of the twig with rounded cone scales.
- **Seed:** The seeds of the Eastern hemlock are winged. They are within the cone. The seeds plummet in the autumn but don't germinate till spring. The tree being chopped down, humans, animals, wind or water can move the seed. The seed growth is very slow. The seed of the hemlock is light brown and $\frac{1}{16}$ long.

Habitat: Eastern hemlocks are found in Eastern North America. They are also found near the Great Lakes and in hilly and rocky areas. They enjoy cool valley slopes with moist soil.

Uses: Early settlers made the young leaves of the Eastern hemlock into tea. The tree's lumber is used for construction (sheetwood, roofing and subflooring), boxes and crates.

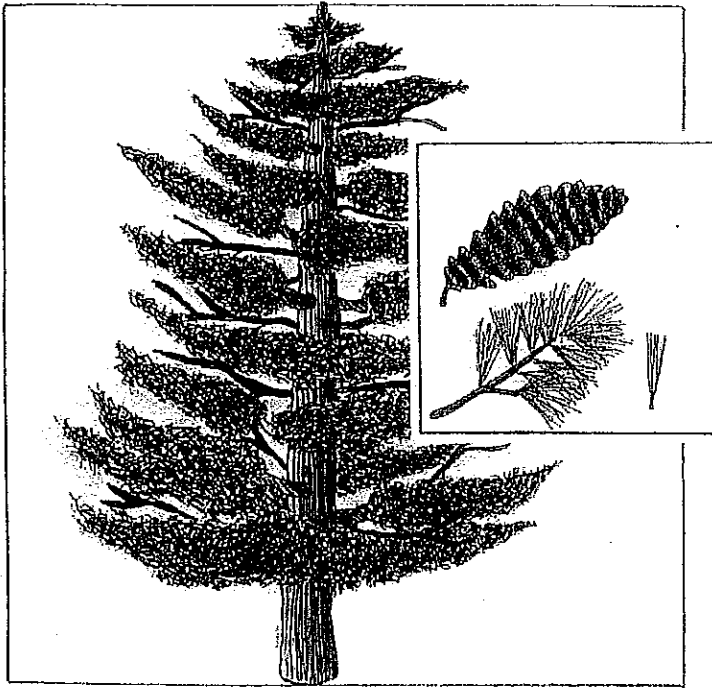
Other Interesting Facts: The needles were once an ingredient in old-fashioned rootbeer. The tree can be in this world 400 to 800 years. The hemlock is the state tree of Pennsylvania. The oldest hemlock was nine hundred and ninety-eight years old.

-Joey



Eastern White Pine

Pinus strobus



Description:

- **Needles:** The needles of the Eastern White pine are slender, soft and flexible. They are about 5 inches long and come to a sharp point. The top of the needle is gray or bluish-green and the underside is grayish-white. The trademark of the tree is its clusters of five needles, which are set very closely together on the twig.
- **Trunk:** The trunk of the White pine, like many pines, has deep crevices set into smooth bark. The wood is light colored, and it is strong except when it is in contact with the soil. It is soft and easy to work

with. The diameter of the trunk ranges from 2-3 feet, and the height can be anywhere from 75-120 feet tall!

- **Root:** Like all conifers, the White pine has a deep, spreading root system that grows best in moist, sandy, loose soil.
- **Cone:** When the cones are young, some people might mistake them for flowers. The male cones start out as a yellow cluster at the base of the season's shoots. They don't grow to be as large as the female cones. The female cones start out as a pink cluster and mature. Each cone has 50-80 scales. They release their seeds after two years.
- **Seed:** Each seed is reddish brown and 5-8 millimeters long. They have a wing that is about 20 millimeters long, which helps the seed get carried by the wind. The seed requires cool, moist conditions for a few weeks before it can start to grow.

Habitat: The White pine grows in woods at low altitudes mostly in eastern North America.

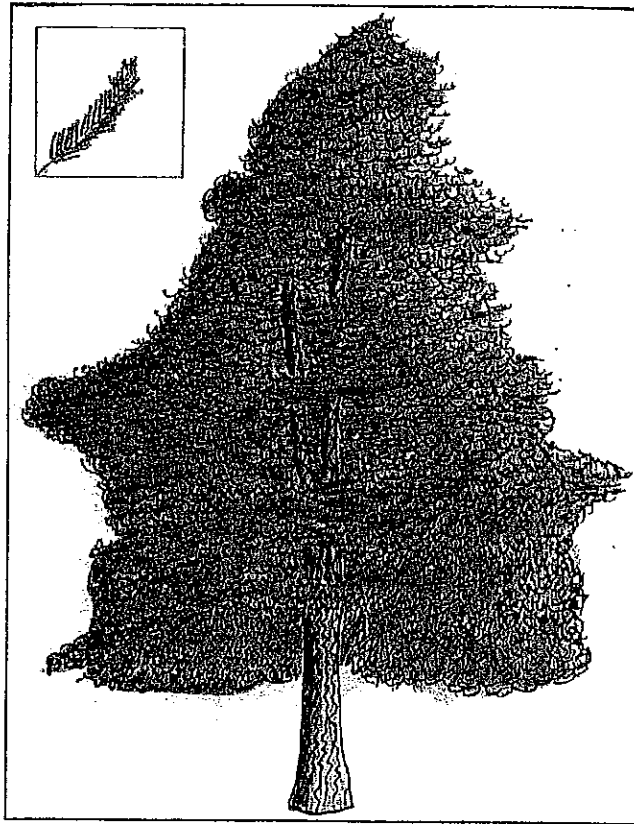
Uses: It is used mostly for light and medium woodwork. It is also said to be one of the best ornamental trees. Its seeds are edible. Its wood was prized for ships' masts when the majority of boats were wooden.

Other Interesting Facts: The Eastern White Pine is also known as Soft, Sapling, Pumpkin, and Weymouth Pine. It is the only five-needled pine native to North America. It is also the Maine and Michigan state tree.

-Riley

Northern White Cedar

Thuja occidentalis



Description:

- **Needles:** The flexible, scale like needles of this tree are from 1/8 to 1/4 inches in length. They are opaque green on the upper surface and yellowish green on the lower. The needles grow opposite from each other on the branch and the branchlets are usually flattened.
- **Trunk:** The White cedar's thick trunk grows into two or three sections from the base. The close-grained, aromatic bark is colored gray to reddish-

brown to orange-brown. The wood is soft and of light weight.

- **Root:** The roots of this tree like easily worked soil, not rocky or hard.
- **Cone:** The cones of this tree are light brown in color. They grow up from short stalks. The cone is 3 to 5 inches in length. They have six to ten leathery scales and fall apart while on the tree.
- **Seed:** The seed grows inside the cone. It is a half inch long, light brown, linear in shape and almost completely encircled by wings.

Habitat: This tree grows in Southwestern Canada and Northeastern United States. It likes moist, swampy areas. It can grow in different types of soil but likes it best if the soil is limed. The tree can tolerate droughts, low temperatures and pollution.

Uses: The wood of the Northern cedar is used for many things such as railroad ties. It's used as the source of oil of cedar, which is used for medicinal purposes. It's used for making canoes, docks and boats because the wood is resistant to water and therefore less likely to begin to decay. The wood is also used for shingles and siding. The needles are often used for ornamental purposes.

Other Interesting Facts: The tree's name is thought to have originated from the Greek tree Thyon or Thiya, which produced resin or incense. The resin was burned as a type of incense during ancient ceremonies. This tree is also related to the Red cedar.

-Anna



Norway Spruce

Picea abies



Description:

- **Needles:** This tree has slender rigid needles that are $\frac{3}{4}$ in. long (2cm). They are four sided with a sharp point at the tip of the needles. They are an evergreen color. The needles are single rather than growing in clusters.
- **Trunk:** The bark is red-brown to gray in peeling thin strips. The trunk is reddish gray and 20m tall. It's stiff while young but often graceful at maturity.

- **Root:** The roots spread out 40 feet to match the crown and grow best in damp soil.
- **Cone:** The cone grows at the top of the tree. It is light brown and the male cone grows 4-7 inches long. The female grows 6-9 inches long.
- **Seed:** The seed is an egg shape with a black tip and the rest of the seed is yellow or purple but sometimes is brown. They are $1 \frac{1}{2}$ inches long.

Habitat: This tree grows in the mountain forest in damp soil. It also grows in northern and central Europe.

Uses: This type of tree is widely planted for the value of its timber and that you can use it for a Christmas tree.

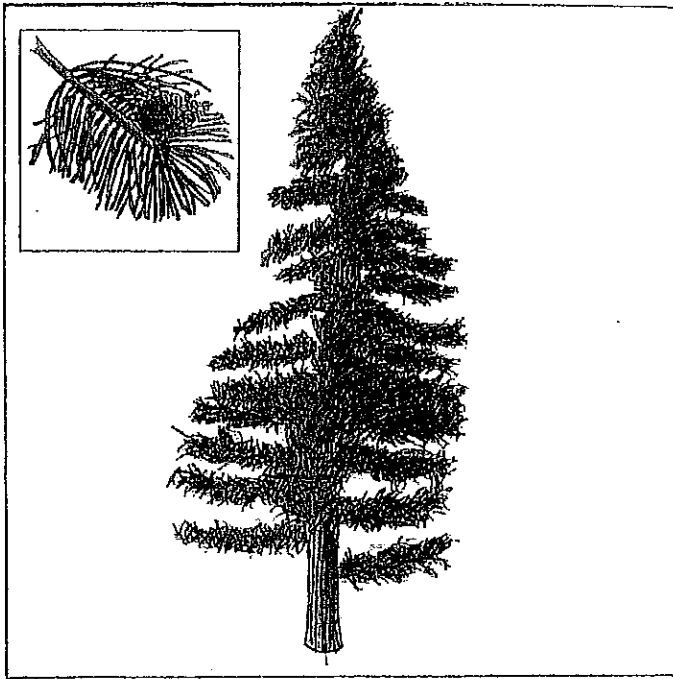
Other Interesting Facts: This tree grows faster than any other kind of spruce growing in America.

Amanda



Red Pine

Pinus resinosa



Description:

- **Needles:** These six inch long needles are slender and flexible, with sharp points. They are green and come in groups of two, with soft, long sheathes at the base. The sheathes hold the needles together. The needles turn brown after they drop.
- **Trunk:** The orange-red flaky bark on the eighty foot trunk has broad flat ridges and shallow fissures. It is one to three feet in diameter, and has brownish wood.

- **Root:** The roots of this tree like well drained soil, particularly in sandy plains and forests that house a variety of trees.
- **Cone:** These light brown cones are egg shaped when closed and round when opened. They have no stalk at all and are about two inches long without prickles. The cones stand at a ninety degree angle from the tree. Both male and female live on the same tree.
- **Seed:** The seed is one quarter inch by one quarter inch and is attached to a one inch by one third inch wing. They are gradually released throughout the winter. The light brown seed is stored inside the cone.

Habitat: They are found in northeast North America and southeast Canada. It grows well in soil that is too poor for the White pine. Usually it is found on dry rocky ridges.

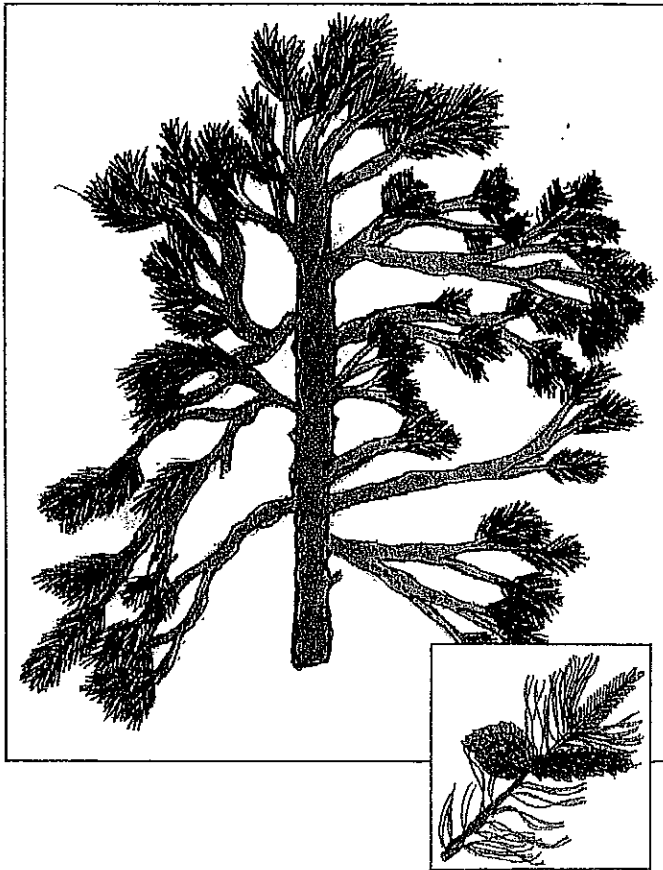
Uses: The Red pine is very valuable for it's timber and is a very pretty ornamental tree. It has been used in many reforestation projects throughout the northeast. It is also used for construction, piling, masts, crates, and pulpwood.

Other Interesting Facts: The Red pine was discovered by early explorers who mistook it for a tree they saw in Norway. So they named it the Norway pine, which is now it's nickname. It will grow very fast for the first 60 to 70 years then slow down considerably.

- Ned

Scotch Pine

Pinus sylvestris



Description:

- **Needles:** The needles are easily identified because they are twisted, about 1 ½" long and grow in pairs of two. They are a dull blue green and are evergreens. The needles are sharp-pointed and flexible.
- **Trunk:** This tree is a softwood with about a 2' diameter which is usually larger in older trees. The trunk is often crooked. The bark is distinctly orange in color and very thin, yet fire resistant. The bark becomes gray with age. The Scotch pine grows to be between 70 and 100 feet tall.

- **Root:** The roots are able to adapt to their surroundings just like the rest of the tree. The trees roots are unaffected by soil and climate conditions.
- **Cone:** Both cones are about 1 ½ - 2" long and the male is yellowish brown. The male cones are numerous even on young trees. The female is reddish brown, egg shaped, and grows in the same tree as the male.
- **Seed:** The seed is about 1½-2" with usually one or two wings or one surrounding membrane. They are circular or oval and are tan to light brown in color.

Habitat: The Scotch pine can grow on sandy to loose and clayey soils and usually grows best in poor soils. This tree can also tolerate city smoke very well. It usually grows in forested areas but can be found in suburbs, gardens and cities. This tree is native to the Scottish north but can now be found in Europe, Asia and North America.

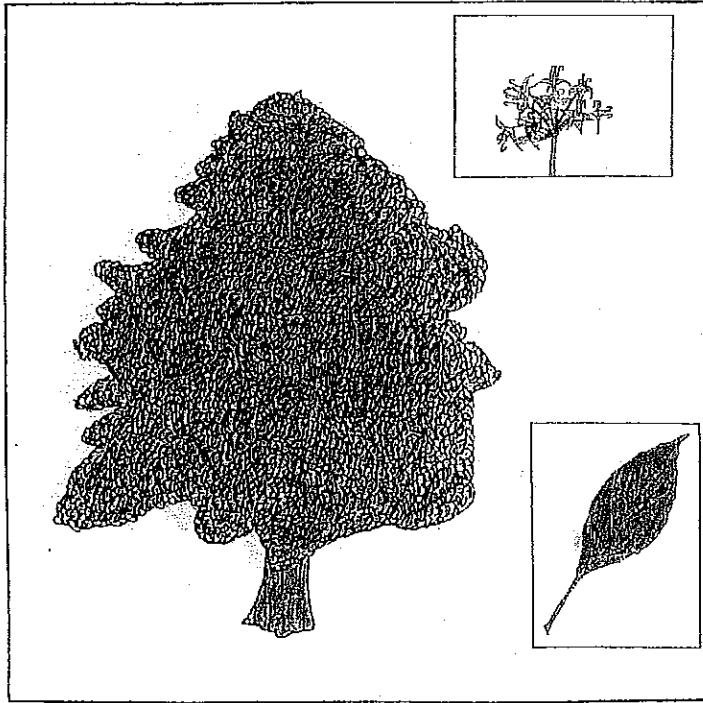
Uses: The Scotch pine is used for timber in America and Europe although not desired by most. It is also a common Christmas tree. It is always in demand in the New York City area.

Other Interesting Facts: The Scotch pine is the most widespread tree in the world. It is almost immune to diseases and although it can withstand many, many things such as fire, smoke and poor soils, it is sensitive to snow, porcupines and birds.

-Sarah

Alternate Leaf Dogwood

Cornus alternifolia



Description:

- **Leaves:** The leaves are alternate. They are also entire which means the leaves are smooth on the edges. They are 4 ½ - 2 ½ inches long, oval-shaped, and yellowish green. They are hairy on the bottom and smooth on top, and they tend to crowd at the ends of the twigs. They have a simple pinnate venation.
- **Trunk:** The trunks are much like the young maple trees you would see in the woods of Maine. Near the fruit the bark gets very red. The tree is 10-30 feet in height, 10-15 centimeters in diameter, and

has a widespread flattened crown. The bark is reddish brown. The trunk is smooth when young, and it gets shallow fissures when the tree grows old.

- **Flower:** The flowers bloom from late May to early June after the leaves have fully developed. They appear in creamy white clusters at the ends of the twigs.
- **Seed:** The seed is 2mm long and is shaped like a teardrop. After the summer is over, the seeds blow off in the wind and start to reproduce.

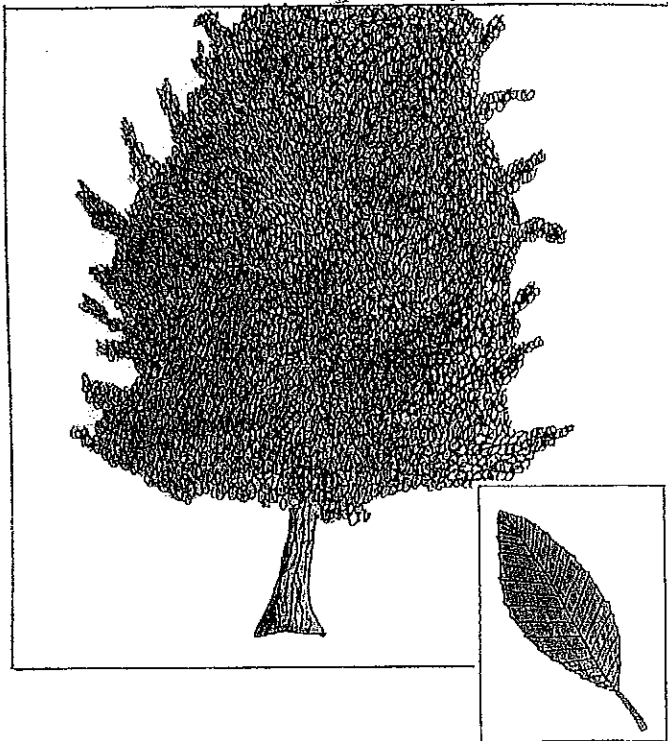
Habitat: The Alternate leaf dogwood lives in the woodlands, on the edge of the woodlands, and sometimes along streams or banks.

Uses: The Alternate leaf dogwood tree is poisonous to human beings.

-wyatt

American Beech

Fagus grandifolia



Description:

- **Leaves:** The leaves of the beech form round canopies. The thin papery leaves turn gold in the autumn. The twigs on the beech are slender and are spear shaped at the tip. The leaf setting on the tree is opposite. The margin of the leaf is dentate. The shape of the leaf is deltoid, and the venation of the leaf is pinnate.
- **Trunk:** The beech tree has smooth tight fitting bark that is a silvery gray color, with dark blotches and bands. The trunk of the beech can grow to be an amazing 4 feet in diameter.

- **Root:** In an open field the beech tree develops a short, stocky trunk and a low, wide spreading crown. In the forest the roots stay nice and deep and are extremely strong.
- **Flower:** The beeches have two kinds of flowers, the male flower, and the female flower. The male flowers of the beech are shaped like a globe. The female flowers are in short erect spikes. The size of the flower is about 3 to 4 inches and the length of the petals on each flower is 4 to 5 inches.
- **Seed:** The seed is very broad, notched, green on the top and white below.

Habitat: Beeches grow in woodlands or in fields all over the eastern coast and into Texas. The tree grows best when in deep, rich, well drained soil, where the surface layer does not dry up so quickly.

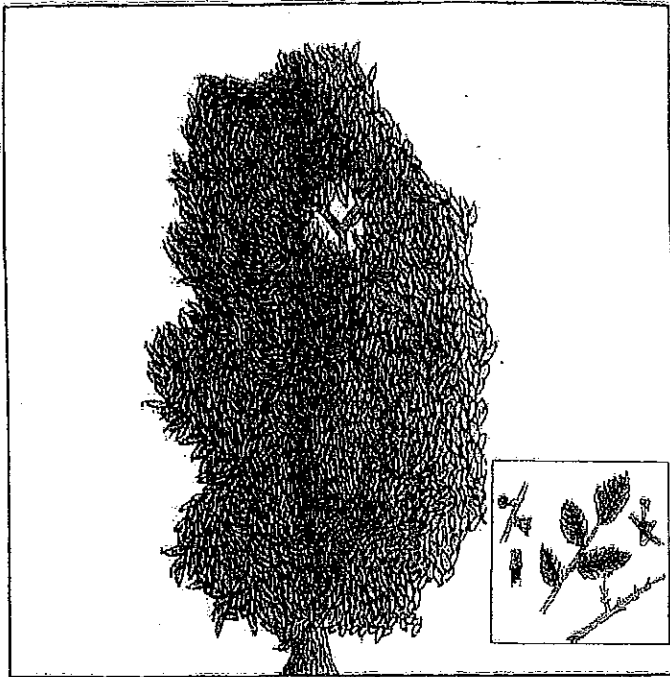
Uses: The beech tree has many uses. Some are charcoals, some soda products, wood manufactures, and the seeds have a very high oil content.

Other Interesting Facts: A famous inscription on an old Beech was, "D. Boon Cilled A Bar on tree in year 1760."

-Brittany

American Elm

Ulmus americana



Description:

- **Leaves:** They are tooth edged and oval, 12 centimeters long. Elm leaves are alternately arranged along the branches, and are usually sharply pointed with a simple pinnate venation.
- **Trunk:** The elm has a single trunk with a 4 to 6 foot diameter. It has gray bark with broad ridges and deep fissures.
- **Root:** Elms have a root system that tends to be deep. They grow in rich bottom land and moist soil.

- **Flower:** The flowers are tiny without petals and contain both male and female parts. Flowers emerge in early spring before the leaves.
- **Fruit:** They are 1-2 inches long and brown. These seeds are flat and dry with a disk like wing.

Habitat: They can be found in eastern lowlands of North America.

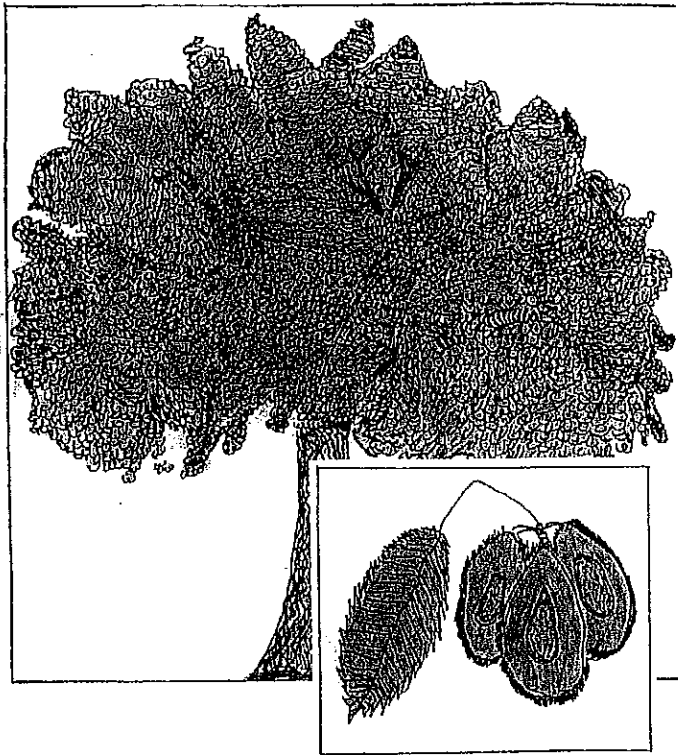
Uses: Elms are used for furniture and hockey sticks and are good nesting places for birds, because many birds eat the tree's fruit.

Other Interesting Facts: In the past they were used to shade the streets of Portland and many other cities across the continent, until many trees were taken by the Dutch Elm disease.

-Mino

American Elm/ White Elm

Ulmus americana



Description:

- **Leaves:** An American Elm's leaves are dentate and are simple pinnate and oblong. They are 4 to 6 inches long and 1 to 3 inches wide. They are green and in the fall they turn yellow.
- **Trunk:** It has tall dark gray ridges on the bark and grows up to 80 to 120 feet tall and 2 to 4 feet in diameter. It's vase-shaped and also a hard wood tree.

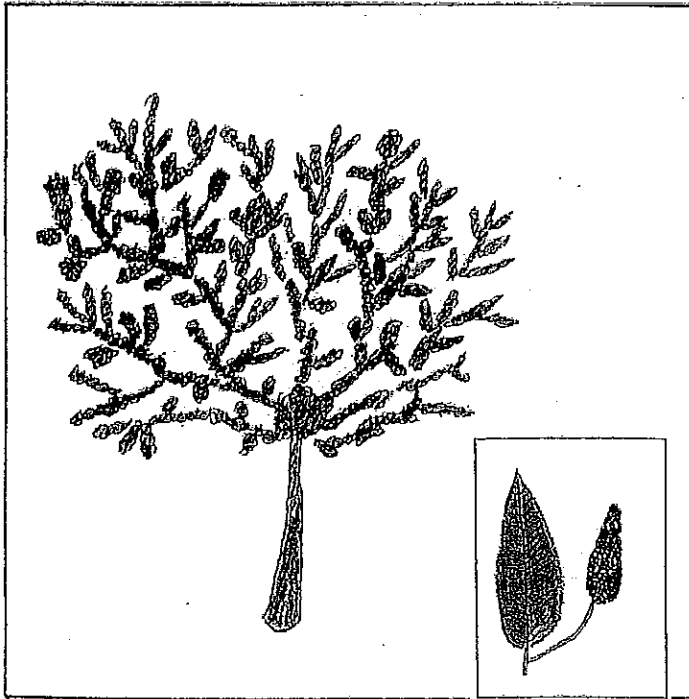
- **Root:** This is a very tall tree. The taller the tree, the more roots it needs so if the winds blow, the roots grab the rocks and hold the tree in place to keep it from coming out of the ground.
- **Flower:** They are greenish and come out before the leaves grow. They are 1/8 inch long and grow in clusters along the twigs. They bloom in early spring to early May.
- **Seed:** The seed is about 1/2 inch long and has bristly edges. It is an oval shape. The light brown seed has a small wing. It ripens before the leaves fully come out.
- **Habitat:** Their habitats are in Massachusetts, North Dakota, Nebraska, and also Newfoundland to Nova Scotia. The American Elm likes to grow down in low lands with other hard woods.

Uses: The American Elm is used for shade and fruit.

-Melissa-

Black Cherry

Prunus serotina



Description:

- **Leaves:** The leaves are alternate, elliptic and oblong. They are widest at the center, finely toothed, dark green, shiny, thick, somewhat leathery, and 2-5 inches long. The underside of the leaf is covered with rusty brown hairs. The leaves are deltoid, and the venation is simple pinnate. The mosaic is opposite and the margin is dentate.
- **Trunk:** The bark on the trunk is red-brown or black, and it's rather shiny with prominent white lenticles on young trees. On older trees the bark is broken into irregular plates.

- **Flower:** The flowers are white and can be found in clusters of 4 or 5. They appear in May when the leaves are only half grown.

Seed: The seeds are inside the fruit, which is pea-sized and globular. The fruit is in drooping racemes, dark purple or almost black when ripe. It ripens from June to October. After the summer is over, the fruit falls off, and the seed reproduces a new tree.

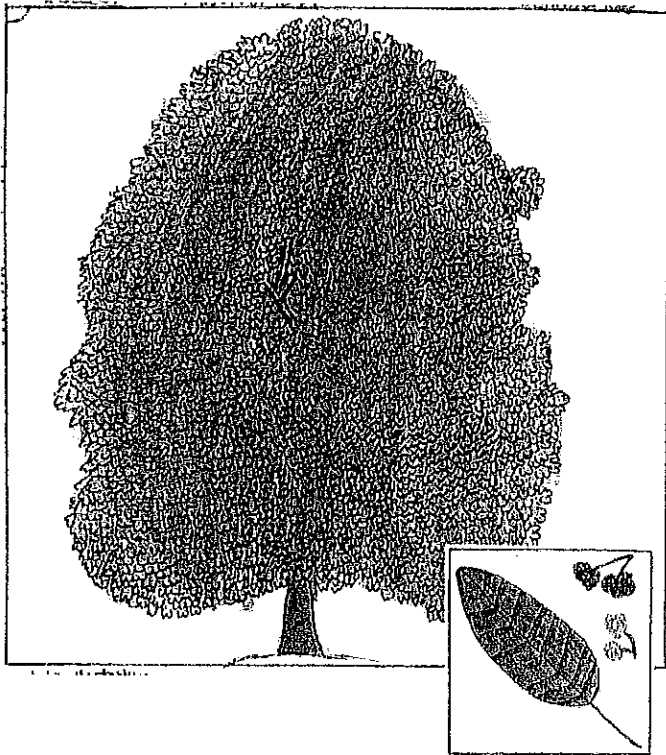
Habitat: The Black cherry is found north of the rose garden on the eastern side of Deering Oaks Park. It is also found in southern Quebec and Nova Scotia. It is found in the south in Florida and Eastern Texas, and in the north in Minnesota and Maine.

Uses: With the fruit you can make pies or make ice cream.

Joseph

Black Gum

Nyssa sylvatica



Description:

- **Leaves:** The leaves in the Black tupelo are a light green, five inches long, and three inches wide. They are leathery, smooth, and hairy. They have simple pinnate venation. The top is usually darker than the bottom. They also turn the brilliant colors of orange, yellow, red, and purple in the Autumn. The shape is oval, the margin is entire, and the mosaic is alternate.
- **Trunk:** The trunk is 110 feet tall and 5 feet wide. The bark on the black tupelo is rough and flaky kind of like sandpaper.

- **Root:** Sometimes the shallow roots cause the tree to give way. Mature trees sometimes get heart rot.
- **Flower:** Flowers of the Black tupelo are a small greenish color and grow in clusters of 5 to 6 on the branches.
- **Seed:** The seed is a berry like fruit and its flowers are a source of honey. The seed is born one at a time in a thin fleshy fruit in a cluster. The seeds of the Black tupelo are 1\3-2\8 inches long and there is one seed in each fruit.

Habitat: They are found mostly in North America in swamps, and really muggy places. They are also sometimes found in pine forest.

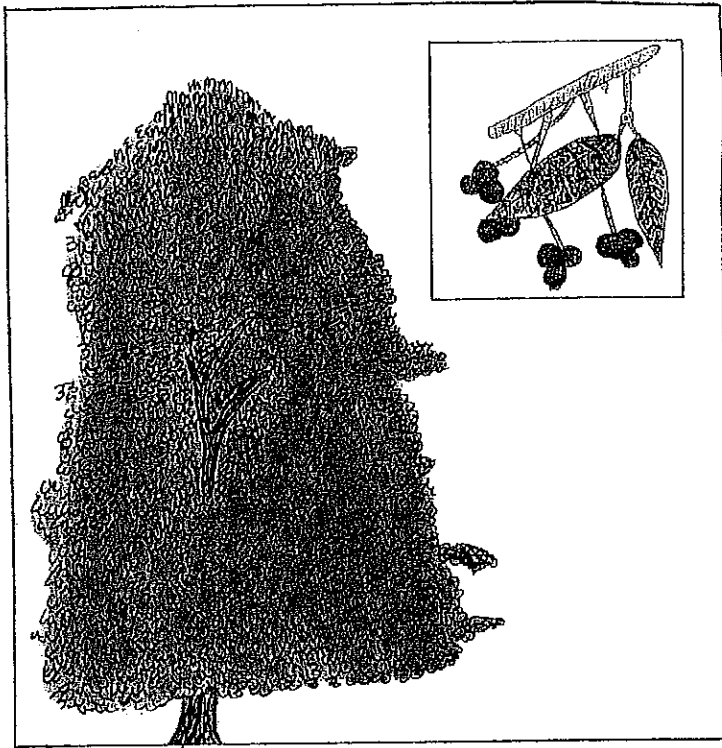
Uses: It is used for chopping bowls, flooring rollers in glass factories, gun stocks, pistol grips for guns, wheel hubs, and lumber.

Other Interesting Facts: The tupelo is also known as the water nymph because it prefers water and swamps. The fruit has a acid pulp inside. Tupelo is a indian name.

Techa

Black Gum

Nyssa sylvatica



Description:

- **Leaves:** Oval-shaped, glossy, and dark green, they are usually about 6 inches long and 3 inches wide. They have a blunt tip, and they feel a little leathery. Sometimes they have little hairs. They are bright and shiny and turn bright red in the fall. The leaves have a simple pinnate venation. The margin of the leaf is entire, and the mosaic of the leaf is alternate.
- **Trunk:** The flaky gray wood on the trunk turns reddish brown, and it has deep wide ridges. The

trunk is large, and it stands up to 110 feet tall and 5 feet in diameter.

- **Root:** The shallow roots cause Black gum to give way during high winds.
- **Flower:** Tiny green flowers grow on the branches. They have five petals in separate long-stalked clusters usually 2-3 inches long.
- **Seed:** The seed is a berry-like fruit, dark blue, 1/3-2/3 of an inch long. The berry has one seed with a thin flesh, and it is born singly in a cluster ripening.

Habitat: It can be found in the moist woods and swamps of North America. It can also be found in hardwood and pine forests and in valleys or uplands with moist soils.

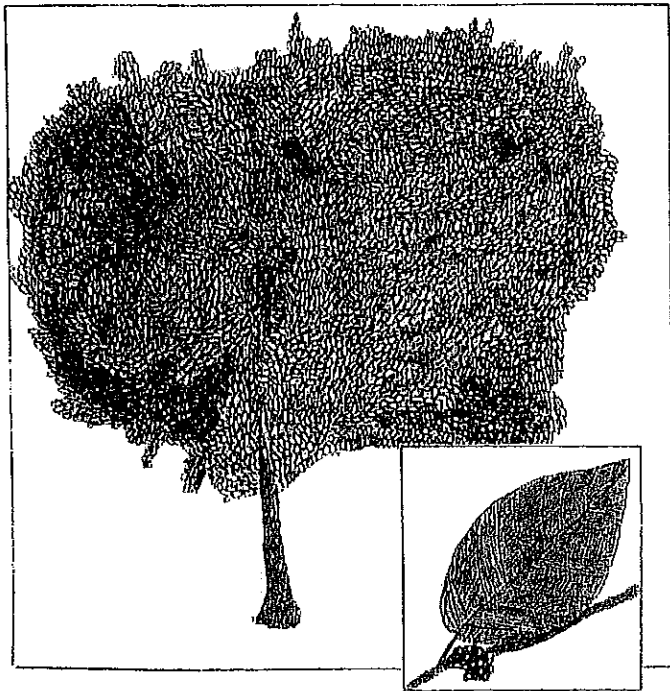
Uses: People use Black gum for ox yokes, chopping bowls, flooring, rollers in glass factories, gun stocks, and pistol grips.

Other Interesting Facts: Black gum is known as the water nymph because it prefers water and swamps.

-Christine

Common Buckthorn

Rhamnus, R. cathartica



Description:

- **Leaves:** The leaves bloom in late spring and drop in late fall. Their mosaic is opposite or sub-opposite and some are alternate. The leaves are simple leaves with prominent pinnate veins and rounded teeth at the leaf margin. The approximate size is 2½ inches long and 1 ½ inches wide. The color of this leaf is glossy green on the top and paler green on the bottom. The leaf type is deciduous persistence.
- **Trunk:** The red-brown to olive-gray bark is broken on the surface into short thin scales. Some of the branches end in short thorns and are stiff. Average height for this tree is 10-15 ft. tall.

- **Root:** The root is a yellowish- brown with a satin finish and a dense wood. The roots like harsh soils.
- **Flower:** The flowers are small and cluster at the end of the branches. The color is green or white. They're very fragrant and they are slightly curved and pressed to the stamen. Female flowers have 3 or 4 stamens.
- **Seed:** The seeds germinate in spring after being planted in the fall. The fruit is a rounded berry, 3/8 inch and very smooth, green ripening to black with a juicy pulp and sweet greenish-black juice. Birds spread the seeds after eating the fruit. The fruit is poisonous to humans. The seeds are plentiful in the berries.

Habitat: The Common buckthorn is usually found in dry land and chalky soil in Southern British Columbia and spreads throughout Washington, Oregon and the western edge of California. Thickets and hedge- rows are the areas where you would commonly find this tree. This tree is also occasionally cultivated in the eastern states.

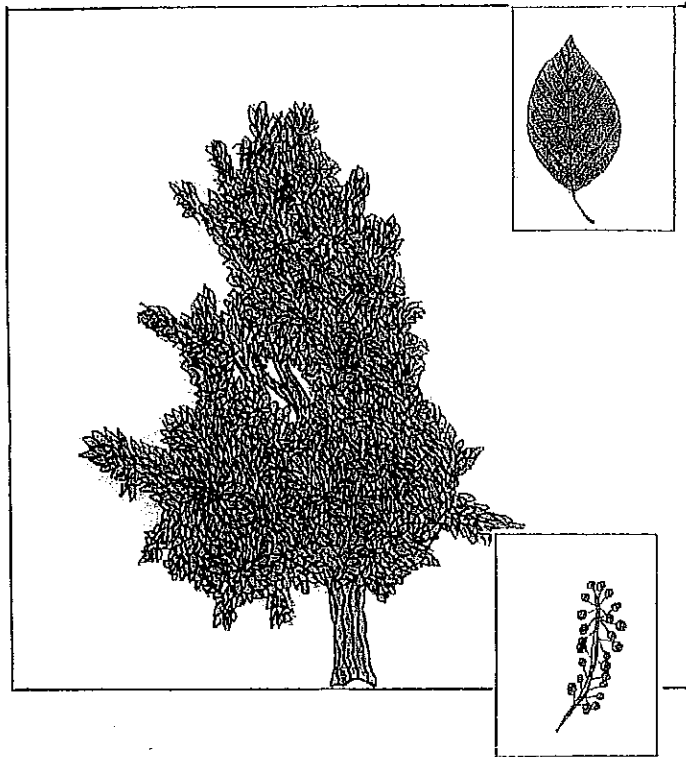
Uses: The bark has been used as a laxative since 1877. It has been known for its medicinal powers since the thirteenth century, but isn't anymore because of its negative side effects. The berries have been used by the French to dye food and clothes. The green sap is made into a juice.

Other Interesting Facts: This tree is native to Europe and cultivated widely in thorny hedges. Sheep are very fond of these leaves. It is often confused with wild cherries and plums.

-Lindsey B.

Common Chokecherry

Prunus virginiana



Description:

- **Leaves:** The leaves of the chokecherry are broad and approximately 2-4 inches long and 1-2 inches wide. Their pointed margins are often doubly toothed. The margin is serrate, and the leaves grow opposite of each other. The leaves are in a deltoid shape with abruptly pointed tips. The vein pattern of the leaves is simple pinnate.
- **Trunk:** The tree is usually small, but it can reach a height of 25 feet. The trunk of the chokecherry is grayish-brown with pale lenticels. The bark and twigs have a bad smelling odor. When the tree

becomes older, the bark becomes scaly. The bark on older trees can be peeled off to expose bright green inner bark.

- **Root:** The root system of the chokecherry is widespread and fibrous. The root usually stretches out as far underground as the branches above. It seems to prefer rich, moist soil but is usually found in dry, poor soil.
- **Flower:** The flower is white and 7-19 centimeters long. The buds are narrow and pointed. There are four petals on each flower.
- **Seed:** The seed of the tree is also its fruit. The cherries ripen in July or August. The seed is a dark reddish-purplish color.

Habitat: The tree is sometimes found in open woodlands but is usually found along roadsides and the corner thickets of farms.

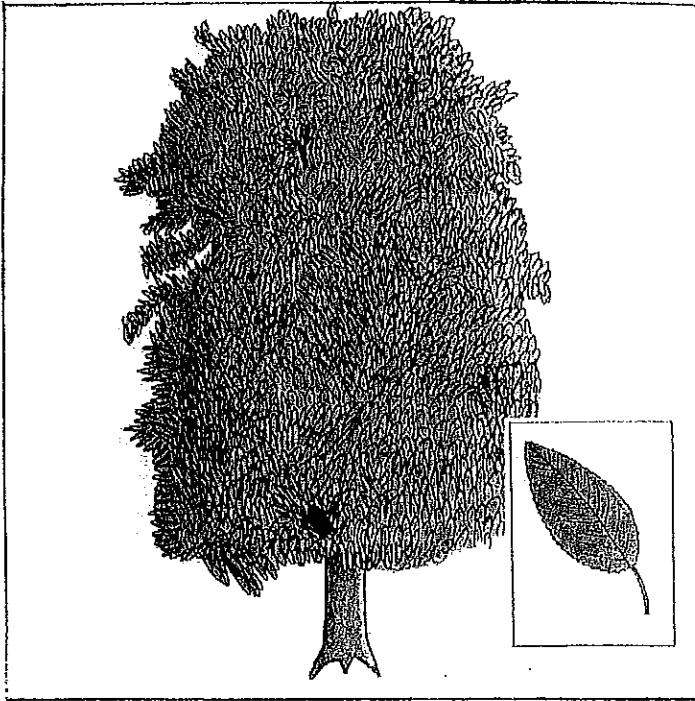
Uses: The cherries of the Chokecherry tree are sometimes made into jellies and wines, and they are eaten by many wild animals. They were used by the Native people in pemmican, and also the leaves and twigs were used in remedies for colds and rheumatism.

Other Interesting Facts: When chokecherries are eaten raw, they cause people to throw up.

-Katherine

Common Pear

Pyrus communis



Description:

- **Leaves:** The leaves are egg-shaped and grow up to 3 inches long. The leaves are jagged on the sides and the tip is pointed. They are shiny with green on the top and a darker green on the bottom. The leaves are 1-2 inches wide. The mosaic is alternate; the shape is deltoid; the margin is dentate; and the venation is simple pinnate.
- **Trunk:** The outside of the tree is covered with gray-brown bark, smooth but scaly. The Pear tree is prized for its wood, which is used to make fine

furniture, drawing instruments, and rulers. This is a hardwood tree that measures 40 feet in height.

- **Flower:** The flowers are white with violet-red anthers. Flowers and a pear will arrive in April before the leaves. They are 1¼ inches wide with 5 rounded white petals. The flowers grow in clusters. They bloom in early spring.
- **Seed:** A pear grows between 2½ - 4 inches in length. It has a green and brown skin. The pear has a sweet edible pulp that matures in late summer.

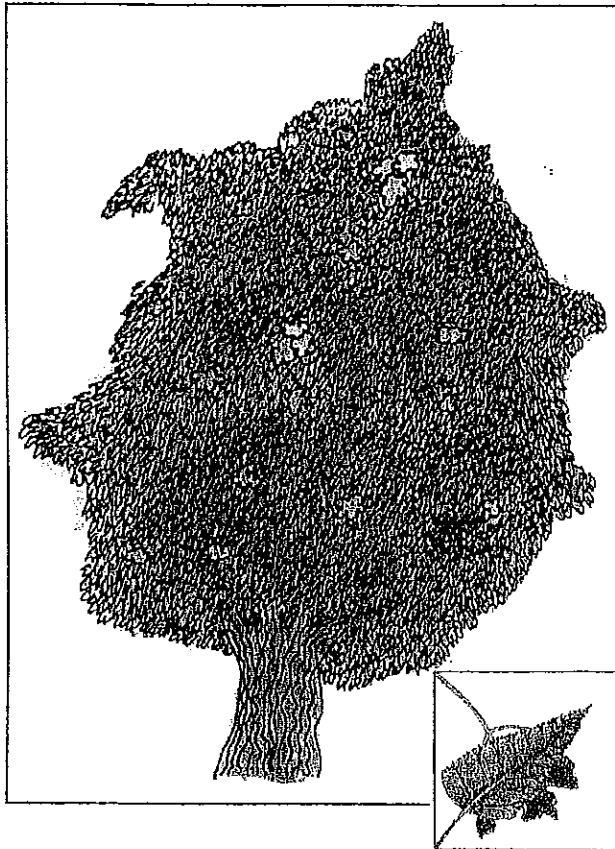
Habitat: The pear tree originally came from Central-Eastern Europe and Asia Minor. They enjoy moist soil near houses and fences, roadside clearings, and borders of the forests.

Uses: Pear trees have been famous for their fruit since ancient times. The light brown wood was once prized by French cabinetmakers.

-Andrew

European Elderberry

Sambucus nigra



Description:

- **Leaves:** The mosaic of its leaves is an opposite pattern. Their venation is a compound pinnate, and the leaf margin is dentate. The shape is usually deltoid.
- **Trunk:** The trunk is a dark brown and has a tint of red to it. It is rough in texture and can grow up to be ten feet in height.

- **Flower:** The flowers are lobed and grow in clusters. They usually have five petals that are grown in a circular formation and are a creamy white.
- **Seed:** The berries that they grow in are black in color, but the seeds themselves are brown in color. When the berries are green they, are poisonous, but if they are black, they are edible. Fruit eating birds spread the seeds.

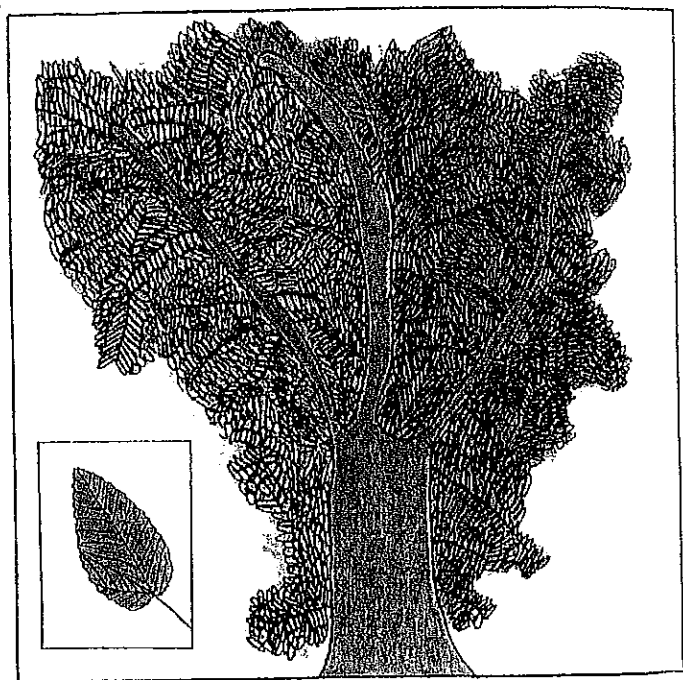
Habitat: The European elderberry grows mostly in the Northwest, but can be found in wooded areas across the Northeast also.

Uses: This tree is used for background screening, wild gardens, and borders.

-Matthew

European Linden

Tilia europaea



Description:

- **Leaves:** The leaves are distinctive, broadleaf, and deciduous. They are also sharp toothed, heart shaped (deltoid) and alternately grouped. They are long pointed at the tip, and green. The margins are serrate.
- **Trunk:** The trunk is rigid and heavily burred where the sprouts are gone. It is smooth, gray, and fissured (a crack at the base) when it's young.
- **Root:** They like to live in areas where there is a lot of moisture.

- **Flower:** They are creamy white in early summer and turn into nutlike fruits in late summer. They are usually ½ inch. They become fragrant and 5 parted in June and July. They mature in October and can live into the winter.
- **Seed:** It is usually a hairy gray nutlike seed. It is usually ½ to 2/3 inch. It is pea size and it matures in late summer.

Habitat: The linden is a very good park and street tree because it gives much shade. It likes to live in moist ground. It mainly lives in the Northeast and Pacific West of the United States.

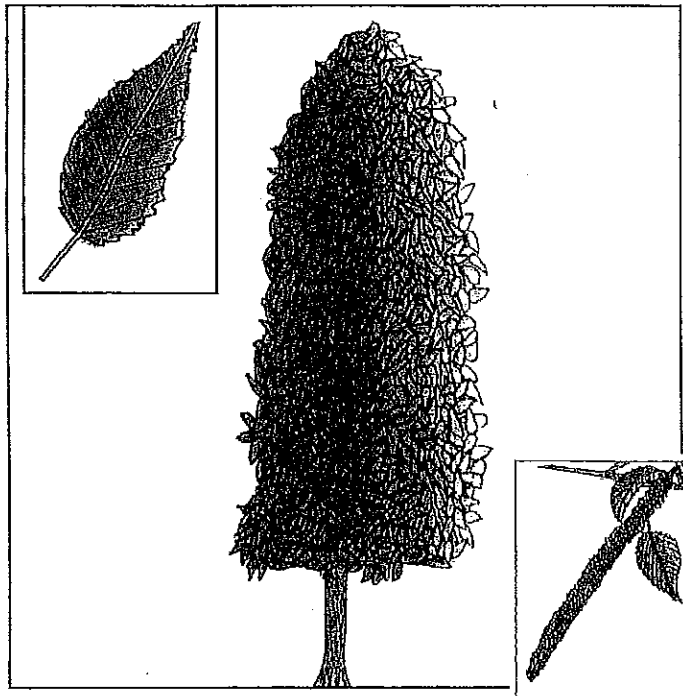
Uses: The flowers make honey. Lindens are also used in making: boxes, furniture, pulpwood, and cabinets.

Other Interesting Facts: Native Americans made rope from its bark. There are over 40 types of lindens. There are many European Lindens in Deering Oaks and Baxter Boulevard. It is a mixture (hybrid) of the big and little leaf linden. It is a great shade tree.

-Tom

Gray Birch

Betula populifolia



Description:

- **Leaves:** The Gray birch's margin is dentate. The mosaic is alternate. The leaf's shape is deltoid. The Gray birch's leaves are usually 2 ½ - 3 inches long. The leaves turn a pale translucent gold.
- **Trunk:** The Gray birch's trunk measures 4-8 inches in diameter. This is not a valuable tree. The trunk is marked by dark triangular v-shapes. The bark is a chalky grayish-white.
- **Root:** The Gray birch grows in poor soils such as abandoned fields, roadsides, and gravelly slopes.

- **Flower:** The flowers are produced in catkins. The catkins are ¾ of an inch long. They are dark brown. They open in the early spring before the leaves in April and May.
- **Seed:** The buds are hairless. The fruits are green and soft. They come out in September. Birds find the fruit delicious.

Habitat: The Gray birch's habitat ranges from the southeast in Canada to the northeast in the United States. It is normally found in wet soils.

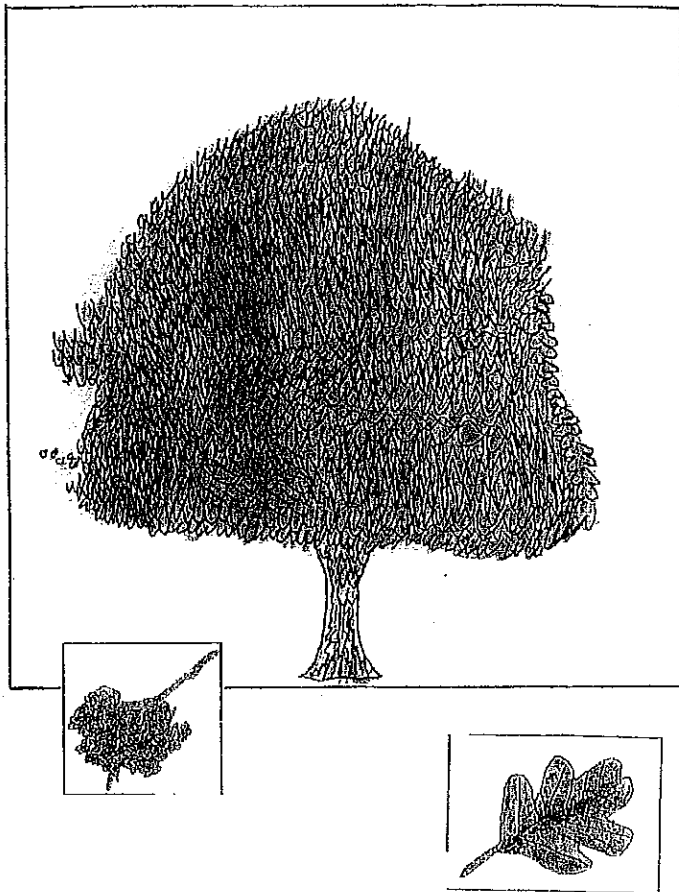
Uses: This tree is used for food, for firewood, and for making spools.

Other Interesting Facts: The tree's height is 33 feet. The birch tree acts as a nurse tree because it protects the seeds of older trees. The scientific name means "birch with poplar leaves."

-Keith R.

Hawthorn Tree

Crataegus species



Description:

- **Leaves:** The leaves of the hawthorn are lobed. The leaves are somewhat thin and dark green. The leaves grow in an alternate pattern, the margin is entire, and the shape is lobed. The venation is pinnate.

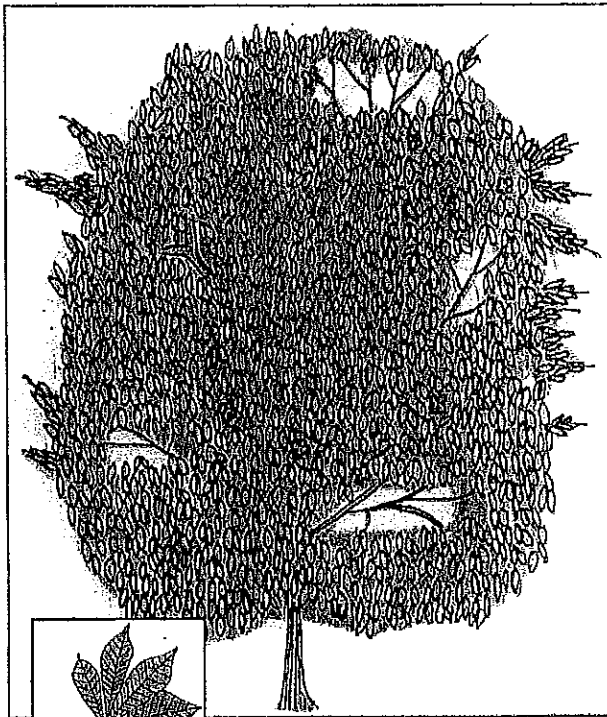
- **Trunk:** This shrub or small tree is 15-18 feet tall. The trunk is brown and ashy gray.
- **Flower:** You first see the flower in June. Five white or pink petals, 5-25 stamens, and 1-5 pistils. The flower is 2cm wide.
- **Seed:** One seed is contained in a reddish fruit about 1cm in size. The fruit begins to grow in the spring after a few cool moist days. Both birds and animals help to spread the seeds. It has a very thick shell that takes a long time to germinate.
- **Habitat:** The hawthorn habitat has to be very sunny. Its homes are China, Japan, Siberia, Asia and India.
- **Uses:** The plant is used for health and healing, and in food products.

-Brittany



Horsechestnut Tree

Aesculus hippocastanum



Description:

- **Leaves:** The leaves of the horsechestnut tree are large, deep green leaves in the summer and bronze in the autumn. The horsechestnut tree's leaves have a dentate margin and they are put together in a compound pinnate venation. The leaf has a deltoid shape. The mosaic growth is opposite.

- **Trunk:** The trunk is made up of dark brown bark that is smooth or broken into plates. Its usual height is 25 to 60 feet with a rounded crown of wide-spreading branches.
- **Flower:** The horsechestnut blossom is a giant compound flower six to twelve inches tall. The giant blossom is made up of smaller white blossoms that have five petals each.
- **Seed:** The seeds of the horsechestnut tree are held in a spiny seed coat and it usually contains one to two seeds. The seed is a rounded shape and it is brown and shiny like it was dipped in varnish. When the seed falls from the tree the seed coat opens, and people and animals distribute the seed.

Habitat: The horsechestnut tree is not native to North America it was brought here from Europe and China. Some people feel that even though the horsechestnut tree was brought to North America it's truly a native tree.

Uses: The tree is sometimes used as an ornamental lawn tree. It is also planted along highways and streets for use as a shade tree.

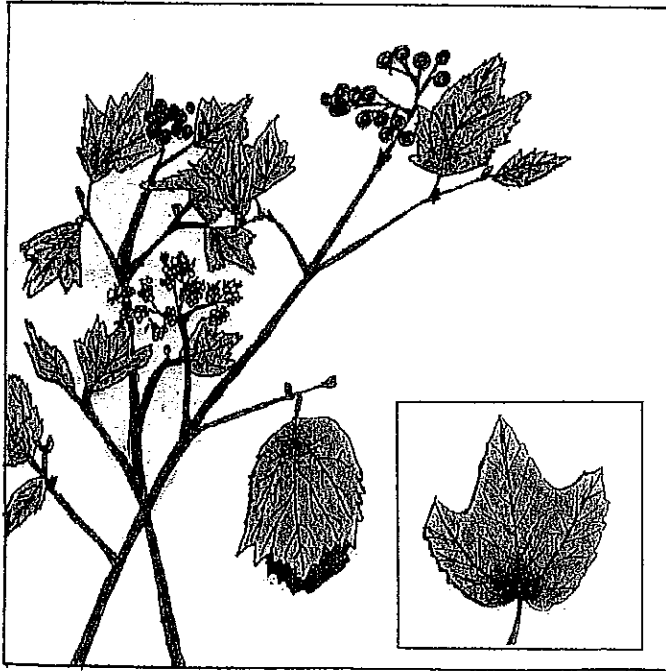
Other Interesting Facts: Some horsechestnut trees are known to grow to a height of seventy feet but this is a rare occasion,

Jack



Maple Leaved Viburnum

Viburnum acerifolium



Description:

- **Leaves:** The Maple leaved viburnum has round three-lobed leaves. The leaves have a dentate margin, a palmate venation, an alternate mosaic, and velvety hairs underneath. The leaves turn green in summer and purple in fall. Its leaves are much like the leaves of other maples.
- **Trunk:** The trunk itself is about 2 feet tall with slender, light grayish-brown, and minutely hairy bark. Its branches are ascending and about ½ to 1 ½ inches thick.

- **Root:** The roots of the Maple leaved viburnum are white and very shallow; they do not reach very far into the ground.
- **Flower:** The flowers cluster in “snow balls” from June through July. Some flowers have a pinkish-tinge, and the clusters are circular and 2-3 inches in diameter. The flowers bud in the spring.
- **Seed:** The seeds are inside berries that grow in the fall. The berries are small, brown, and circular. The berries have an unpleasant taste and are eaten by birds which is a good form of distribution for the plants.

Habitat: The Maple leaved viburnum lives in rocky woods and in shady areas. It ranges from New Brunswick to Minnesota and from Georgia to Tennessee.

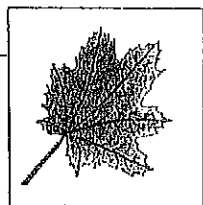
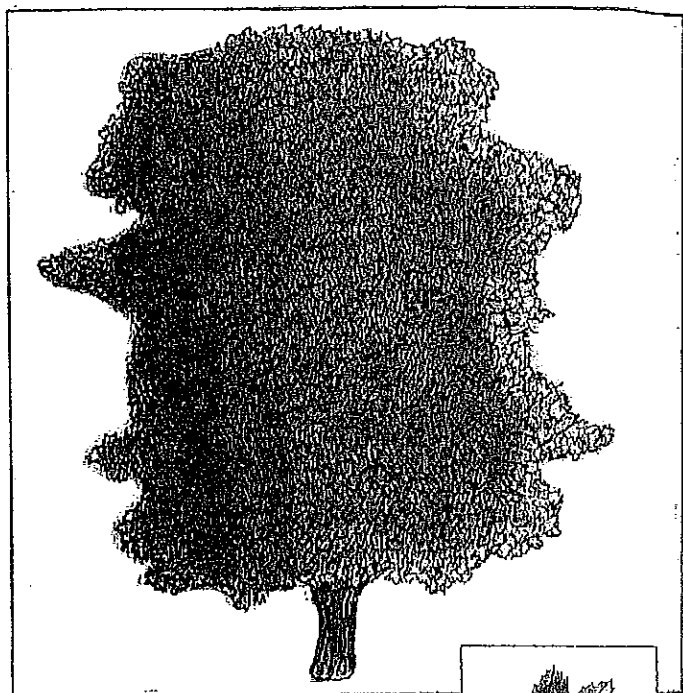
Uses: The Maple leaved viburnum does not have many uses, but it is used by experienced gardeners to take up places in gardens that have too much shade for other plants.

Other Interesting Facts: The Maple leaved viburnum is also known as the Maple leaved arrowwood or Dockmackie.

-Nathan

Norway Maple

Acer platanoides



Description:

- **Leaves:** The leaves of the Norway maple are simple palmate and lobed. The way they are arranged is opposite and the margin is entire. The leaf has 5 lobes, which end in several long, slender points and it is bright green and smooth on both sides.
- **Trunk:** The height of the Norway maple is approximately 25 meters and the trunk is very short compared to the rest of the tree with a diameter no more than 1-2 feet. The bark is gray with ridges that are not very deep.

- **Root:** The root requires a cool deep soil.
- **Flower:** The flowers are small and bright yellow or green born in conspicuous clusters and open up before the leaves.
- **Seed:** The fruits of this tree have large wings 5 centimeters long and they mature in early autumn.

Habitat: Its habitat is the mountain woods and its native region is South Western Asia and Europe. Although the U.S. isn't its native habitat, it is very well known, for people have planted it extensively. It is much smaller than its maximum height when grown in the open. In the U.S. it can be found anywhere west of the Mississippi River and all along the West Coast.

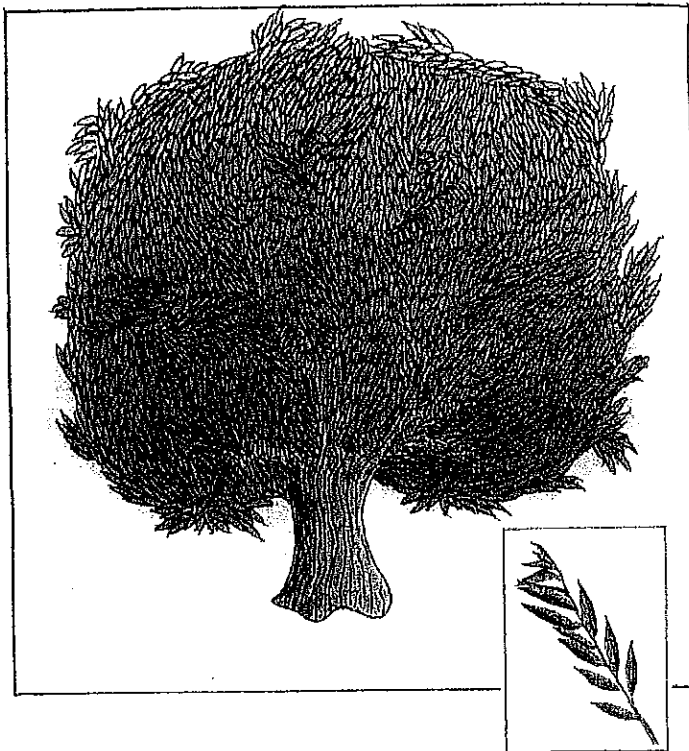
Uses: It is used for fine expensive furniture and as a shade tree.

Other Interesting Facts: It is very tolerant of city smoke and dust. It is also relatively free from insect pests and fungus disease. The Norway maple has a rounded even crown.

-Jordan

Prairie Willow

Salix humilis



Description:

- **Leaves:** The leaves are narrowly lance shaped with long tapering tips. They are light green and somewhat lustrous on both surfaces. The leaves are about 3-6 inches long. The venation of the prairie leaves are simple pinnate, the edge of the leaves, or in other words the margin, is entire, while the mosaic is alternate and the shape is linear.
- **Trunk:** The trunk of the Prairie willow divides into branches at or close to the ground. The trunk is covered with rough thick scaled, blackish- brown, heavy bark. It also has broad connecting ridges

which are made up of freely peeling scales that become shaggy at old age.

- **Flower:** The flowers appear in slender clusters at the ends of short leafy shoots. Both male and female flowers have the form of a little scale with a nectar gland at its base. Within weeks the pistil develops into a little bottle capsule ready to split open and release the seeds.
- **Seed:** Seeds of the Prairie willow have tiny green-light seedpods. The seeds are about 1/8 of an inch long, reddish-brown. The hairless capsules of the seeds mature in late spring.

Habitat: The Mississippi River Valley is where this tree grows best. It's often found in pure stands, in wet areas along streams, and in swamps. Its habitat is from the Gulf of Mexico all the way to the Great Lakes and from the Atlantic to the Rockies.

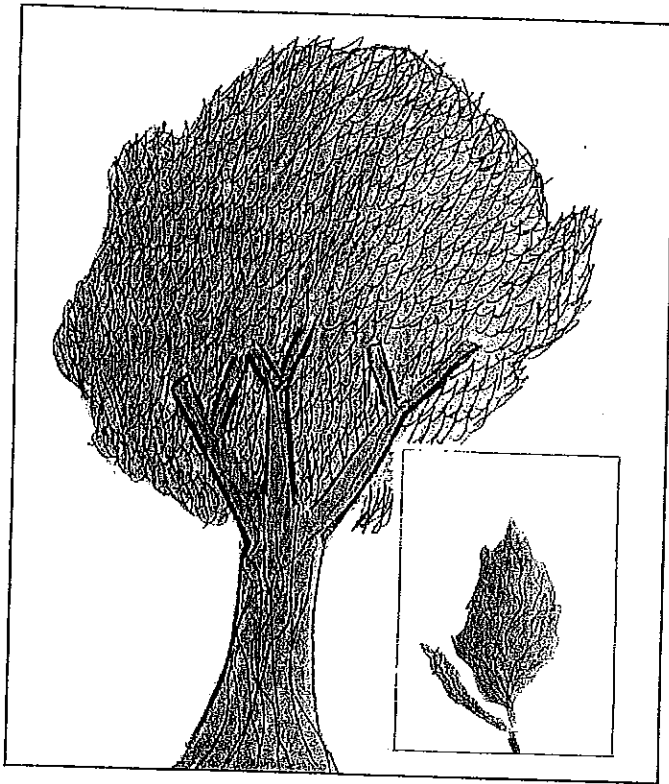
Uses: Prairie willows are used mostly to make charcoal for fuel. The bark is said to make a good substitute for quinine. It contains a glucoside salicin, which is used as a drug. It has a bulky root system that makes it a valuable tree in preventing soil erosion

Other Interesting Facts: Prairie willows may reach a height of sixty feet or more, making them one of the largest willow trees. The Prairie willows that grow in the northern part of the range tend to be much smaller than those in the South.

-Naíma

Quaking Aspen

Populus tremuloides



Description:

- **Leaves:** The leaves are alternate, short pointed, and are a deltoid shape with finely rounded teeth. The leaves are a smooth green above and paler below, turning golden in the autumn. The leaf blades measure from 1 to 2 inches in length. The veins in the leaf are pinnate.

Trunk: The soft, closed grained light brown heartwood merges into a broad band of nearly white sapwood. Young trunks can be a pale yellow-green color. The Quaking aspen can reach up to 40 to 50 feet in height and eighteen to twenty inches in diameter.

- **Root:** The roots are very wide spreading and up near the surface, with the sinker roots extending down to 10ft (3cm).
- **Flower:** Appearing before leaves unfold, the flowers of poplars are tiny, without petals, and contain one sex. Male and female flowers are gathered into same sex clusters on separate trees. The clusters are called catkins. A single stem has numerous, almost stalk less, individual flowers.
- **Seed:** The seeds are located in a green capsule found in the fruit. The seeds are tiny and are a light green color and grow faster in moist soil.

Habitat: The Quaking aspen grows faster in disturbed land and cannot live in shade. It can live from sea level to elevations higher than 10,000 feet. The Quaking aspen extends all across the world. It extends from Newfoundland to Alaska, and in the south into California, Arizona, New Mexico, and Texas.

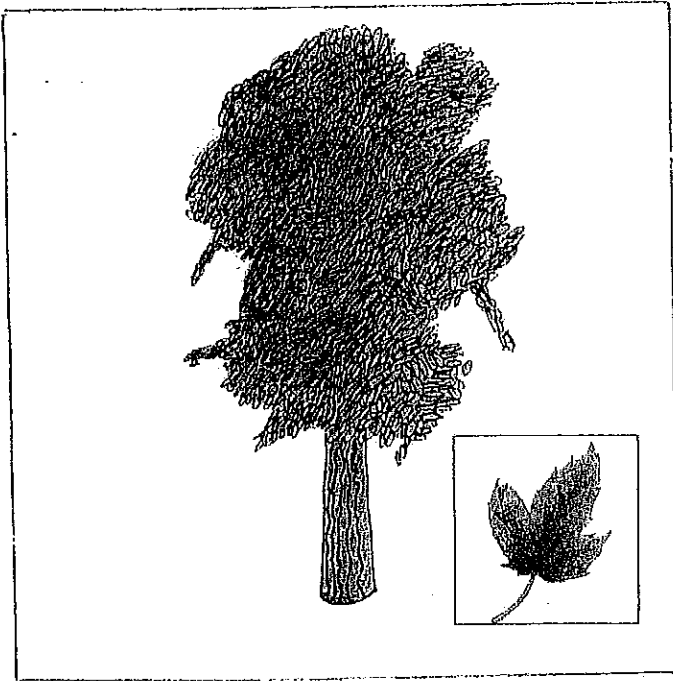
Uses: The Quaking aspen is used for lumber, box boards, pallets, and for the manufacture of pulp, plywood, cone stock, and benches because it doesn't splinter.

Other Interesting Facts: The Quaking aspen has many names such as Trembling aspen, Golden aspen, and the Popple aspen. The tree itself can live up to eighty years old. On occasion heart rot causes the trees to become useless before reaching fifty years old.

-Ryan

Red Maple

Acer rubrum linnaeus



- **Flower:** The flowers are ruby red and open in March and April. The blossoms have five lobes. The flower stalks elongate as fruits form.
- **Seed:** The seed comes from the ruby flower when the flower falls off the tree.

Habitat: The Red maple grows in North America in the east and into Canada. The tree likes to grow near a lake or a body of water.

Uses: The inner bark was used by Native Americans for medicinal purposes. A strong infusion was used as an emetic, while a milder one was used as a gargle for sore throat. The twigs are eaten by deer in the winter.

Other Interesting Facts: The Red maple can grow for 150 years.

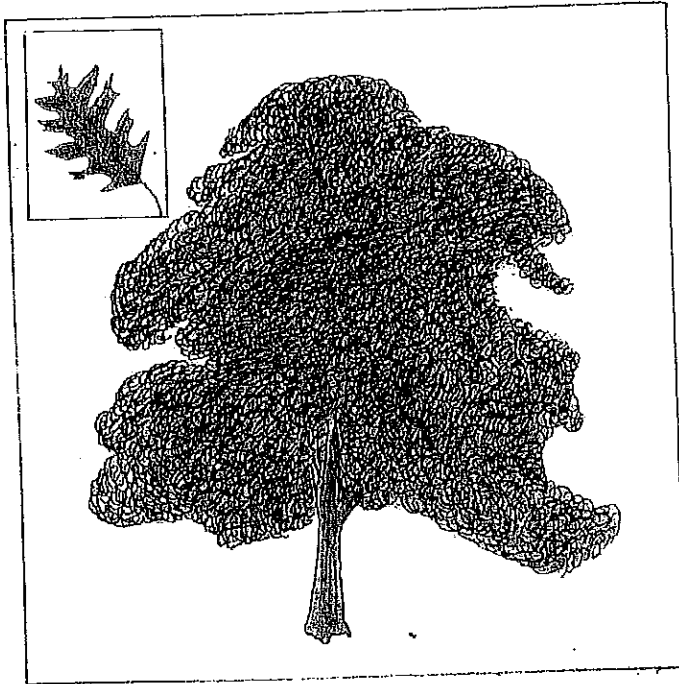
-Tyler

Description:

- **Leaves:** The tree has five-lobed, doubly toothed leaves. The red maple has bright leaves. In the fall the leaves turn a bright red color. The leaves are 3 to 4 inches long. The mosaic is alternate, the margin is entire, and the venation is simple palmate.
- **Trunk:** The color of the bark is dark gray and flaked. The trunk of the red maple is small, oval, and smooth striped with a diamond-look on it's bark.

Red Oak

Quercus rubra



Description:

- **Leaves:** The leaves are five to eight inches long. They are dull dark green above and yellow green below and have bristle tipped lobes. The shape is lobed. The margin is entire, the venation is alternate, and the mosaic is simple pinnate.
- **Trunk:** The trunk is thick, nearly black, with shallow grooves, and wide smooth light flat ridges. The inner bark is a light red. It grows to a height of 50-60 feet and a diameter of two to three feet.

- **Flower:** The flowers appear in May while the leaves are partly grown. Bees, beetles, butterflies, moths and birds pollinate the flower. There are countless narrow yellow petals clustered together.
- **Seed:** The seed is the acorn. The acorn is 1 ¼ inches long. The color is light brown like the inner bark. The sprouting acorn develops full-sized leaves and unusually long roots giving the seed an advantage to reach its maximum height.

Habitat: The trees are mostly found in bottomlands, and on slopes. The lone oaks can live in many different places because they are very flexible.

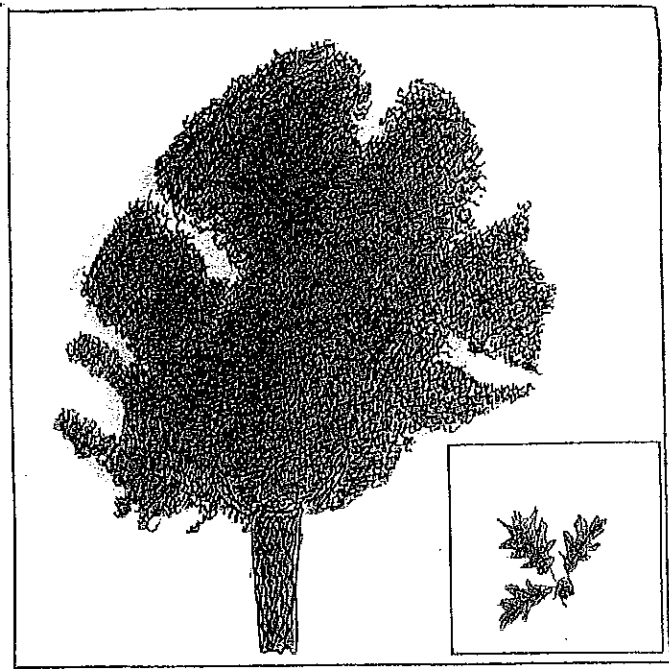
Uses: The wood is heavy and strong. It is a hard wood so it is used to make fine furniture. It is more expensive than pine because it is stronger and will last longer.

Other Interesting Facts: Red oaks can live up to eight hundred years, The oldest living is six hundred years old. There are over thirty different kinds of oaks in the U.S.

-Kellen

Red Oak

Quercus rubra



Description:

- **Leaves:** The leaves are 5 – 8 inches long. The leaves are glassy, dark green and thick, and the leaf pattern is alternate. The leaves hold on until winter. The margin is entire, the shape is lobed, the venation is simple pinnate.
- **Trunk:** The bark is dark gray with deep ridges. It is a hardwood with a reddish inner bark. The average height of the tree is 70 –80 feet, but it can grow as tall as 185 feet.

- **Flower:** The flowers of the red oak appear in May when the leaves are only partially developed. They are short stalked flowers. The flowers are light yellow.
- **Seed:** The seed is an acorn, which is 1 ¼ inches long and enclosed in a shallow cup. The acorn is brown.

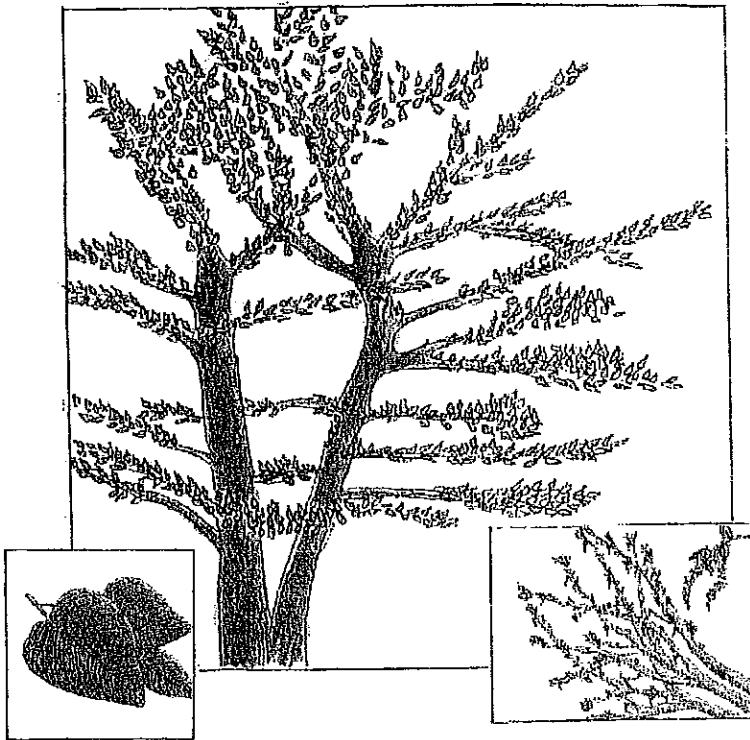
Habitat: They live in the north as far as Cape Breton. They live in the west as far as Minnesota. They live in the south as far as Oklahoma. They live in the east as far as Georgia.

Uses: Squirrels find and store acorns for winter. Many animals make their nests in the tree. The wood is used for furniture.

-Chris

Speckled Alder

Alnus rugosa



Description:

- **Leaves:** The leaves of the Speckled alder are 2-4 inches long and about 3 inches wide. They have a deltoid shape, an entire margin, and an alternate mosaic. The venation is simple pinnate, and they are prominently veined. The leaves have a dull green under side and a dark green top. These leaves grow very persistently up until late autumn.
- **Trunk:** The bark of this lovely shrub is a light grayish-brown with white oval "speckles". Now, these spots aren't big Dr. Suess polka dots; they're tiny little stripes covering the smooth bark.

- **Root:** The roots of the Speckled alder are very thin, long, shallow, and spreading. Alders love to have water around their roots and grow very rapidly in moist or wet soil.
- **Flower:** This tree doesn't have the type of flower that you might imagine. It has these reddish-brown buds that bloom in March and April. They grow in clusters (known as catkins.) The little ones always droop, so it looks like grapes are hanging from the tips of the branches.
- **Seed:** The seeds are small and shaped like nuts. They are about an inch long and half an inch wide. The coloring is pretty common, yellowish brown. The seeds are buoyant, so when they fall off the tree, which is usually close to some form of water, they can be dispersed (moved around by the water, so a new Speckled alder can grow somewhere else).

Habitat: They can be found in Maine, Maryland, and West Virginia. They are found usually in swampy, wet locations, like near ponds or streams, places where the soil is moist.

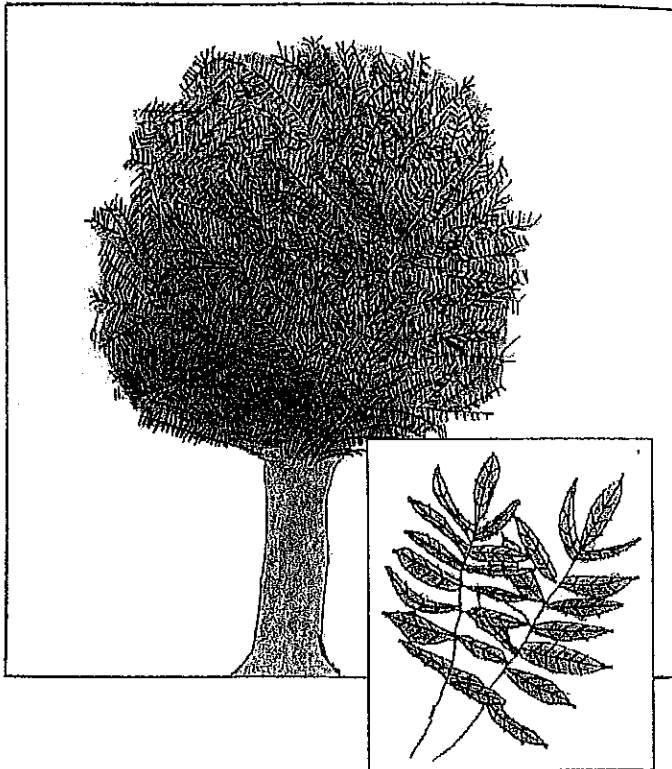
Uses: Even though the Speckled alder is used for commercial lumber, the roots are used for medicinal purposes.

Other Interesting Facts: When the Speckled alder is freshly cut, the sapwood (an inner layer of bark) turns bright stop-light red. This tree is also called the Hoary alder. Nitrogen-fixing bacteria is associated with the roots used for medicine.

-Anabe

Staghorn Sumac

Rhus typhina



Description:

- **Leaves:** The leaves are dark green above and they are always smooth on both sides. They turn orange and red in autumn. The leaves are made up of 3 inch leaflets that can grow to 12 feet long. The venation is compound pinnate and the shape is linear. The margin is entire and the mosaic is opposite.
- **Trunk:** The bark is brown and smooth for younger barks but the older barks are rough and scaly. The tree can be 10 to 16 feet tall. It is hard wood.

- **Root:** This shrub grows in groups which are connected underground through the root system. The roots stay near the surface but they spread out far from the stem.
- **Flower:** Flowers for males and females are both small and green. Male and female are not together most of the time. Flowers cluster together and they can be up to eight inches long. Clusters of male flowers can be one foot long.
- **Seed:** The seed coat is bright red, and it is about 8 inches long, very fuzzy, and bumpy. Inside the seed coat there are many tiny yellow seeds.

Habitat: These trees grow on dry land and open uplands. They also grow in old fields, on roadsides, and on the edges of forests. North America is where they mostly live.

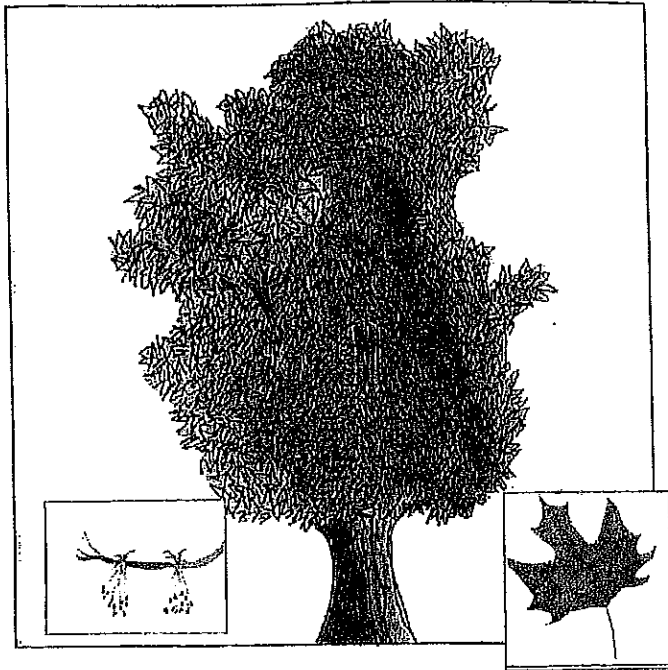
Uses: The bark is used for tanning the skins of animals.

Other Interesting Facts: Indians made a lemonade drink from this tree and similar species.

Petar

Sugar Maple

Acer saccharum



Description:

- **Leaves:** The leaves of the Sugar maple are 2-10 inches long. In the autumn they are flame pink, orange, or bright yellow. In the summer they are dark green. The leaves have five lobes with a u-shape in between each lobe. The margin is entire, the mosaic is alternate, the shape is lobed and the venation is palmate.
- **Trunk:** The trunk is a grayish color that can be a hundred feet or taller. On average they are 60-80 feet tall. The trunk is 3-5 feet in diameter. The

bark on a young tree is very smooth. The bark on an older tree is deeply ridged.

- **Root:** The root of a Sugar maple prefers light and fertile soil but can survive in poor soil.
- **Flower:** The flower is yellowish green and very small. The petals are bell shaped. They appear in April and May. The flowers are both female and male. They come in bunches of about 12. The flowers are about ¼ of an inch long.
- **Seed:** The seeds of the Sugar maple are brown. They have two oval-like veiny attachments coming out in opposite directions. The seeds are ready to fly away by midsummer. They are about two inches long on either of the two parts.

Habitat: The Sugar maple prefers living in places where it's not too swampy but not too dry. They are mostly found in southeastern Canada to New England. As a sapling they can tolerate low sun.

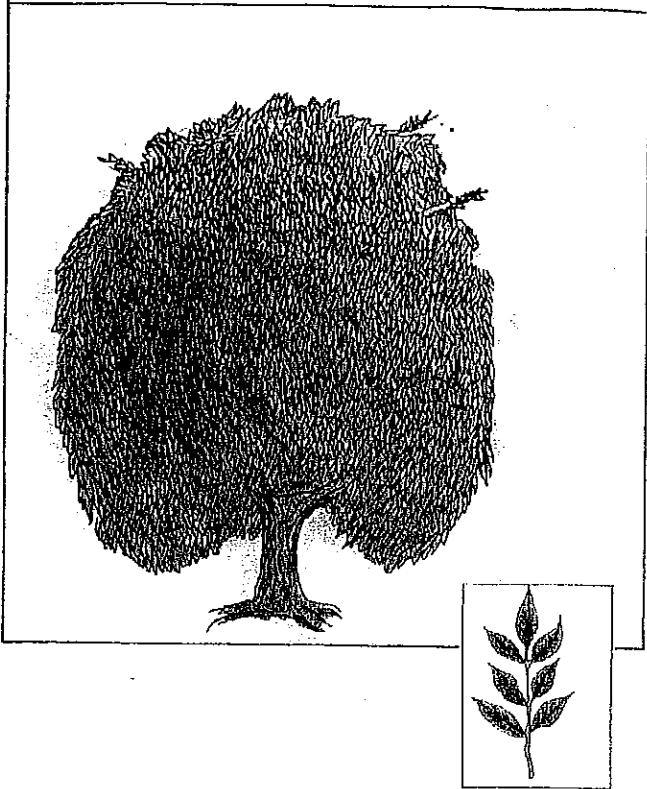
Uses: Sugar maple wood is the hardest maple wood. It makes fine furniture, and string instruments. Some Sugar maple wood has special grain designs. It is called curly maple or birds eye maple. Sugar maple's sap is made into maple syrup, maple sugar candy, and other maple sugar products. Vermont is the leading state producer of maple syrup. The Sugar maple is the chief source for maple syrup.

Other Interesting Facts: The wood was once used for making spears because of its hardness. It is the state tree for Vermont, New York, West Virginia, and Wisconsin.

-Jane

White Ash

Frazinus americana



Description:

- **Leaves:** The leaves are 35 cm. long, and come straight out from the side of the branch on short stalks. They are dark green and smooth on the top, and blue green and hairy on the bottom. The leaves' shape is deltoid, and the venation is simple pinnate. The mosaic is opposite and the margin is dentate.



- **Trunk:** The trunk is dense and straight. It is a hard wood. The trunk is medium with giant diamond shaped ridges, and is five feet in diameter. The tree is 70 to 80 ft. tall. The color of the bark is ash gray.
- **Flower:** The male and female flowers are both about two inches long. They are born in clusters. The color of the flower is pink.
- **Seed:** The seed is called the samaras, which is light brown. It is also the fruit. It is about two inches long and is winged. The wing extends halfway along the seed.

Habitat: It grows from Nova Scotia to Northern Florida on wet soils of swamps and river banks.

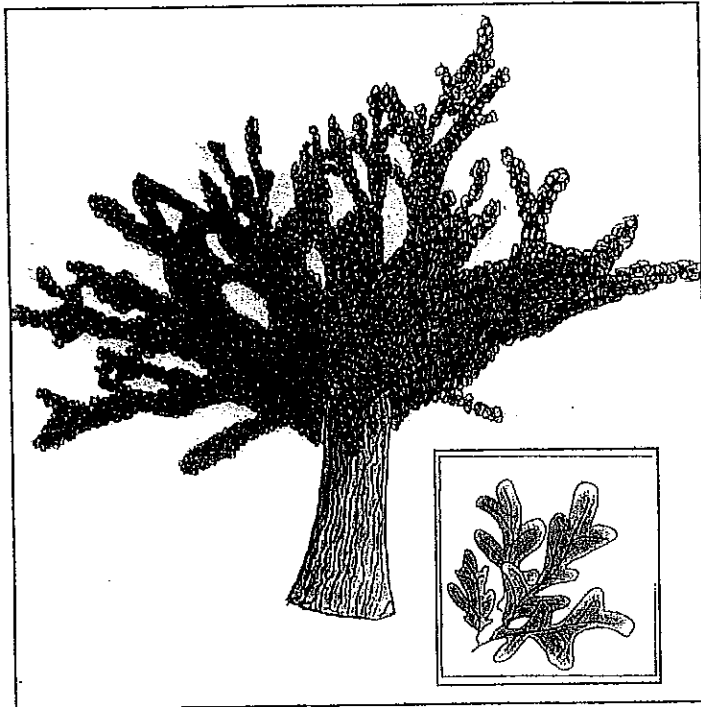
Uses: The hardwood is elastic and strong. It is used for baseball bats, handles and furniture.

Other Interesting Facts: An interesting fact about the White ash is that it is the biggest of 18 species of americana and is part of the olive family.

Tee Tee

White Oak

Quercus alba



Description:

- **Leaves:** The leaves are from four to seven inches long and four inches across, and narrow at the base. They are deep cut into two to four lobes on each side. The bottom side of the leaf is blue green and turns purple in the autumn. The margin is entire, the mosaic is alternate and the venation is simple pinnate.
- **Trunk:** The trunk is pale gray often with a reddish tint. The lighter inner bark measures 0.5 -1.5m (2-4ft.across.) The trunk can grow over a period of 200 years; they can be about 60 feet tall.

- **Flower:** The male flower of the white oak is a yellow green drooping catkin. The flower comes out in May when the leaves are half grown.

Seed: The seed is an acorn that measures 2.5cm long and is one quarter enclosed in a rounded cup. The only seed they can produce is the acorn and it is dark brown on bottom and lighter on top.

Habitat: It prefers a fine textured soil with a high water table but grows in almost average soil. It grows fairly fast. It also makes a nice street tree. The White oak gets its name from the color of the bark.

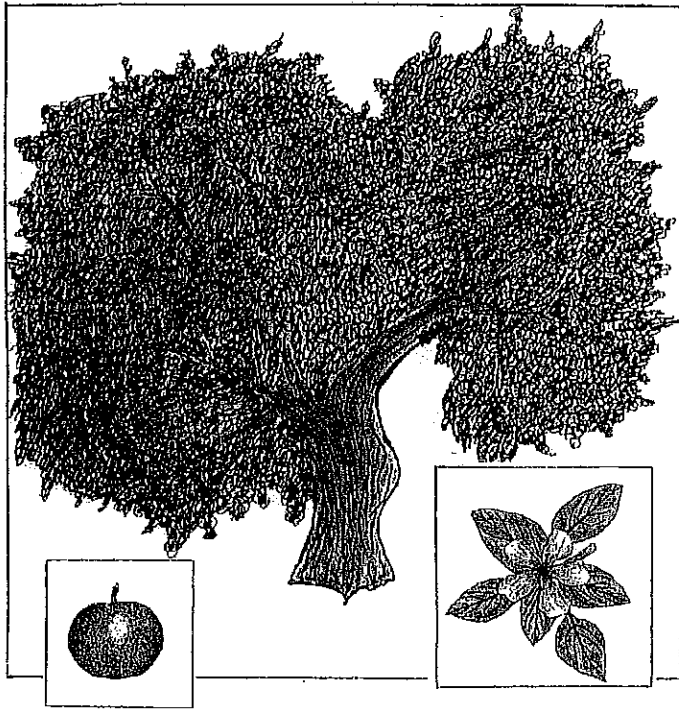
Uses: The white oak is widely used for furniture, flooring, barrels and firewood, and in colonial days it was used in shipbuilding.

Other Interesting Facts: Indians taught the early Englishmen to boil the acorns and prepare them as food. All the early ships were made of White oak and it is still used the most out of all the trees in the world for this.

-Kathlyn E.

Wild Apple

Pyrus malus



Description:

- **Leaves:** The leaves have a dentate margin, a simple pinnate venation, an alternate mosaic, and a deltoid shape. They are deciduous, and they are 2-3 inches long and about 1½ inches wide. They are a green-yellow, smooth on top, and slightly furry on the bottom.
- **Trunk:** The trunk ranges from 20 to 35 feet in height, which is small to medium in size. The tree has short, wide-spreading branches. The bark is purple-brown to gray-brown. The heartwood is brown to light red, and the sapwood is yellow. The

wood is heavy being about 44 pounds to the cubic foot; however, the wood is not hard or strong.

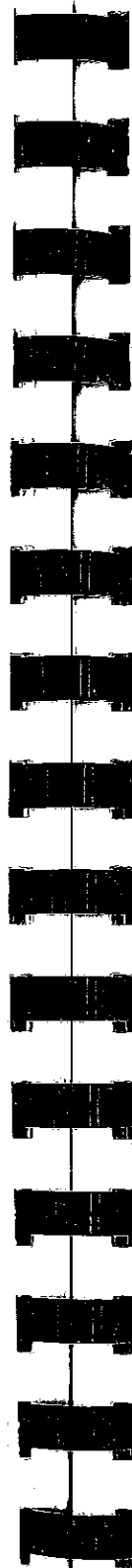
- **Flower:** Apple blossoms are about 2 inches in diameter and white-pink in color. The flowers are in few, flowered, compact clusters.
- **Seed:** The seed is about 1 centimeter long. It is smooth, damp, and dark brown in color.

Habitat: Wild apple trees are located in temperate regions of the Northern hemisphere.

Uses: The fruit is rounded and green, 1½ inches in diameter, and slightly broader than it is long. The fruit is found on short stalks with sepals on top.

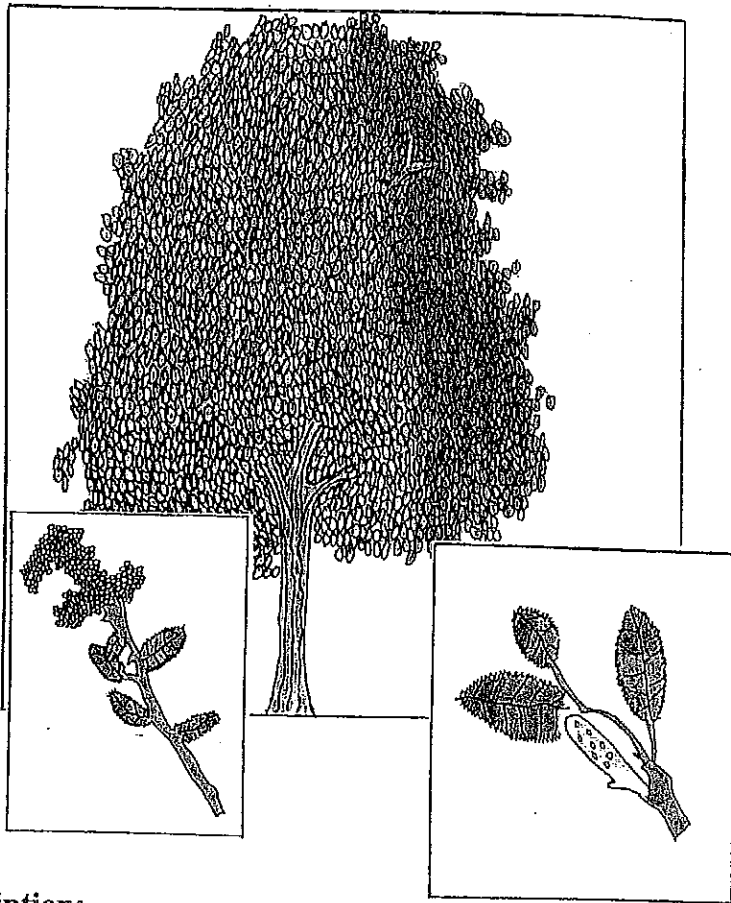
Other Interesting Facts: The fruit is known as the "Crab apple" or the "Common apple." Long after the orchard apples come into bloom, the Wild crab still stands in thickets, fields, and along fence rows.

-Chris



Yellow Birch

Betula alleghainensis



Description:

- **Leaves:** The leaves are ovate-oblong and grow up to 4 inches long (about 10cm) and 2 inches wide (about 5cm). They are pointed at the tip of the leaf. They look like a toothpick at the tip, and have a rough outside shape. The color is green with a yellow tint and it has an alternate mosaic. The venation is simple pinnate.

- **Trunk:** An average sized Yellow birch tree is between 60-70 feet high with a width and diameter of about 1-2 feet, but under favorable conditions a tree may grow up to 100 feet. Sometimes the bark is amber-yellow to silvery gray. The bark peels horizontally into thin papery, curled strips.
- **Root:** The Yellow birch has roots that hold onto rocky hillsides like a monstrous claw locked in place.
- **Flower:** All winter long the stamen-bearing flowers called catkins are visible on the little branchlets. During the warm days the flower grows longer and faster. When they get bigger they sway in the wind.
- **Seed:** The reddish brown seed comes from the catkin. All the males and the females are the same. They look like a backward R with a straight flower going along the bottom.

Habitat: Very often you might see Yellow birches in dry areas but not too dry. The most common place would be right by the riverside.

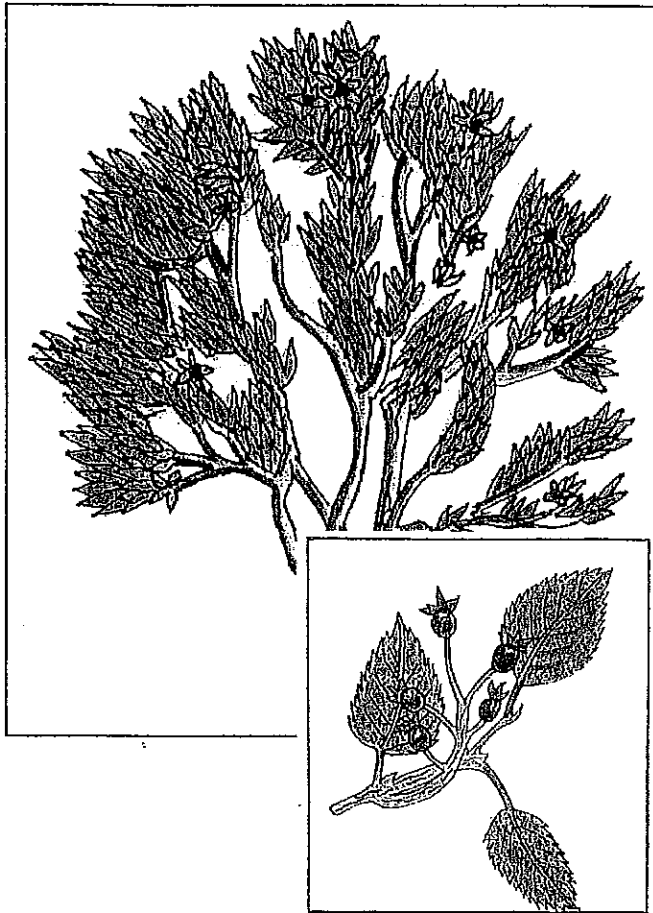
Uses: They are very common for furniture, flooring, interior finish, wood ware, baskets, boxes, veneer, and crates. Also they are used for fuel.

Other Interesting Facts: There is a Yellow birch in South Carolina which is 90 feet in height and 4 1/2 half in diameter.

-Kimberly

Allegheny Blackberry

Rubus allegheniensis



Description:

- **Leaves:** There are three to five oval, coarsely toothed, stalked small leaves that live through the winter. The leaves are generally 2-10 inches long. The mosaic is alternate. The venation is simple pinnate. The shape is deltoid. The margin is dentate.

- **Stem:** The biennial, prickly, erect, semi erect, or trailing stem is about 5-25cm long. The stem is usually green and red. The height of the plants is about 6 feet.
- **Flower:** The flower has 5 petals. The white, pink, or red flowers grow together in clusters at the ends of the stems.
- **Seed:** It produces small black berries that have a 1/4 cm tiny black seeds inside.

Habitat: The Allegheny blackberry is found in North America on the Pacific coast and in places on the East coast. It's found in a sunny area in a group of small bushes.

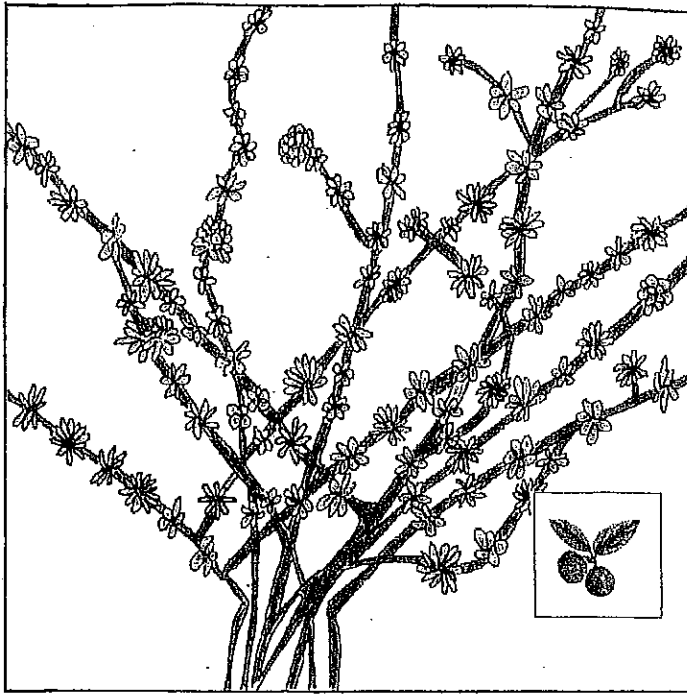
Uses: Blackberries are a fairly good source of iron and vitamin C. They are used in baked goods such as jams, jellies, and pies.

Other Interesting Facts: In the U.S.A there are 10,000 acres under blackberry cultivation. There are also 10,000 hybrids.

-Sambo

Aromatic Wintergreen

Gaultheria procumbens



Description:

- **Leaves:** The leaves are $\frac{3}{4}$ - 2 $\frac{3}{4}$ inches wide and 2-7 cm long. They are striped with white along the middle. The upper side is bright green, and it is patterned underneath. The leaves are sharp and have a peculiar aromatic smell and taste. The margin is dentate, and the mosaic is opposite. The venation is pinnate.
- **Stem:** The stems are woody and have branches and an outer bark usually made of cork. The stem is brownish and has a rough texture. It has many short branches with short stalked, thick, shining tooth-edged leaves in the upper part.

- **Root:** The roots are fibrous and spread out.
- **Flower:** The flowers are fragrant and waxy and can be found in small clusters. The flowers are about $\frac{2}{3}$ of an inch long and 16 mm wide. They have 5 petals each. The white and pink round flowers are widely spread, pale and waxy looking.
- **Seed:** The seed is in the berry, and the berries are fleshy and bright red. Seeds are round shaped and about $\frac{1}{2}$ inch long. This fruit is known as the Deer Berry.

Habitat: Wintergreen is found in sandy and barren plains as well on mountain tracts. It grows from the southern United States to Newfoundland, Canada.

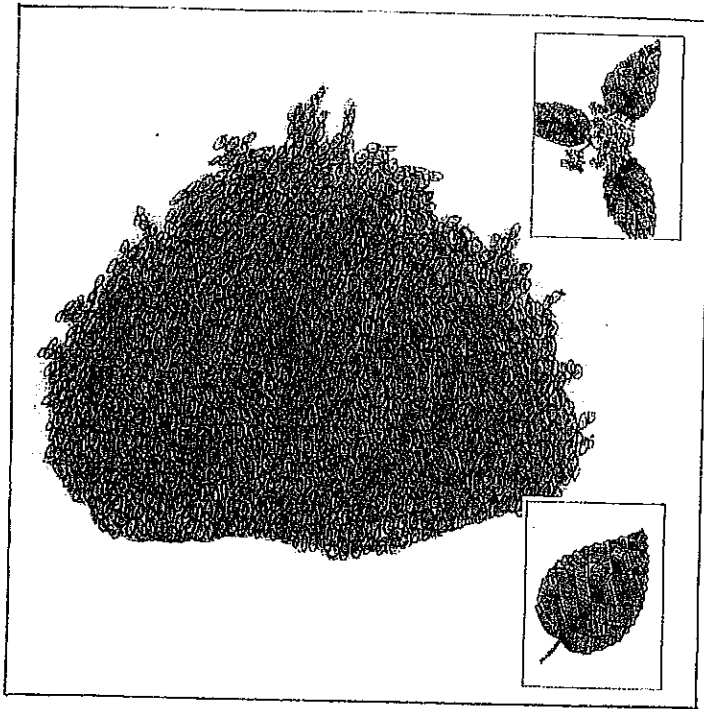
Uses: Wintergreen is used for chewing gum, candy, medicine, tooth powder, and oil. It is also used for tea, and it is used for treatment of muscular aches and pains.

Other Interesting Facts: The leaves were formerly found in the United States pharmacopoeia (a book of drugs and medicine). To get the oil the leaves have to be soaked for twelve to twenty four hours.

-Sarith

Arrowwood

Viburnum recognitum



Description:

- **Leaves:** The leaves of the arrowwood are egg-shaped with coarsely toothed edges. They are dull green, slightly glossy, and 2-3 inches long. These leaves have a dentate margin, an opposite mosaic, and a simple pinnate venation. The foliage turns from yellow to red-orange to purple in autumn.
- **Stem:** The stem of this shrub is gray to reddish-brown and is very smooth. The arrowwood can grow 3-10 feet tall and 6-10 feet wide. The twigs are slender, hairless, and have ringed nodes.

- **Flower:** In mid-May the arrowwood has flat, even clusters of milky white flowers that are 2-4 inches wide. The petals of these particular flowers are rain-dropped in shape.
- **Seed:** A blue to blue-black berry, that is $\frac{1}{4}$ - $\frac{3}{8}$ of an inch long, covers the seeds. The seed is shaped like a globe and turns green when it is ready to be planted. These seeds are spread when birds and other mammals eat the fruit that has fallen to the ground or when humans step on the berry after it has fallen to the ground.

Habitat: Arrowwood plants prefer neutral to acid soils, and soil that is sandy and moist to dry. They will grow well in shade or sun. This shrub also thickens in open areas and is a native plant of North America.

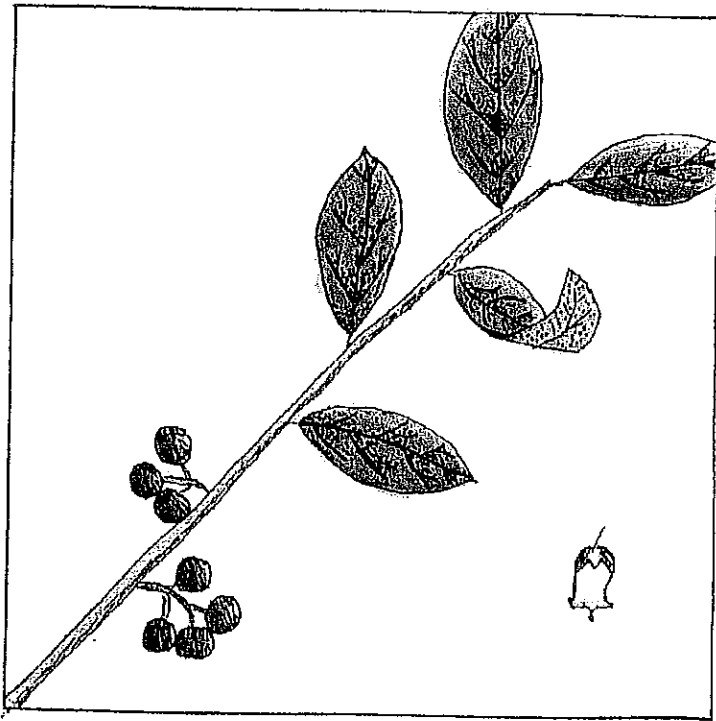
Uses: The arrowwood is used in many different ways, but usually they are used for landscaping purposes such as to attract birds, to make landscapes more hospitable, to beautify parking lots, and to border different sites.

Other Interesting Facts: The arrowwood was used by Native Americans to cover their homes and to make arrows to hunt with, hence the name "arrowwood."

-Sara

Black Huckleberry

Gaylussacia baccata



Description:

- **Leaves:** The leaves are deltoid in shape and have an entire margin. The leaves go in a spiral shape up the branches, and the venation is simple pinnate. The leaves are dotted on both sides, more densely so on the bottom.
- **Stem:** The stem has short, straight broad based pricklers, and the crown spread is two to four feet. It's a woody stem of brownish green color. It has smooth bumps with hairs.

- **Flower:** It blooms from April to June. The bud is covered with raisin-sized dots. The flower is white with a pink or red outline at the tip of the petal. Sometimes it is purple. Each flower has about five petals.
- **Seed:** The seeds are sweet. There are ten seeds in a bundle, and they are more or less dotted on the bottom surface. Their size is similar to blueberries, and their color is black. There are fruits in July and August.

Habitat: Usually it stands one and a half to three feet tall, and it likes to grow in dry, sandy, or rocky soil. Sometimes it can be found in bogs. It prefers 65 – 86 degrees.

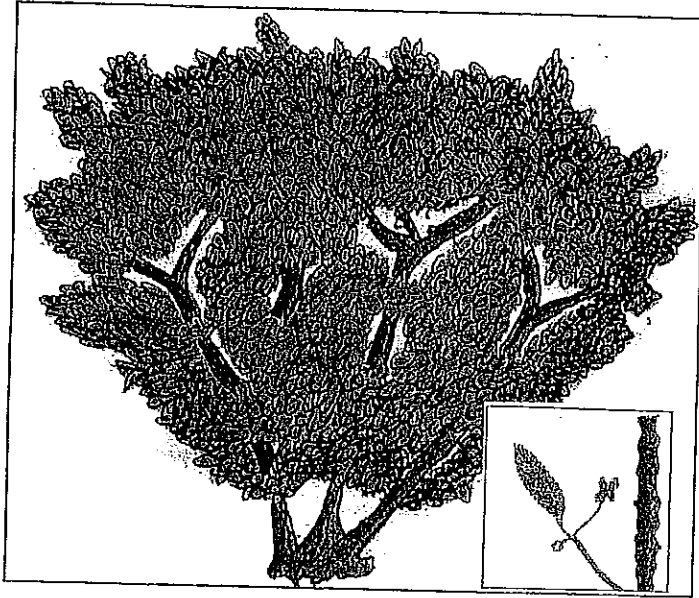
Uses: These berries make great pie fillings and jams!

-Renee



Burning Bush

Euonymus alatus



Description:

- **Leaves:** The leaves are long-stalked in the shape of a broad oval. They are about 1 to 3 inches long and up to 2 ½ inches wide. The color of the leaves is light or bright green; the undersides are bluish, but in the fall they turn to a fiery red color. The margin of the leaf is dentate. The mosaic is opposite, and the venation is simple pinnate.
- **Stem:** The stem is green or brown. It is woody and grows from 6 to 15 feet in height.
- **Root:** The roots are fibrous and fairly shallow.

- **Flower:** The flower is a yellow-green and can be found on slender stalks. They bloom from May to early June, and they are white in the summer. The size is ½ inch, and the flower is not ornamentally important.
- **Seed:** The fruit turns pink when it is ripe. It is 10-14 millimeters in diameter with 4 prominent lobes, splitting to reveal 4 seeds. The orange-red fruit remains on the tree when the leaves have fallen.

Habitat: They are found along streams, on floodplains, in moist woodlands, and occasionally in rocky woods. They are native to Northeastern Asia to Central China. They were introduced to the United States in 1860.

Uses: They are good for gardens because of their bright red color. They are excellent for hedging, and they make a great foundation plant because of the horizontal lines and clean foliage.

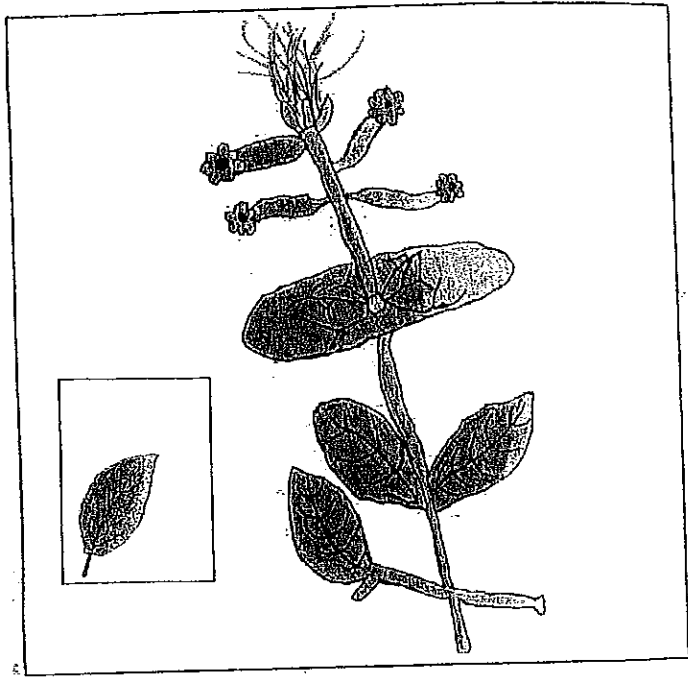
Other Interesting Facts: It is much easier to find in the fall because of red leaves.

-Connor



Bush Honeysuckle

Diervilla lonicera



Description:

- **Leaves:** The leaves have an opposite mosaic, the venation is simple pinnate, the margin is entire and the shape is deltoid.
- **Stem:** The stem is a long weedy vine that winds and has evergreen foliage. The stems are usually thornless. The stem is about one foot tall and is greenish brown.
- **Root:** The root is white and tangles together. If you plant a honeysuckle it is hard to get rid of it. The roots are stronger than most roots on other plants.

- **Flower:** The flower has long projecting stamens that are white. These expand later into black. The flower is red or white. It blossoms from April to July. It usually has four to eight petals. When it blooms, the flower is about two inches wide.

- **Seed:** The berries are characteristically dark red, but they might be yellow. They are found in pairs at the base of the leaf. They may remain on the shrub throughout winter. Each berry contains two to six tiny red seeds.

Habitat: The honeysuckle bush is tolerant of many environmental conditions. Most live in wetlands, prairies, and forest. Almost all honeysuckles live alone.

Uses: The honeysuckle produces real honey, which can be eaten even by humans. The berries of the bush can also be eaten.

Other Interesting Facts: There are four different species of the honeysuckle. The honeysuckle is a very small plant compared to other bushes. One of the most common species is the one in Baxter Woods. Insects are the most common pollinator of the honeysuckle.

- Robert

Common Chokecherry

Prunus virginiana



Description:

- **Leaves:** The leaves are a greenish color and are oval. They grow to be about 2-4 inches long with a width of about 1-2 inches. The leaves have toothed margin edges. The venation of the leaves is pinnate.
- **Stem:** The stem and twigs give off a very strong odor. This is the plant's self-defense against predators such as deer or birds. The stem, including the whole plant, grows to be about 25 feet high. It has a width of 8 inches in diameter. The only thing the stem cannot fend off is a fungus called Black

Knot. The texture has a very rough feeling, and the color is a very dark brown.

- **Root:** The roots go five feet or more into the ground to the water source. Once at the bottom the roots expand in width. This allows the intake of water to increase. This is also why the plant grows to be so high.
- **Flower:** The flower's petals are very similar to white roses. The color is a very bright white, and the petals overlap each other. The flowers appear at the beginning of May and last until late fall. The flowers grow on slender stalks in racemes. The flower will grow a number of petals usually 12 to 25.
- **Seed:** The seed is about 2 inches long and half a centimeter in width. The color is a very dark brown.

Habitat: The chokecherry grows deep in the country and almost never in the city. The plant usually grows by old fences or old brick walls.

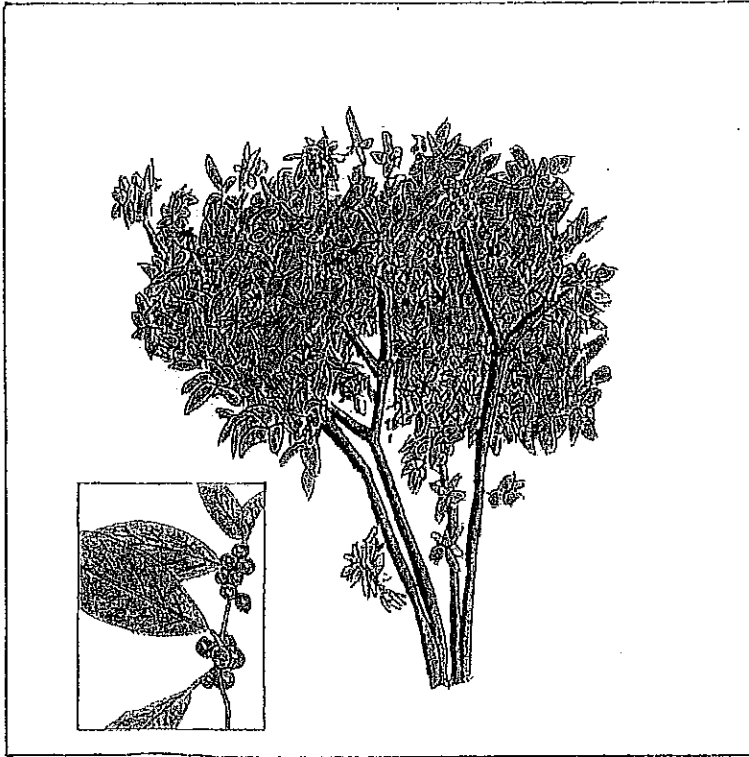
Uses: The wood cannot be used commercially because it is very weak and is very bendable. The fruit should not be eaten. It has an astringent, tart, acid taste, and is poisonous. (Many children have died eating the berries thinking they are real cherries.)

Other Interesting Facts: The chokecherry got its name from the fruit, the chokecherry, that grows from the plant. Since the fruit is poisonous, people will choke if it's eaten.

-Graham

Common Winterberry

Ilex verticillata



Description:

- **Leaves:** It has dark green leaves. They have a dentate margin. They have an alternate mosaic. They have a deltoid shape, and they have a simple pinnate venation. They are between 1-3 inches long.
- **Stem:** It has a woody stem and grows to be between 6-12 feet tall.
- **Root:** It has spreading root system.
- **Flower:** Each flower has 4-6 petals that are white and yellow. They flower from June to August.

- **Seed:** The berries are found in small clusters on short stalks. The seed is $\frac{1}{4}$ inch wide. The fruit color ranges from orange to red, and the birds really like them.

Habitat: It likes to grow in swamps. It likes to grow in eastern North America, and it likes full sun.

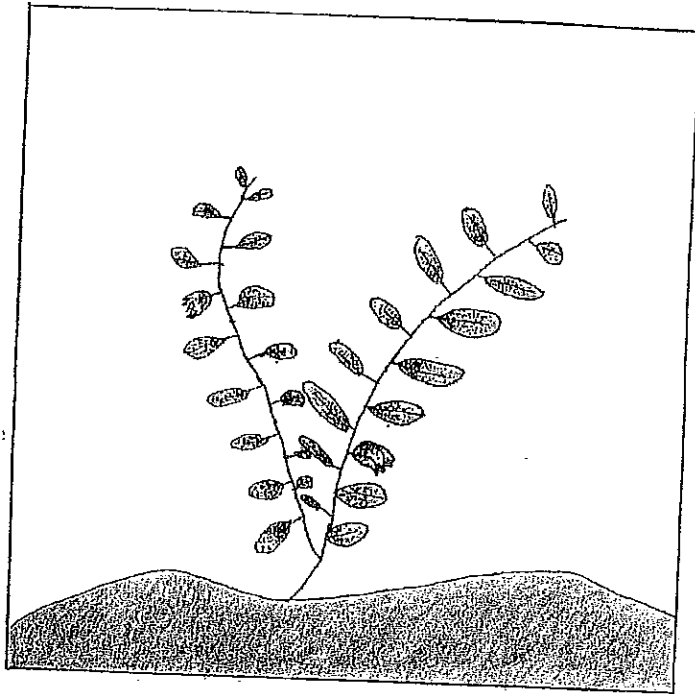
Uses: It is used in gardening and in the making of cabinets.

Other Interesting Facts: They prepare the soil for another trees by increasing the organic matter and the nitrogen in the soil.

-Darit

Creeping Snowberry

Gulthairia hispidula



Description:

- **Leaves:** The leaves are 2 centimeters tall. The leaves are greenish blue on the top with a pale white on the bottom. Their mosaic is opposite. Their margin is entire, the shape is deltoid, and the venation is simple pinnate.
- **Stem:** The color is green with a little fuzz on it to give it smooth texture. The plant grows from two to twelve inches in size.

- **Flower:** the flower is a attractive white color with a small white. The flowers come out from May to June. There size is half a centimeter long and they have four to five petals, which make an upside down cup.
- **Seed:** The seed is actually a berry and it is a circle shape. The seed is a tiny brown pit found in a berry two-thirds of a centimeter long.

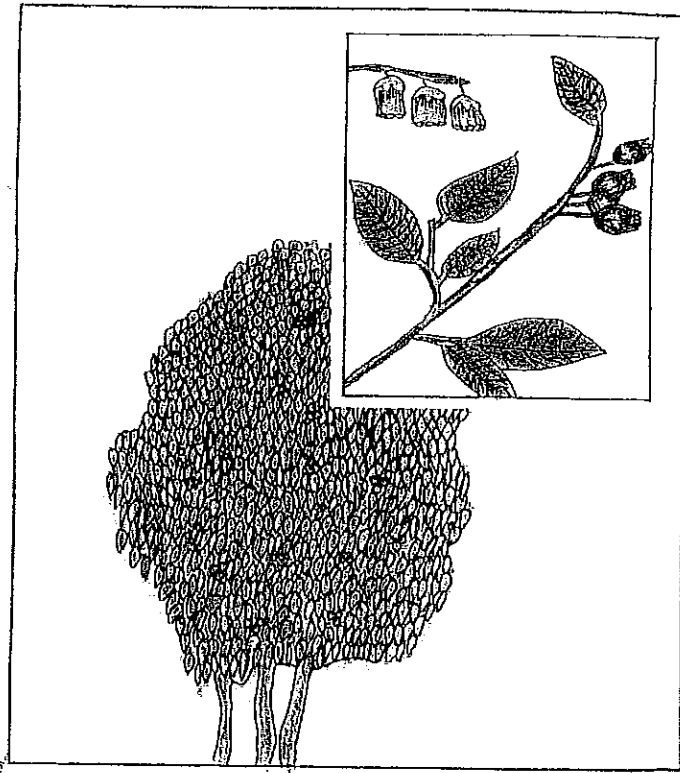
Habitat: The snowberry's habitats are mossy areas but it is mostly in evergreen areas. It is also found in woods, in bogs, in rocky areas around the fence and on damp shores. It prefers rocky soil but it can grow almost anywhere. But if the snowberry is in the sun the fruit will more likely be bigger.

Uses: The snowberry has a lot of good uses. You can make tea on a nice cold day or you can make fresh or cooked fruit if you like going out in the summer.

Kory

Highbush Blueberry

Vaccinium corymbosum



Description:

- **Leaves:** The leaves are smooth and sometimes have slightly toothed edges. They are dark green, grow in-groups of four. The shape is deltoid. The venation is simple pinnate. The mosaic is alternate.
- **Stem:** The plant can grow to be 6-15 feet tall. The bark is gray when it is old and copper or bronze when it is young.

- **Root:** The blueberry bush likes sandy soil. The roots spread out to be as big as the plant on top.
- **Flower:** The flower is white, pink or both. There are five petals; it is 5/16 of an inch wide.
- **Seed:** The berries are 1/4- 1/2 inch in size. They are round and dark blue.

Habitat: They grow in fields and marshes or by ponds and lakes.

Uses: People make jam, blueberry pie and sometimes they can or freeze the berries to sell in stores.

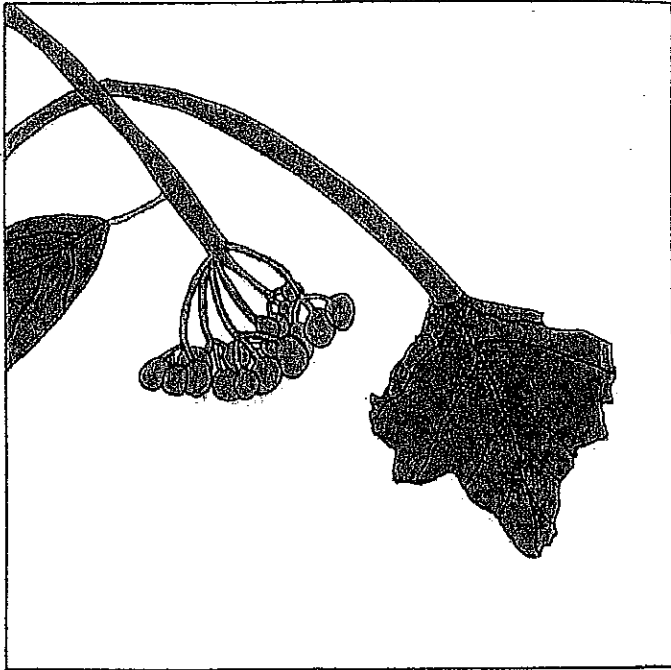
Other Interesting Facts: Maine is known as the Blueberry capital. Blueberries are one of the state most important crops.

-Lindsey



Highbush Cranberry

Viburnum trilobum



Description:

- **Leaves:** The leaves are a dark green color, and they are about 2-4 inches long and 1-2 inches wide. They are of alternate mosaic, simple pinnate venation, and dentate margin. The leaves have dome-shaped glands at the base of the leaf blades.
- **Stem:** The stem is slim and green, but the branches are brown and thick. The stems are somewhat droopy and 2-3 inches long.

- **Flower:** The clusters are about 10cm wide. There are about seven flowers in each cluster. The petals of the flower are an oval shape and a snowy white color. There are about five petals per flower.
- **Seed:** The seed is rather large compared to a normal seed, it is ½ an inch long. It is a flattened oval in shape.

Habitat: They grow in moist lands ranging from Alaska to Labrador to Newfoundland to Southern Canada and to the Northern United States.

Uses: The berries are used for food and dye. The whole bush is used for decoration.

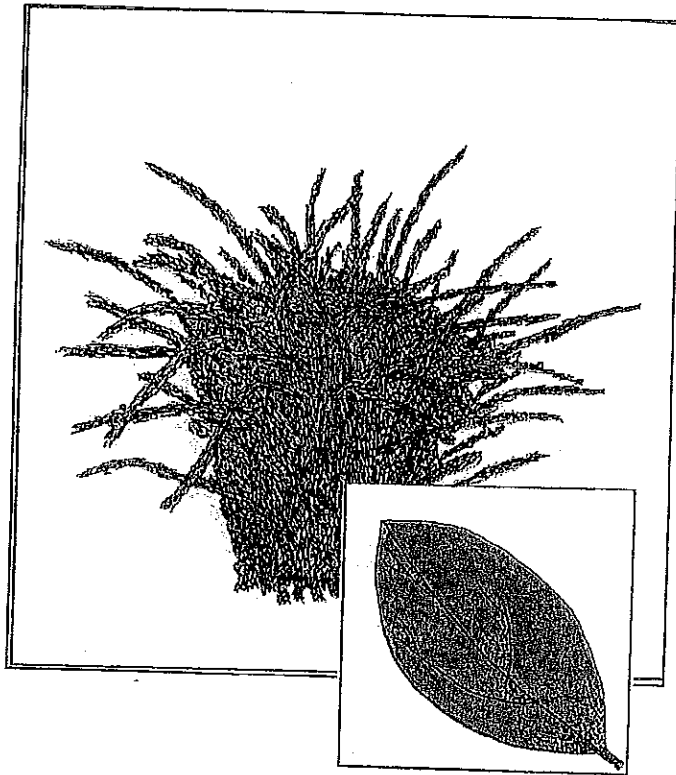
Other Interesting Facts: The cranberries are not good for human consumption. They are, however, edible.

-Alexandra



Japanese Barberry

Berberis thunbergii



Description:

- **Leaves:** The leaves of this shrub are small (up to one inch), and generally dark varying from green to red. An interesting feature of the simple pinnate leaves is that they are semi-evergreen. The leaf shape is deltoid and the margin is entire. The mosaic is alternate.
- **Stem:** On this one to eight foot shrub sharp thorns grow on regular nodes with the leaves. The zigzag stem is $\frac{1}{4}$ to $\frac{1}{8}$ of an inch in diameter. The woody stem has yellow wood.

- **Root:** Japanese barberries have a shallow, weak root system in forested areas.
- **Flower:** The beautiful flowers of this shrub are small, yellow, and bell-shaped. This six petaled, 8-10mm flower has a disagreeable smell.
- **Seed:** The berries are small, red, and oval-shaped. The berries grow at each node singly and ripen in September. The berries are not tasty good by most standards.

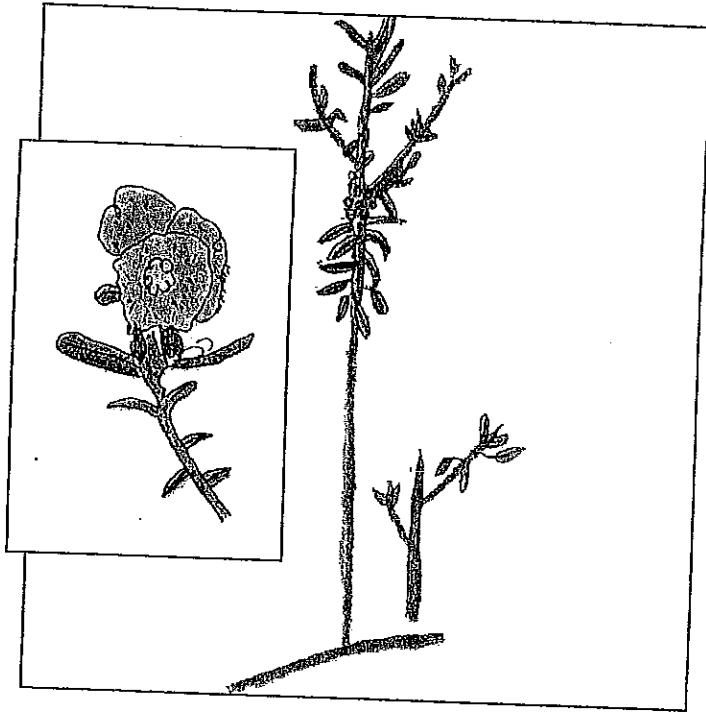
Habitat: Japanese barberries grow best in dry-gravelly soil. They generally grow in thickets. They grow best in non-acidic soil, staying away from oaks. Barberries are naturalized in New England and the Middle States but are less common in the West and Canada.

Uses: Japanese barberries are used for bonsai, hedges, and in gardens.

Other Interesting Facts: There are over five hundred known species of barberries. The Japanese barberry was introduced in the United States from Japan in 1864.

-Zachary

Lambkill
Kalima angustifolia



Description:

- **Leaves:** The leaves are approximately ½ to 2 inches long. The color of the leaves is dark green above and pale beneath when mature. The long leaves hang over the stem that has a flower at the end. Sometimes the underside of the leaf is hairy. The leaf margin is entire. The mosaic is opposite. The shape is linear and the venation is simple pinnate.

- **Stem:** The stem is a greenish brownish color and usually 15 to 20 inches tall.

- **Flower:** The width of the flower is a ½ inch. The flower is saucer-shaped and dense. There are clusters around the stem. The almost perfectly pentagonal flowers have five petals, ten stamen, and a solitary five-celled pistil. It has crimson or pale crimson petals with pink-tinted stamens.

- **Seed:** The fruit is round and contains many seeds.

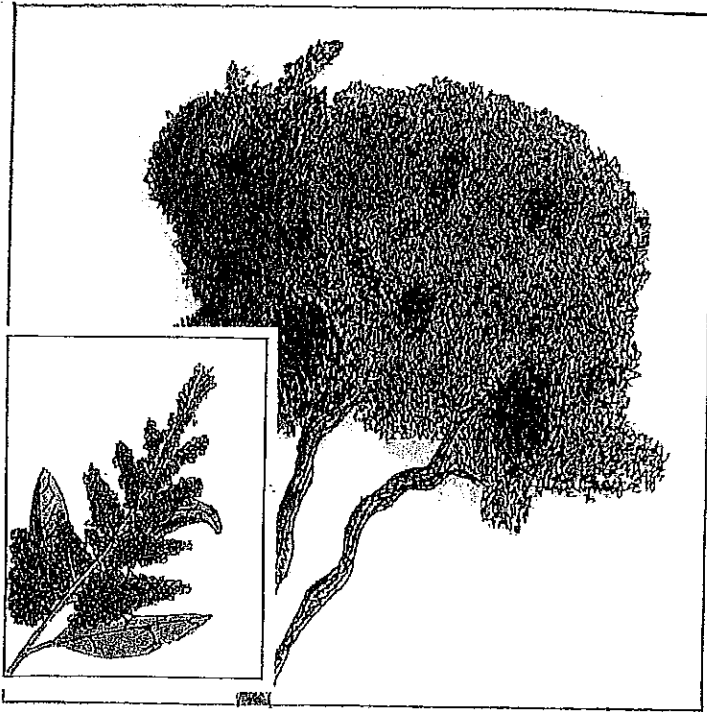
Habitat: Lambkill is native to North America. It can be found in the pastures and swamps of eastern Canada and the eastern United States. It grows in acidic, wet soils.

Other Interesting Facts: The leaves have a poisonous crystalline substance that is harmful to livestock.

-Stephanie

Lilac

Syringa vulgaris



Description:

- **Leaves:** The lilac's leaves are long, green, slender, and heart-shaped. They are simple pinnate and entire and can grow 2 to 5 inches. In late summer powdery mildew may turn all leaves a dirty off-white color.
- **Stem:** The stem of the lilac is usually a reddish brown color with smooth bark. The lilac is about 13 feet high, and the wood is fairly hard.
- **Root:** Lilacs must have well-drained soil to grow, and they prefer neutral to alkaline ph levels in soil.

- **Flower:** The flowers of the lilac can grow up to 5 inches, are very sweet smelling, and are considered one of the most fragrant of plants. There are many different colored flowers ranging from white to dark purple. The flower is made of up of many tiny double flowers that start to bloom in early May and bloom until late June, but the majority are in full bloom in late May.
- **Seed:** The lilac's fruit appears in April, and they ripen in September. They are capsular, have two valves, and grow $\frac{1}{4}$ to $\frac{1}{2}$ inches long.

Habitat: Lilacs are native to open woods and thickets in southeastern Europe and the Near East. Lilacs can grow basically anywhere though and can be found in almost any climate. Lilacs can live extremely long, sometimes over 100 years old!

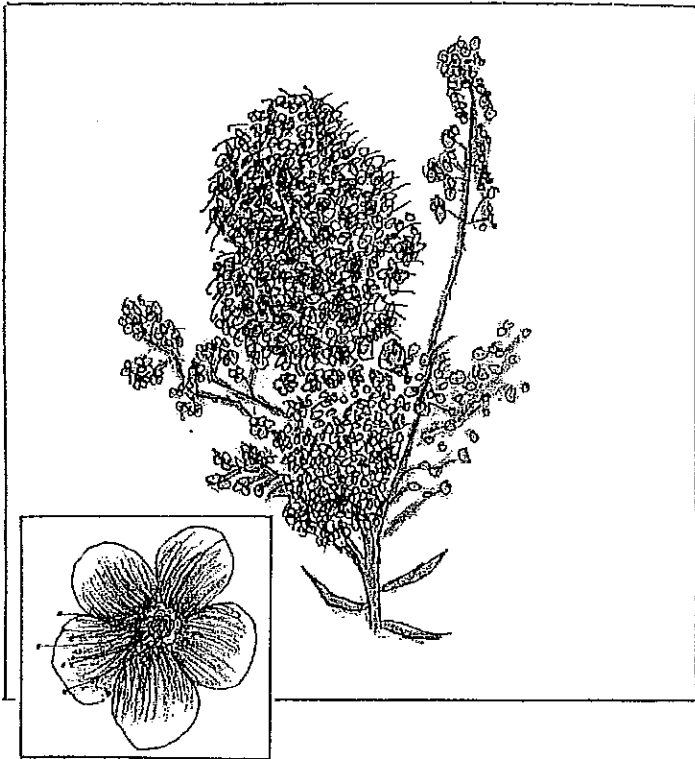
Uses: Lilacs are used for borders, specimens, informal hedges, screening, and bonsai.

Other Interesting Facts: The lilac is said to have come from Persia in the sixteenth century, and since then 24 new species have been introduced to America and can be placed in 7 to 8 color groups. The largest lilac can grow to be 30 feet and is the *Amurensis japonica*. Lilacs can be low and mounded or tall and straight. The lilac is one of the most common garden plants and was in George Washington and Thomas Jefferson's garden due to its stunning appearance and fragrant smell.

-colin

Meadowsweet

Spiraea latifolia



Description:

- **Leaves:** The leaves are broad and set on each side of the middle rib. They have a faded green color on the upper side and a grayish color underneath. The scent and taste are sharp. The mosaic is alternate. The margin is dentate, and the venation is simple pinnate.
- **Stem:** The stems are reddish, and they can be 3 feet high. Sometimes the stem can be 4-5 feet high before the stem branches out.

- **Root:** The root is woody and blackish on the outside and brownish on the inside. It has many smaller fiber-like threads. It does not die but stays alive for many years and germinates every spring.
- **Flower:** The flowers bloom in June. Several small flowers form a pyramid or triangle at the top of the stalks and branches. The flowers are small and white, and they grow together in a thick cluster. They smell much sweeter than the leaves. The petals are oval-shaped, and there are five petals per flower.
- **Seed:** The seed is ripe soon after August. It is a small, dry, brown seed.

Habitat: Meadowsweet grows in moist meadows or near the banks of streams.

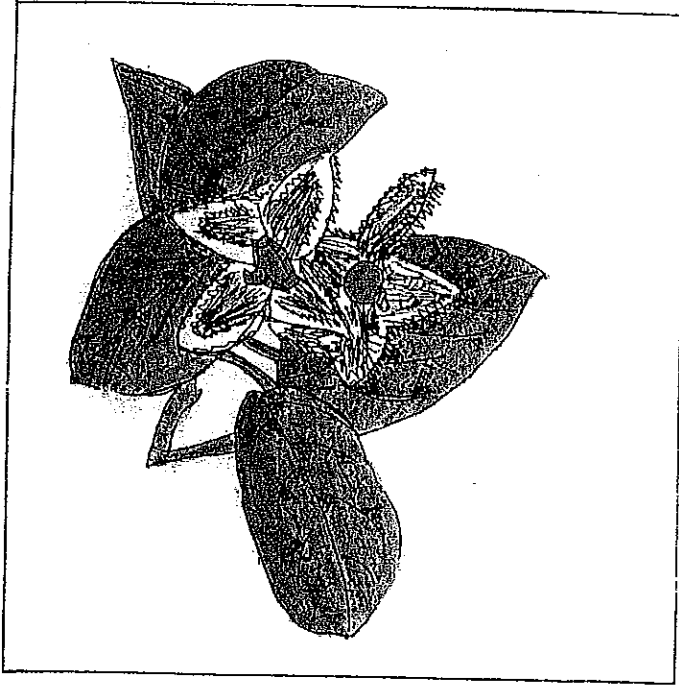
Uses: Meadowsweet is mostly grown as a garden decoration or ornament. The flower buds are used in perfume. Also, it helps those who are trying to give up coffee. It can help with vomiting, and it is sometimes used during pregnancy.

Other Interesting Facts: Its nickname is "Queen of the Meadow." Ancient Celtic druids used meadowsweet during their ceremonies for they believed it was a magical herb.

- Fred

Partridgeberry

Mitchella repens. L



Description:

- **Leaves:** The leaves are smooth and shiny. Their shape is round and under the mosaic category it would be placed as opposite. The leaves are only 1 half inch long and are considered evergreen because of their long lasting green colored leaves. On the venation category it is placed as simple pinnate. In the margin category it's mainly entire.
- **Stem:** The stem is woody. It is about 4-12 inches long and very slender. The stems often take root at the nodes and form a mat.

- **Flower:** The flower has small white-fringed blossoms that occur as pairs. The flowers are followed by bright red berries. The blossoms sometimes smell like lilacs. There are 4 petals in twin like pairs.

- **Seed:** The seed usually appears between July and November. There is a single berry from each flower. The berries often stay on the stems over winter. The berry is extremely juicy. It is red, but can also be white.

Habitat: The Partridgeberry can be found in woods where it is common. It is sometimes found in wildflower gardens and is quite popular in dry or moist woods. It can also be found under evergreen trees, mossy areas, and along banks and forests.

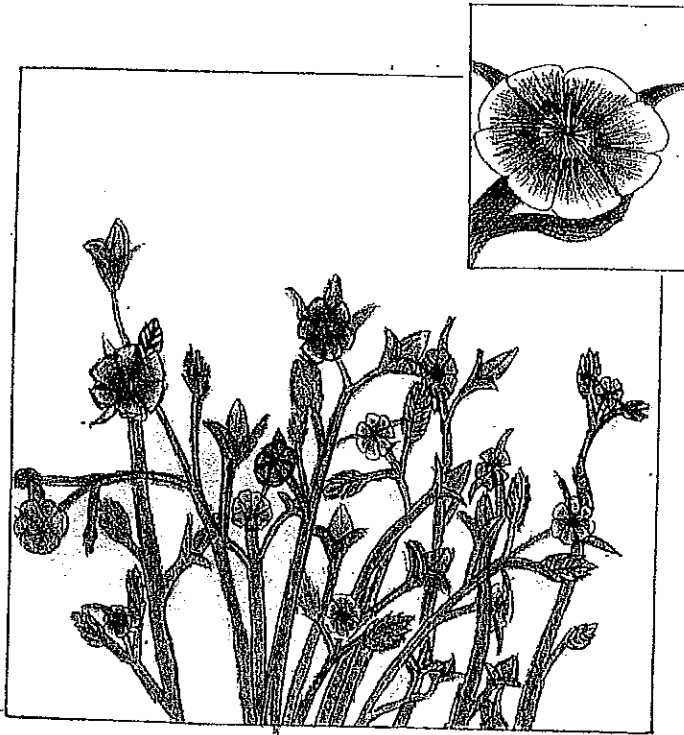
Uses: The berry is used in salads. It is used as a jam and goes good as a tea. The berry can be sour and often is.

Other Interesting Facts: It was used for sick people. It is sometimes called running box, or two eyed berry.

-Natasha

Pasture Rose

Rosa carolina



Description:

- **Leaves:** The leaves of the Pasture Rose have a dentate margin, alternate mosaic, deltoid shape, and pinnate venation. The color is not really a green but a yellow brown.
- **Stem:** The green and brown stem is long, thin and has spines for protection. It has leaves growing off it and is between 3ft and 4ft tall.
- **Root:** The roots of the *Rosa carolina* are thick near the start and gradually thin out toward the end.

- **Flower:** The flower can come in many colors such as pink, red, yellow, and white. The center of the flower can be a yellow/green or yellow. The petals follow a circular pattern with about 5-6 petals.
- **Seed:** The seed has one embryo and looks like a sunflower seed except it's brown and is about half an inch long and a centimeter wide.

Habitat: The Pasture rose has a habitual need for warm weather and some rain. Almost anywhere in the world will be a suitable home for this plant. There are some exceptions such as Alaska, Arabia, Antarctica, and Greenland.

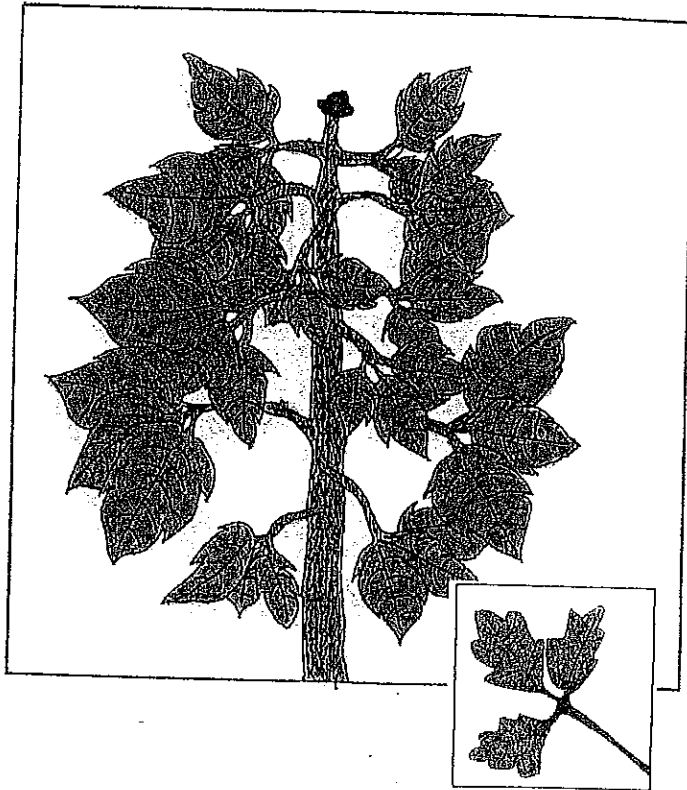
Uses: The Pasture rose can be used for decoration, in teas, and in some herbal medicines.

Other Interesting Facts: The Persian name for Pasture rose is Gul, and a French name for the rose is Cuisse Nymphé Emue which means maidens blush. The Chinese name for Pasture rose is Yo gu Tain, The rose is an emblem of Christianity and the death of Christ.

-Tory

Poison Ivy

Toxicodendron radicans



Description:

- **Leaves:** The branches of the Poison ivy break off into three leaflets per branch. The dentate margin of each leaf makes them look like they have teeth on the edge. The mosaic of the leaf is alternate with deltoid shaped leaves on the end, and the venation of the leaves is simple pinnate.
- **Stem:** The wood like stem of the Poison ivy can easily climb fences, trees and walls. It is small but tree like and has a hairy appearance. The length of the stem on a seedling is 1 to 2 inches long and the length of an adult stem is 3 to 6 inches long.

- **Root:** Its reddish brown root branches off into certain directions. Since it is aerial it helps the Poison ivy grow in between rocks.
- **Flower:** The small yellowish green flowers of the Poison ivy develop between May and June. The creamy white berries that are 5mm long are produced in late summer. The 1 to 3 inch long flowers stay on the shrub through winter. There are 3 petals per flower which are bunched in loose clusters.
- **Seed:** The seeds of the Poison ivy are spread by birds and are usually distributed in open landfills, landscapes and other unusual places. Once the seeds touch the ground they reproduce. These seeds are creamy white like the berries. They are also wide and B.B sized.

Habitat: The Poison ivy is native to North America and grows in some parts of Canada. It grows in the wetlands, woodlands, disturbed property, landscapes and thickets low to the ground. It also grows in wastelands and near roadsides.

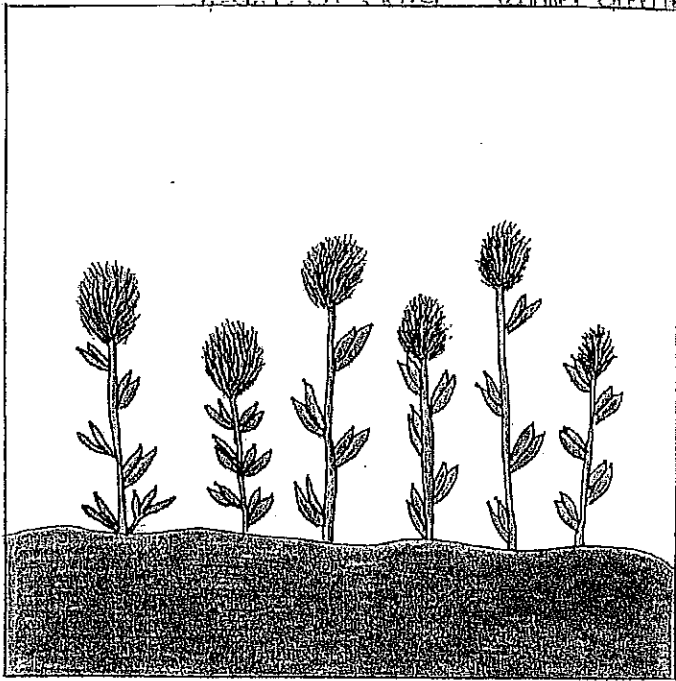
Uses: Poison ivy can be used to make soap and its fruits can be eaten by game birds.

Other Interesting Facts: It can survive in many different conditions. The leaves turn bright red in August and every part of the plant is very poisonous. Another name for Poison ivy is Urushiol. 500 people could get a rash from the amount of Poison ivy on the head of a pin.

-David

Rabbitfoot clover

Trifolium arvense L.



Description:

- **Leaves:** The leaves are green with silky hairs on the surface. They have a simple pinnate venation, are deltoid in shape, and grow up to be between 1-2.5 cm long. They have an alternate mosaic. There are three narrow oblong leaflets when the plant is just born.
- **Stem:** The stem is often red and can be between 6 inches and 1 foot. It grows in a bush format with many branches. It has a dry stem that is soft and hairy. The stem straightens out when it is mature.

- **Root:** The type of the root is a taproot. It is between 5 and 20 cm long and has a secondary fibrous root system.
- **Flower:** The flower is greenish-pink, fuzzy, oval-shaped and grows into circular clusters. The plant has five bristly sepals that protect the bud when it is little. The size of the petals are between 1.5-2.5 cm long, and the flower from between 5 and 30 petals on one flower. They reproduce from July through September.
- **Seed:** The seed's cotyledon is either round or oval with a short stalk. They are green with a little bit of purple on the tip. The seeds are connected to a petal which helps it to be carried away in the wind to reproduce.

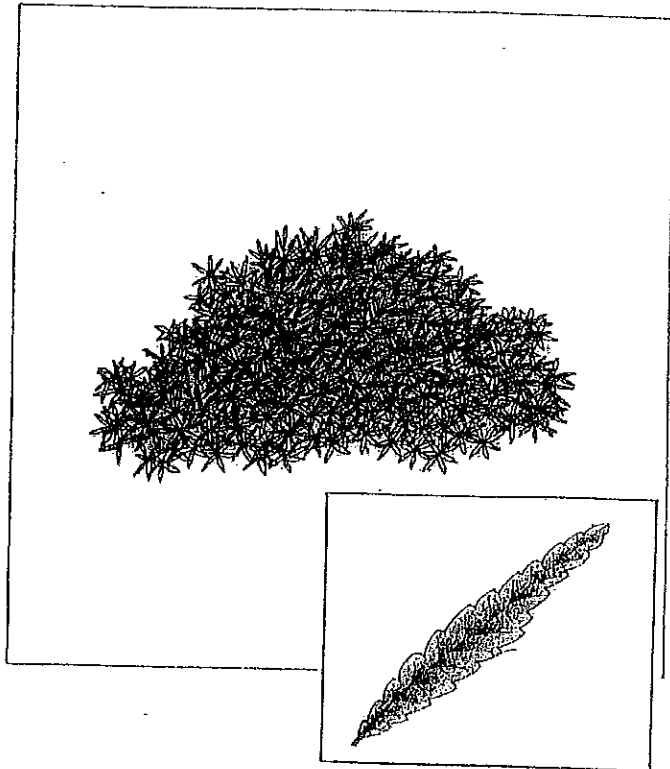
Habitat: They live in dry, sandy or gravelly places in eastern North America. They may be found all over the U.S. They are usually the first thing to move into disturbed, dry places.

Uses: Animals eat them. They pick the flower off the top and place it into their mouth and eat it.

Other Interesting Facts: The plant may take several years to reproduce.

-Jennifer

Sweetfern
Comptonia peregrina



Description:

- **Leaves:** Sweetfern actually gets its name from its fern-like leaves. The leaves have an alternate mosaic, a dentate margin with leaf blades deeply cut into 20 or more lobes. They have a compound pinnate venation. These strongly aromatic leaves range from 3-6 inches in diameter and are covered with small hairs.



- **Stem:** The plant ranges from 1-4 feet tall and is loosely branched.
- **Root:** The root of the sweetfern prefers dry soil and sandy banks.
- **Flower:** The flower of the sweetfern has small catkins that bloom during April and May. Flowers of one or both sexes can be produced on an individual plant. Each flower is unisexual and appears on catkins clustered at the ends of the branches. The catkins become bur-like are ½ inch in diameter and are brown in color at maturity.
- **Seed:** The fruit grows during September through October. They have about 4 seeds. Each seed is about ¼ inch long, is olive brown in color, and is shiny.

Habitat: Sweetfern thrives in deciduous forests and sandy areas such as beaches. It ranges anywhere from Manitoba to Nova Scotia. It also can be found in New England and much of upper North America.

Uses: The spicy dried leaves can be brewed into a pleasant tea. It is also used for ground cover for erosion control.

Other Interesting Facts: Sweetfern is a nitrogen-fixing plant and is domesticated.

Kai

Virginia Creeper/ Woodbine

Parthenocissus quinquefolia



Description:

- **Leaves:** The woodbine has blue-green leaves. They are 4 to 6 cm wide. They have 6 to 12 cm long, toothed margins. The mosaic is opposite. The venation is simple pinnate. Also, they turn a deep red in the fall.
- **Stem:** The woody stem is brown and can be put in a plant pot or cover a small building. Which means they can be anywhere from 6 inches to 100 feet in length. The texture of the stem is very smooth.

- **Flower:** White petals form the flower. There are five petals for every flower. They have spikes of 3 to 5 whorls.
- **Seed:** They have small blue-black berries, which are round. Also, the seeds are poisonous.

Habitat: They came from Europe, Africa, and Asia Minor. They need a place to climb. They live in a variety of conditions: dry, sandy sites, or moist, nutrient rich soils. Some like shade but some varieties like sun. They are now native to the eastern parts of the United States.

Uses: They are common weeds in landscapes, orchards, and vineyards. They are often used as ornamental plants in landscapes.

Other Interesting Facts: The woodbine is an angiosperm. It is also called a "weigela." They are pollinated by Hawk Moths. The seeds are dropped by birds but spread by stems which root when in contact with the ground. Poison ivy is a similar species.

-Jamie

Wild Sarsaparilla

Aralia hispida



Description:

- **Leaves:** Single, long-stalked leaves rise above the flower stalk in 3 whorled branching parts, each with 3-5 compound pinnate leaflets.
- **Stem:** The leafless flower stem, green and smooth, usually grows to be 11" in height.
- **Root:** The sweet-smelling root (brown) usually grows 3-5 feet underground and it is used to flavor root beer.

- **Flower:** The flowers appear in circled clusters one and a half to two inches wide. They have tiny white and yellow petals with 5 green stamens.
- **Seed:** The seeds are dark purplish-black, clustered, round, a half inch wide and not edible.

Habitat: It grows in mostly hardwood, upland forests that are below 4,000 feet.

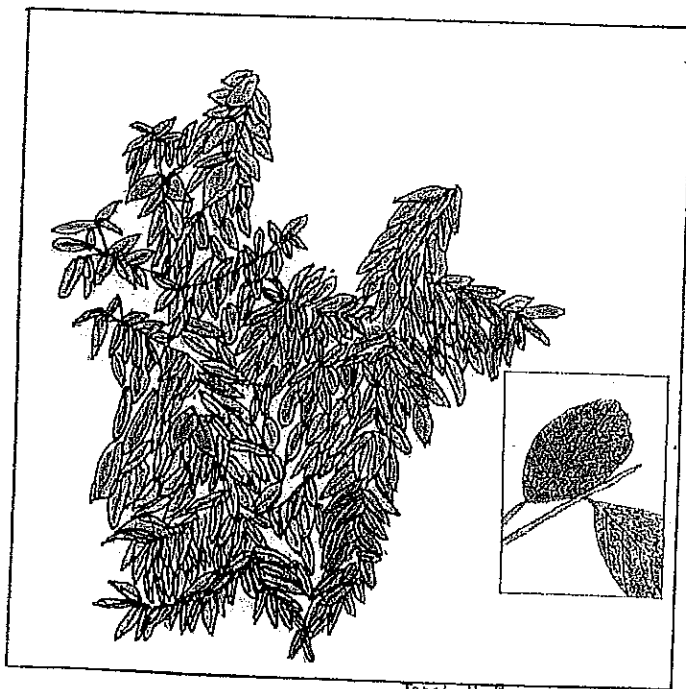
Uses: The root is used to flavor the old soda-fountain favorite, Sarsaparilla. It is also used for tea.

Other Interesting Facts: This aggressive plant quickly covers large areas of open water in southern wetlands, (mostly cypress swamps). Its growth is so thick that it gives the appearance that it can be walked upon. It is sometimes used as an aquarium plant.

-Lauren

Witch Hazel

Hammelis virginiana



Description:

- **Leaves:** The leaves are alternate, 4-6 inches long and 2-3 inches wide. They are dull green on top and light green below. They have a wavy toothed uneven base. The buds of the leaves are not scaly and the leaves aren't hairy. The leaves are spiral on the branch and have simple pinnate veins.
- **Trunk:** The tree can be 30 feet high and 12 inches in diameter. The bark is light brown and smooth. It also yields an astringent medicine.

- **Root:** The Witch hazel tree likes thick, rich soil, and rocky stream banks. The roots are soft and fibrous to absorb water.
- **Flower:** The flowers are pale yellow and they look like spiders and only bloom in autumn.
- **Seed:** The seed is black, half an inch long, and it has an oval shape. The seedpod will forcefully eject the seed 20 feet from the tree when it gets cold and dry.

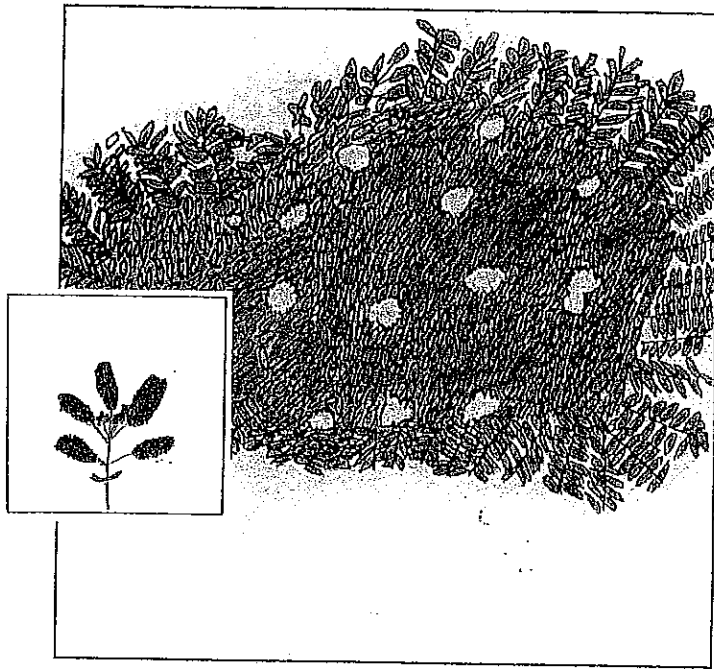
Habitat: The common Witch hazel may be found in Nova Scotia southward through Maine all the way down to Florida and to the west to south Texas.

Uses: The bark of the Witch hazel tree yields an astringent medicine that we get by distillation. The medicine is used to sooth minor cuts and insect bites. Another use for it is that if you cut a bough from it that is forked and you hold it lightly it will point towards water under ground.

Other Interesting Facts: The flowers on the tree will not bloom till autumn and if you know this you can see some very pretty flowers if there is a Witch hazel in the woods.

-Torrin

Witherod
Viburnum cassinoides



Description:

- **Leaves:** This is a shrub with flat-topped stalks and round white scented flowers. The leaves are 2-4 inches long with thick dull green leaves. The margin is entire; the mosaic is opposite; the shape is deltoid; and the venation is simple pinnate.

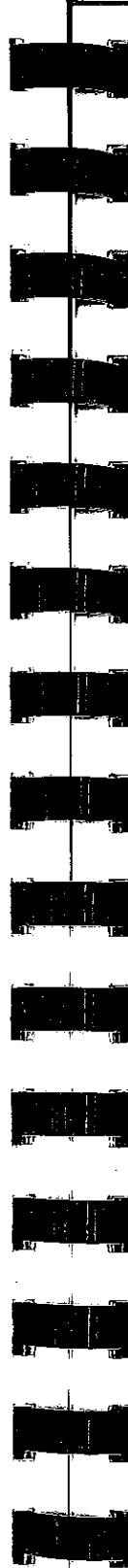
- **Stem:** The stem is long and green with some red. Witherod can grow to 6 feet tall. It has a diameter of about 3-4 inches.
- **Root:** The roots are long and slender with small hairs to get water.
- **Flower:** The flowers are small, white, scented and grow in round clusters.
- **Seed:** The seed likes temperatures between 68 and 86 degrees, but it will tolerate 50 degrees. The fruit is raisin-like and is edible. The berries come out in late summer. The fruit is deep red and changes to purplish-black when ripe when it shrivels to look like a raisin. The fruit is approximately one inch when full grown.

Habitat: The witherod likes wet thickets, swamps, clearings, and bodies of woods.

Uses: The fruit can be eaten. It is raisin-like in appearance and is eaten by various birds.

Other Interesting Facts: The witherod is also called "Wild raisin."

-Nicholas



American Crow

Corvus bbrabynchos



Description:

- **Beak:** The American crow's beak is short, slightly curved dull charcoal black. It is about one inch long. The American crow has the longest beak of all the crows.

Body Size: Its body is an oval shape about 17 ½ inches in length. The crow has long wings. It has a blunt tip as tail. The head is a rounded half circle supported by a very short neck. The crow's body is very plump. The crow has short stubby feet.

- **Male Coloring:** The male American crow is glossy black with a dull black beak.

- **Female Coloring:** The female American crow is shiny black with a charcoal black beak.
- **Voice:** The most common sound for the male and female is a raucous "Caw, Caw, Caw!" They also make various sounds like a dry rattle and different guttural sounds.

Food/Behavior: The American crow is a scavenger that eats corn, insects, nuts, small mammals, fruit, vegetables, and some dead animals. If a hawk, eagle or a large predator comes near a crow's nest, all the crows in the area will gang up on it to frighten it off. The crow is known as a scavenger because it will go into a trash can and pick all the trash out. It will also go into a compost pile and pull it apart looking for food for itself or it's young.

Habitat: The American crow can be found in most all of North America. It lives in forests, farmlands, woodlands, suburbs, city parks, and seashores. The crow prefers living in tide pool areas when available. The crow's nest is made out of twigs or sticks and is lined with bark, grass, or moss. They build their nests in the middle of a tree some twenty feet off the ground. Crows lay 4-5 eggs each spring. The eggs are bluish green with brown marks.

Other Interesting Facts:

They will live anywhere they can find. They live in groups of 2-10 crows. These rookeries include parents and young but all the adults help to care for the chicks. The American crow is the largest of all the crows. In some cultures the crow is a symbol of bad luck and death.

-Peter.

American Kestrel

Falco sparverius



Description:

- **Beak:** The American kestrel has a small, curved, predator's beak. The base is orange in color, and the tip is grey. It has a short, rounded appearance.
- **Body Size:** The smallest member of the falcon family, the American kestrel is nine to twelve inches long, the female being larger than the male. Its wings are large comparatively, but they are slim and pointed. The kestrel has large eyes and a rounded head. The talons and beak are sharp and hooked.

- **Male Coloring:** The male American kestrel's upper wings are a blue-grey with black spots and black wingtips. It has a rust colored back and tail, the back being barred, and the slim tail featuring a broad, black band on the squared tip. It's belly is cream, speckled with black. There are two vertical, black bars on the kestrel's white face and the bird is crowned with a blue-grey and reddish brown cap.
- **Female Coloring:** The female's tail and back are the same russet color, barred with black. The wings are brown, lightly barred. The face features the two black stripes and the blue-grey and rust cap. The tips of its wings are black and its chest is white with light brown marks.
- **Voice:** The kestrel has a loud, repeated "killy", but when the nest is disturbed it gives a range of staccato notes.

Habitat: American kestrels will live in almost any open area, urban or rural. They can be found all through North America. Kestrels nest in most hollows or cavities, including holes in trees or cacti, cliff ledges, and nest boxes.

Food/Behavior: American kestrels eat insects, smaller birds, rodents, and small reptiles. When hunting, the kestrel often hovers above it's prey before diving and will perch on trees or poles to search for food.

Other Interesting Facts: During the breeding season, the male will hunt for both himself and the female, who incubates her eggs. The American kestrel does not use any nesting material. Its eggs are a cream color with brown speckles.

-Charlotte

American Robin

Turdus migratorius



Description:

- **Beak:** The robin's beak is about 1/2 inch long. The beak is sharp, small, and short and is useful for digging in the soil to get food like worms.
- **Body Size:** *Turdus migratorius* body size is about 9-10 inches long (23-25cm). The robin hops on its feet. Its foot is about 2 1/2 inches long.
- **Male Coloring:** The male robin has a dark gray back and its tail is black. The robin's head is usually black and the throat later whitens. Males usually have a darker breast.

- **Female Coloring:** The female's breast is pale red with spots of yellow then later on changes in the winter to orange. On its back is dark gray like the males. The females tail is also black like the males breast color.
- **Voice:** Their whistle sounds like: "cheer-yup, cheerily" Calls like: "Teeek", or "tuk, tuk, tuk" and a "tseeps"
- **Food/and behavior:** Robins eat mostly insects that live in trees. The adults are expert worm hunters. They also eat insects and fruits such as cherries, raisins, grapes, and ripe berries.

Habitat: Robins live in most of North America, Alaska, and Northern Canada. Robins lay 3-4 eggs. The colors of the egg are blue. Robins make their nest in shrubs.

Other Interesting Facts: The song of a male bird attracts a mate. When people see robins it gives them a sign that spring is here.

-Danny

Barred Owl

Strix varia



Description:

- **Beak:** The beak is short and sharp, made for catching and eating small animals. Its yellow and about 1 ½ inches long.
- **Body Size:** The barred owl is 17-24 inches tall, chubby, with a wing span of 3.5 to 4 feet. The female is larger than the male. It is one of the largest owls in North America.

- **Male Coloring:** The barred owl is named after the bars on its chest. It is covered with brown, white and black. It has large black eyes, and unlike most other owls it does not have ear tufts (horns)
- **Female Coloring:** Same as the male
- **Voice:** The barred owl hoots a loud series of hoots that sound like "Who cooks for you? Who cooks for you all?" The female hoots in a higher pitch.

Food/Behavior: The barred owl eats at night. Its diet consists of mice, reptiles, fish, snails, slugs, spiders, bats, chickens, wood peckers, crows, crayfish, and rabbits.

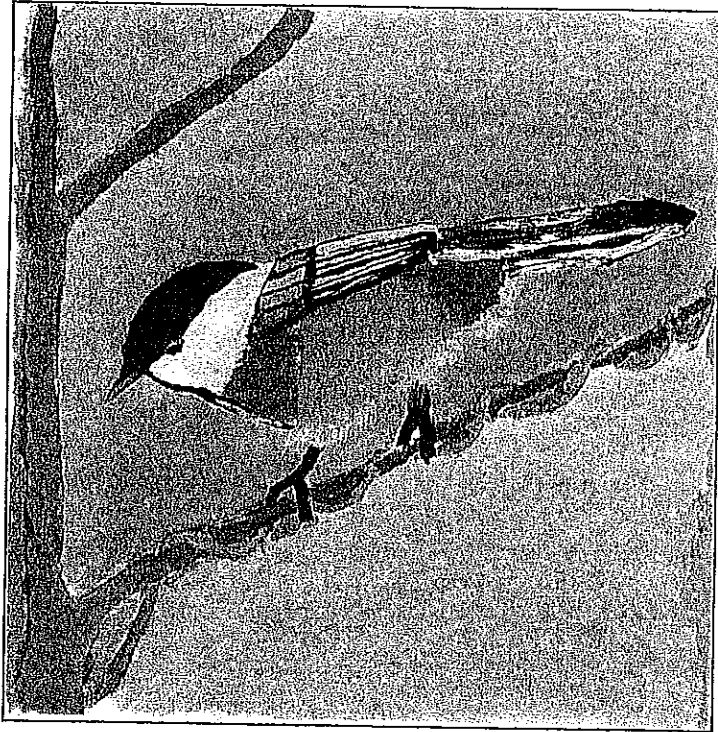
Habitat: The barred owl is found across the US and Canada in rivers and swamps. When the barred owl nests it will adopt a nest from a crow or hawk in an oak tree, when the young owls fall out of the trees they can climb back up them on their own. It is said that they will return to that same nest for up to 25 years, they will lay 2-4 pure white eggs. Since the 1960's the barred owl has moved around a lot, it now lives in most of the US and Canada.

Other Interesting Facts: The barred owl is easily hidden during the day, and could fly past your head at night without you knowing it happened. The barred owl resembles the great horned owl when it is in flight. Strix = Screech owl Varia = different

-Matt

Black-Capped Chickadee

Parus atricapillus



Description:

- **Beak:** The chickadee's beak is very tiny. It has a 2½ cm domed head, and the beak bends with the head.
- **Body Size:** The chickadee has two long and big feathers on its tail. Its head is domed; it also has short legs that stick out of its stomach. In the fall its stomach is larger than when it is in the summer because it eats more in the summer than in other seasons.
- **Coloring:** The male and female chickadees both have the same color. They change color between

summer and fall. Their stomachs turn from a light brown to a very dark brown, and their feathers get a little white added to the gray. Their back wings and their tails are gray with white endings. The cap and the bib are dark black. The sides of their heads and neck are pure white; the abdomens and the sides of their bodies are brownish with a little white added to it. The male is a little bit larger than the female.

Voice: The black cap's song is a slower version of the Carolina chickadee call. The black cap's notes are faster, too. When they are singing or talking to each other, they say the same words again and again like "chicka-chicka." In the winter, they use a high, clear, sweet whistle, like "phee-phee."

Food/Behavior: Black capped chickadees eat berries, spiders, and insects that hibernate. They also eat eggs. They are known to visit gardens and backyards. In the winter, they go to a feeding station where they eat suet or sunflower seeds that are provided for them.

Habitat: The black capped chickadee lives in all of Alaska, most of Canada and in the northern part of the United States. They also live in mixed forests, residential areas, especially in the winter. (I guess they like the cold.) In the winter, spring, and fall chickadees travel in little groups and go to different trees. When they land on the trees they go to different branches and nest. It mostly lives in trees, forests, city parks, woodlands, and orchards.

Other Interesting Facts: It is the state bird of Maine and Massachusetts. Both male and female look alike. The black capped and the Carolina are almost identical. It got its name because of its black cap, it also has a black bib. Black cap chickadees are one of the most favorite birds of bird watchers.

- Mohamed

Blue Jay

Cyanocitta cristata



Description:

- **Beak:** The beak is a very powerful bill that is capable of handling a range of food. The beak is very smooth yet sharp; it is a jet-black color, and it is ½ an inch long.
- **Body Size:** Blue jays are usually 11-12 ½ inches in length (28-31) cm. Their shape is asymmetrical.
- **Male Coloring:** The males have a black sturdy bill, with blue crest on most of the upper parts. They have a jet black eye line and breast, a grayish white throat and under parts. They have bright blue wings

with black bars and white patches, and a long blue tail with black bars and white corners. They also have short and skinny legs like duck legs.

- **Female Coloring:** The same as the male but with darker colors
- **Voice:** Best known for their loud calls, jays are also accomplished vocalists whose calls range from imitating a hawk's scream to occasional soft, sweet warbling songs.

Food/ behavior: It eats a variety of seeds at feeders including mixed seeds, sunflower, and cracked corn. It fills up its crop with sunflower seeds and goes off to store them in the woods then returns for more.

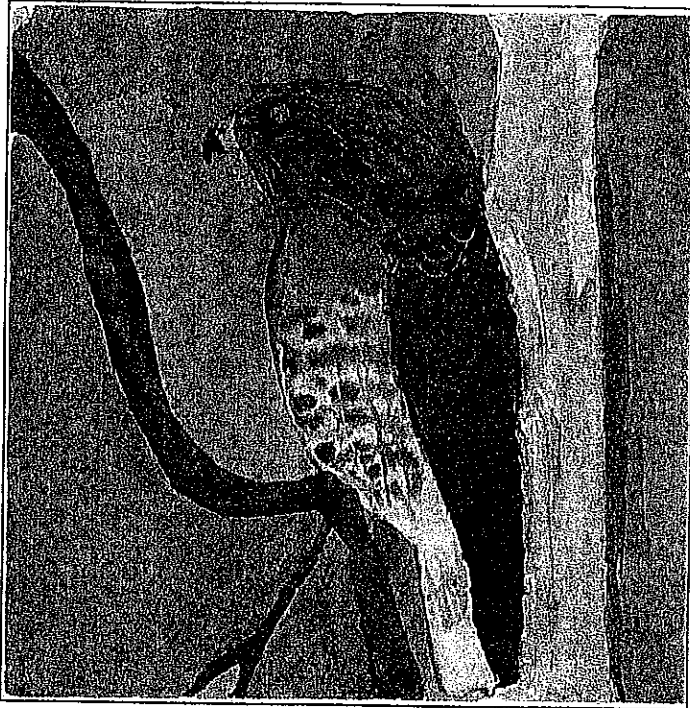
Habitat: Blue jays live in mixed woodlands, suburban gardens, groves, and town parks. They nest in shady trees. Their nests are loose and carelessly made, with a ridged rim. Though sometimes they are fairly well made of sticks, leaves, weeds, stems, and lined with strips of bark, grass pine needles and rags. They also use paper, string or any other materials that appeal to them. The nest is located in the mid story or canopy layer.

Other Interesting Facts: They begin to lay their eggs in March, usually 4-5 eggs. Females cover the eggs for 16 and a half- to 18 days. The adults defend the young and the nest. Most of the jays that are left in the world are tropical. They LOVE bird baths!

-chris

Broadwing Hawk

Buteo platypterus



Description:

- **Beak:** The Broadwing hawk's beak is short, curved, and used for ripping flesh. The beak is yellow with a black tip and is approximately a half-inch to an inch long.
- **Body Size:** The Broadwing hawk is the smallest of all the Buteo hawks. It has the same general shape of all Buteo hawks. It is about 13 inches long and has an approximate wingspan of 33 inches. The female Broadwing is generally larger than the male.

- **Adult Coloring:** The adult broadwing is a dark reddish-brown with a generally lighter breast and white underwings. It has a dark tail with a broad white band. The males and females have no significant color differences.
- **Immature Coloring:** The immature Broadwing is a lighter brown with its white underwing streaked with brown. Its tail has more stripes than the adult.
- **Voice:** The Broadwing has a thin shrill monotone whistle: "Ta-weee." It is often mistaken for the call of an insect or a small bird.

Habitat: The Broadwing lives mainly on the East coast stretching from Maine to Georgia. In the winter they migrate in large flocks to South America. They normally nest in pine and oak trees.

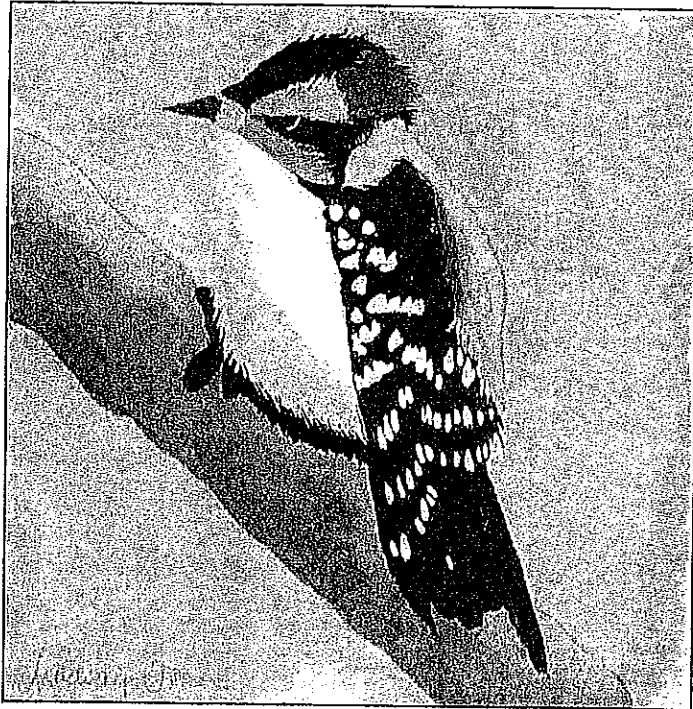
Food/Behavior: Broadwing hawks are definitely carnivores, eating mostly small rodents, snakes, frogs, and insects. They also eat small birds and are particularly fond of caterpillars and moths. One of the interesting behaviors that makes the Broadwing different from the other Buteo hawks is that it is the only raptor to migrate in flocks, and the number of hawks in each flock can vary from hundreds to thousands to tens of thousands.

Other Interesting Facts: The hawk's eyes are about two or three times more powerful than the human's eyes, and the hawk's eyes take up as much headspace as the brain.

-Samuel

Downy Woodpecker

Picoides pubescens



Description:

- **Beak:** The strong chisel like beak is short and slender. The females have shorter bills than the males. The beaks are a striking black and seem to become thinner as you near the end.
- **Body Size:** The Downy woodpecker looks like a mini Hairy woodpecker at 6 inches, and is also the smallest of the species. The tail and claws of this particular woodpecker are used for support when on trees.
- **Male Coloring:** The male Downy woodpecker is much like the female woodpecker in that they both

have a white belly, eye area, and neck. Both wings are spotted black and white. One of the defining features of the Downy woodpecker is the white line down its back. Another would be the black spots on its tail. The head and back are otherwise black. The only differentiating feature of the two is the red dot on the males' head.

- **Voice:** The voice of this woodpecker is a distinguishing feature. The call is like a rattle, descending in pitch as it ends. "Pik" is the beginning sound of the call, ending in dee – dee – dee.

Food/Behavior: The Downy woodpecker eats insects and maple syrup in the spring. The insects include spiders, aphids, ants, and caterpillars. The Downy woodpecker also enjoys seeds, crumbs, and suet. To find the food the male pounds into the top of the tree and the female pounds and searches in the middle of the tree. In late March or early May the birds begin mating. During mating season two males will follow a female. Whichever male catches the female's fancy is chosen to stay and mate with the female. While pounding trees, the woodpeckers are not only trying to find food, but are also marking territory.

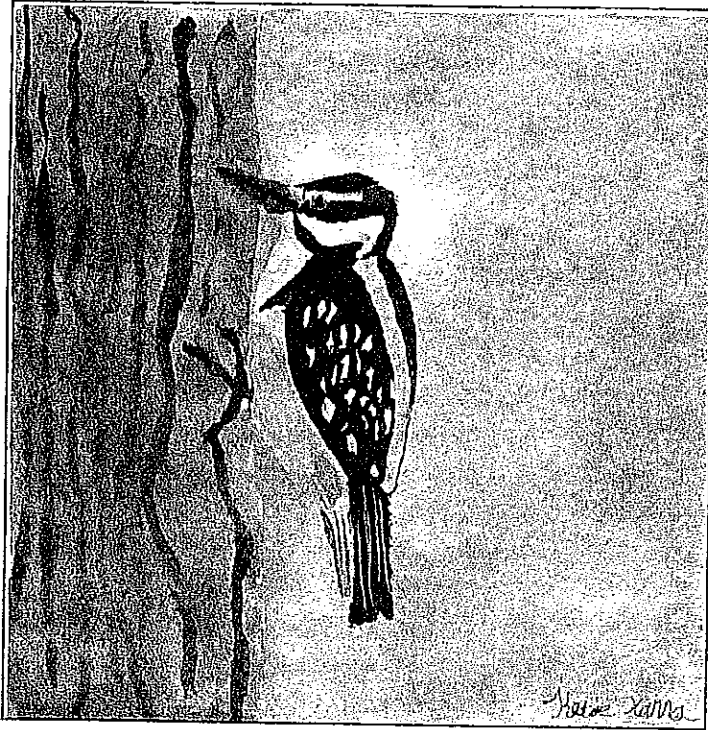
Habitat: The Downy woodpecker inhabits much of the U.S. including suburbs, orchards, shade trees, the woods of the U.S. and parks. The woodpecker makes its home in trees by making a small circular hole for the nest.

Other Interesting Facts: The Downy woodpecker is protected in the state of Illinois from being hunted.

-Lindsay

Hairy Woodpecker

Picoides villosus



Description:

- **Beak:** The Hairy woodpecker has a larger beak than other birds. The woodpecker species has a long pointed beak, which they use to peck holes into the wood. Their beak is roughly 1 inch long. The Hairy woodpecker has a greyish-brown beak that is very sharp. It has a much firmer beak than other woodpeckers.
- **Body Size:** The length of their body is from 7 and a half to 10 inches. They have two feet each with four toes. They have a circular head and an oval shaped body.

- **Male Coloring:** The male woodpecker has a white band stretching down his back, with a band of red on the back of his head. He also has a stripe of black on the top of his head and a similar stripe across his face. He has a white stomach and black wings with white spots.
- **Female Coloring:** The female has the same band of white and the same band of black minus the stripe of red. Her body has the same patterns as the male.
- **Voice:** The woodpecker makes a loud "peek" or a slurred whinny. Some say it makes a loud rattle similar to the kingfisher. The rattle is used as a mating call or a territorial warning.

Food\Behavoir: The Hairy woodpecker feeds mostly on insects such as wood-boring grubs and larvae. In the summer they eat wild fruits like poison ivy berries, service berries, cherries and plums. They also eat acorns, hazelnuts, and beechnuts. In the winter they feed at sap sucker holes, or drill their own, and eat the sap and cambium. The Hairy woodpecker changes it's feeding site each season. The Hairy woodpecker spends it's time drumming on the tree trunks. They climb their way up the tree in short leaps.

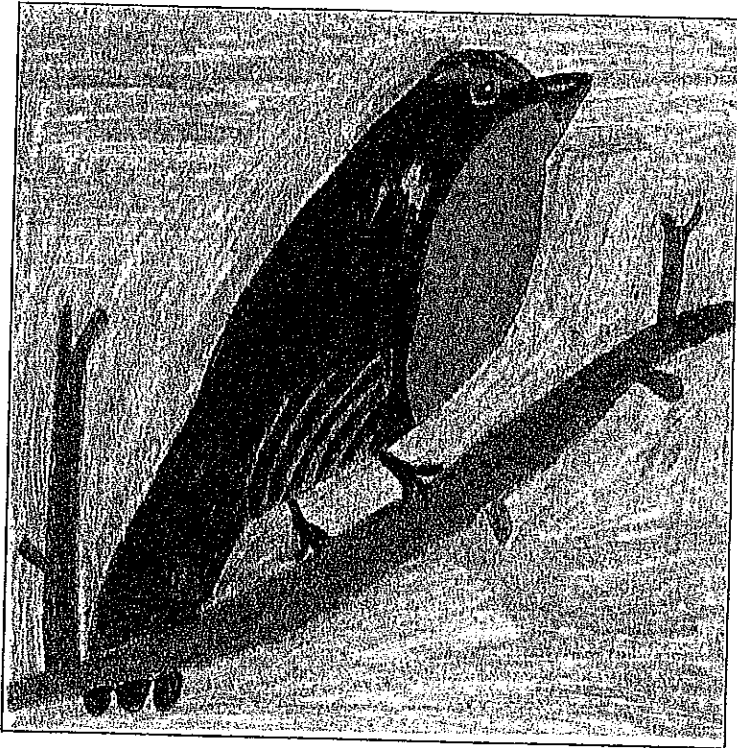
Habitat: The Hairy woodpecker lives in a habitat that ranges from a dense coniferous forest to open woodland. They make their homes in states from Alaska and Canada to Panama. They do not migrate.

Other Interesting Facts: They have a long barbed tongue that is so long it curls over the top of their skull. They use it to get insects out of tunnels and galleries.

-Katie

House Finch

Carpodacus mexicanus



Description:

- **Beak:** The House finch's beak can be light brown or dark brown. It can be compared to chocolate because chocolate can be light or dark. The beak is $\frac{1}{4}$ of an inch long and shaped like a small triangle.
- **Body Size:** The body is 5 to 5 $\frac{1}{2}$ inches long and 14-15 centimeters high. It is oval in shape.
- **Male Coloring:** Most of the male is brown while the forehead, eyebrow, rump, throat, and breast are

rose red. The grayish-buff belly and flanks are heavily streaked with brown.

- **Female Coloring:** The female's coloring is similar to the male's but lacks red. There is no conspicuous head pattern.

Voice: The voice is a fairly melodic sound. The song is a canary-like warble, usually ending with an ascending "Zeeee." The call note is a hard chirp.

Food: The House finch eats grass, twigs, plants, insects, dense foliage, cavity, seeds, and blossoms.

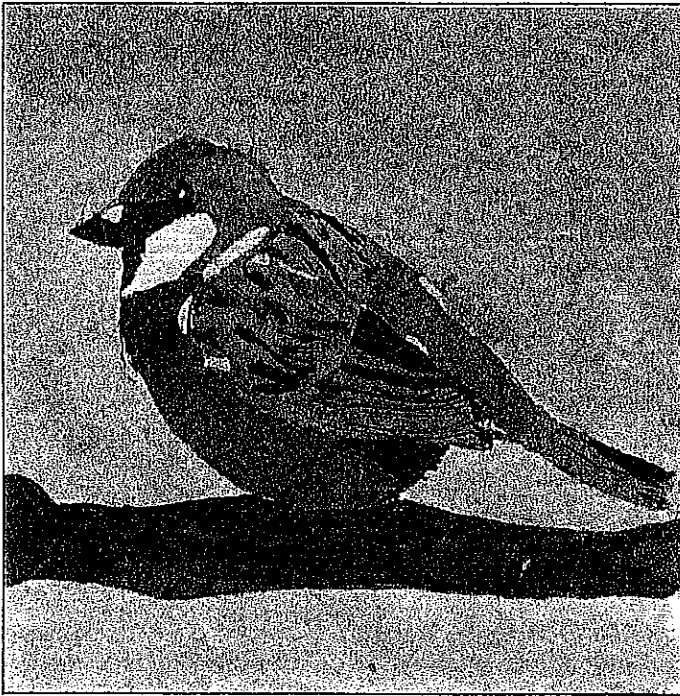
Habitat: The bird can be found in residential areas as well as weedy fields and coastal dunes. In the fall, they can be found in the eastern and southern parts of the United States as well as Canada.

Other Interesting Facts: The cheerful House finch has become common place in even the most populated eastern cities. The male is more conspicuous by virtue of his red brow and rump.

Samantha

House sparrow

Passer domesticus



Description:

- **Beak:** The male has a beak that is black and the female has a beak that is light brown. The beak is short.
- **Body Size:** The body shape is round and their head is round too. And the whole body is 5 to 6 inches long.

- **Male Coloring:** The male is brown above and streaked with black. The head is gray. They have grayish cheeks. The throat and the chest are black, and the rest of the body is gray.
- **Female Coloring:** The female has a brown crown, buff stripes behind the eye, a grayish-tan body and it has lighter colors than the male.
- **Voice:** The House sparrow has a sound that repeats chip, cheep. Some sparrows are good singers.

Food/Behavior: House sparrows have messy nests of straw, weeds, trash, or grass lined with feathers and hair. Nests are placed in any crevice or cavity, such as bird house, under eaves of houses. House sparrows eat all types of seed from a variety of feeders.

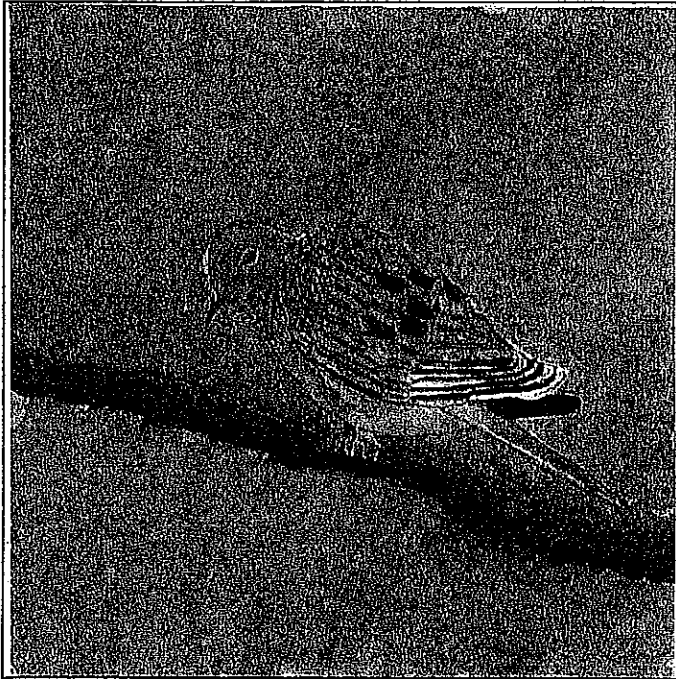
Habitat: House sparrows are found in farmlands, cities, towns and suburban areas all over North America. They lay from 3 to 7 eggs that are white, light green or light blue with dark marks on them.

Other Interesting Facts: The House sparrow has another names like European, and Domestic. Sparrows are the luckiest of the perching birds. They cannot enter nest holes smaller than 1 1/8 inch.

Andrey

Mourning Dove

Zenaida macroura



Description:

- **Beak:** The beak is ½- 1 inch long. The color of the beak is black and white. The shape of the beak is a cone like shape with a hump where the nostrils are.
- **Body Size:** The length of the mourning dove is from 11 to 13 inches. It is about 5 inches wide. The shape of the mourning dove is plump.
- **Male Coloring:** The color of the mourning dove is: grayish brown back and wings with a long pointed tail that is gray-black with white tips. It has a rose

tinted breast and a grayish cap on its head. It has a black spot behind each eye.

- **Female Coloring:** The female is the same color as the male but her colors are duller than his.
- **Voice:** The mourning dove has a hollow mournful coah, cooo, and cooo, coo. When they're in a bad mood they will give a coo, ocoo, ocooo.

Habitat: The mourning dove likes to live in open woods, road sides, scrubs, grasslands. They build nests low to the ground. They breed as far north as southwestern Alaska.

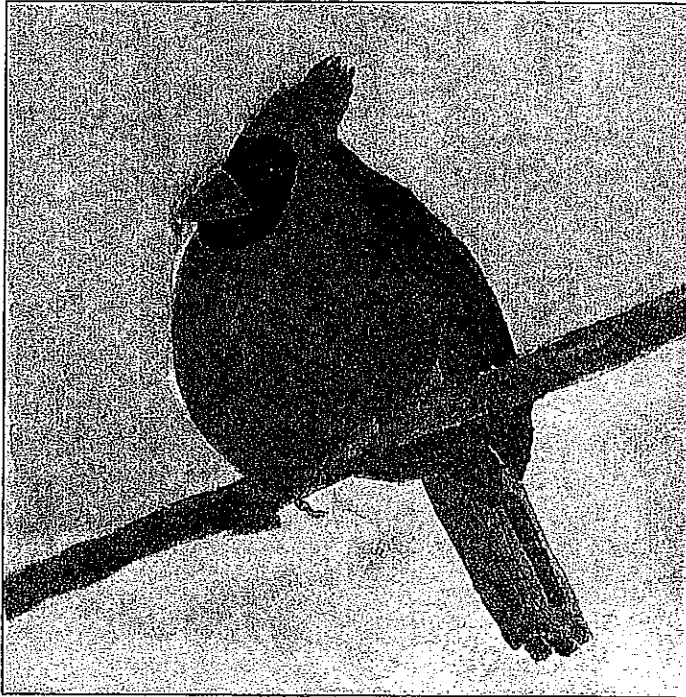
Food/ Behavior: The male makes a short coo followed by a long coo to tell the female he wants her. He also makes a flapping noise with his wings. On the ground the male bows and puffs out his neck. The mourning dove eats seeds, insects, grains, and green shoots.

Other Interesting Facts: They go to bird bathes, where they can sip up water through their bill {like we do with a straw} unlike other birds that have to tilt there heads back to swallow the water. They nest in a loose platform of twigs, placed low in a tree. They hatch two white eggs. The male takes 14- 15 days to hatch and the female takes 12- 14 days to hatch.

- Philip

Northern Cardinal

Cardinalis cardinalis



Description:

- **Beak:** The Northern cardinal's beak is wedge shaped. The male's beak is red and the female's beak is reddish pink.
- **Body Size:** The bird's length can be anywhere from 7 1/2 to 9 1/4 inches. Its shape is oblong and it is bigger than a tomato.
- **Male Coloring:** The male's coloring is bright red like an apple with reddish brown wings, a black face like coal with a fire-truck red beak.

- **Female Coloring:** The female is a pale brownish color, with a reddish pink beak.
- **Voice:** The cardinal sings a clear bunch of repeated whistles like this: " whoit, whoit, whoit, cheer, cheer, cheer;" that sounds like a metallic " chip."

Food/ Behavior: A cardinal's favorite food is seeds, which they depend on the most in the winter for food. In the summer it also eats fruit, insects, and grain. When singing both male and female sway their bodies back and forth with outstretched necks. If you have a bird feeder you might see mate feeding. Mate feeding is a relationship between two breeding cardinals and can happen four times a minute. What happens is the male picks up a seed, hops over to the female and they touch beaks for a second as she takes the food.

Habitat: The cardinal lives in various places like dense thickets, tangled shrubby growth, and hedges. They also live in woodland borders and bushy swamps.

Other Interesting Facts: In the Catholic church the cardinal is a very important official. Their red coat gave them both their common and scientific names. The name cardinal came from the Latin word " important."

Kacie

Northern Mockingbird

Mimus polyglottis



Description:

- **Beak:** The mocking bird has a slender bill, straight or slight curved it is about 1 and a half inches long.
- **Body Size:** This species is about 25 cm (about 10 in) long, and is smaller and more streamlined than a robin.
- **Male Coloring:** The mockingbird is gray above and grayish white to white below, with flashy white markings on the black wing and tail. They have two white wing bars.
- **Female coloring:** The females have coloring similar to the males but less bright.

- **Voice :** The northern mockingbird is known for its famous voice. It can copy over 36 songs from other birds. No one can tell the sound from the original. They also can copy cats, frogs, even pianos, electronic sounds and many more.

Food: Northern mocking birds, unlike catbirds, eat spiders and insects-mainly beetles, ants and grasshoppers. During fall they change their diet to eating fruit and berries from trees and shrubs.

Behavior: There is no simple explanation for their copy cat behavior. Northern mocking birds sing all year long. They are also known to fight intruders in the fall to keep them from their winter foods. They will even attack people and cats.

Habitat: Northern mocking birds are usually found in the United States and southern Canada. They are more common in the east but they can be found from California to Wisconsin. They live in brushy fields and woodland edges.

Other Interesting Facts: Most mockingbirds are tropical. The Northern mockingbird has expanded northward in the United States and southern Canada since 1950.

- Lars

Peregrine Falcon

Falco peregrinus



Description:

- **Beak:** Their bluish-gray beaks are small, short and hooked, for ripping open the flesh of the bird's prey.
- **Body Size:** The female Peregrine falcon is 1/3 bigger than a male Peregrine falcon. The average size is 18 in (45 cm) and their bodies are oval shaped. The female weighs about 2 pounds and a male weighs about one and a half pounds.

- **Male Coloring:** The head, wings, and legs are more brown than grey. The breast is whitish-brown, and the belly and legs are striped black and brown.
- **Female Coloring:** The female has grayish blue head and wings, a black and white striped belly, and bluish white and black striped legs.
- **Voice:** This bird has a call that is series of low slurred notes.

Habitat: Peregrine falcons live on cliffs and ledges in high up places. They also live near coasts, shores and steep, rocky mountainsides. They often live on ledges of buildings in big cities on the highest perches available.

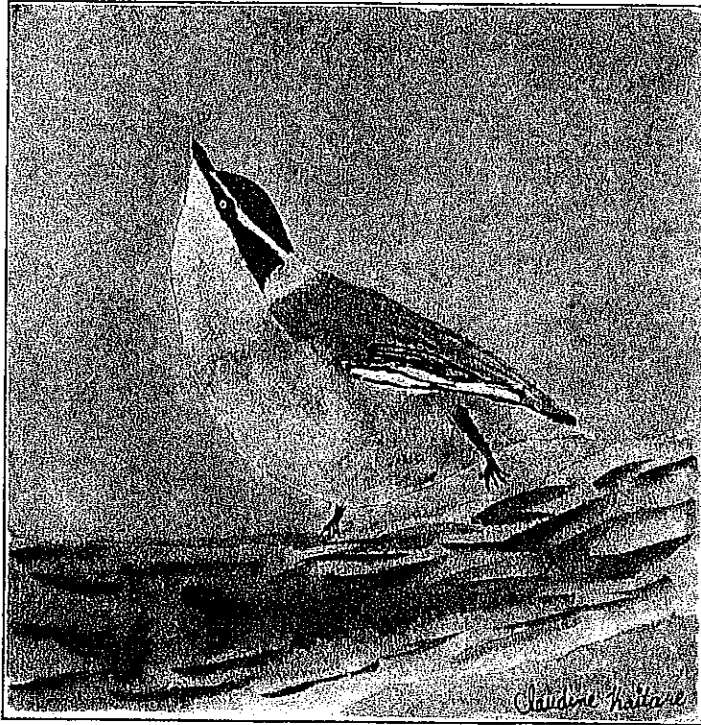
Food/Behavior: Peregrine falcons hunt mainly smaller birds. For example, herons, orioles, robins, and pigeons, as well as many other smaller birds. Big cities are an ideal place for these birds to live because they can be on high up ledges and feed on smaller birds living in the city.

Other Interesting Facts: These birds do not make their own nests, they use the nest's of eagles, ravens, and hawks. They nest on cliffs and ledges. Another interesting fact is that they bathe in streams to keep clean.

-Zach

Red-Breasted Nuthatch

Sitta carolinensis



Description:

- **Beak:** The beak of the Red Breasted nuthatch is black and very strong. It is used for opening up nuts during feeding time. The beak is about $\frac{1}{2}$ inch.
- **Body Size:** Nuthatches are small passerine birds that grow to be up to $5 \frac{1}{2}$ inches long.
- **Male Coloring:** The back is blue while the under parts are rusty red. It has a black cap and a white face. You will see a black line on the side of its head that runs through the eye.

- **Female Coloring:** Speckled with a reddish brown color or lavender spots make it different from the male.
- **Voice:** The common call of the Red Breasted nuthatch is slow and nasal, sounding like "nyac nyac." They also do a rapid series of nasal notes when agitated.

Food /Behavior: Sunflower seeds, cracked nuts and suet are their natural foods. Primary food: insects, insect eggs, and spiders. Secondary food: seeds, and berries.

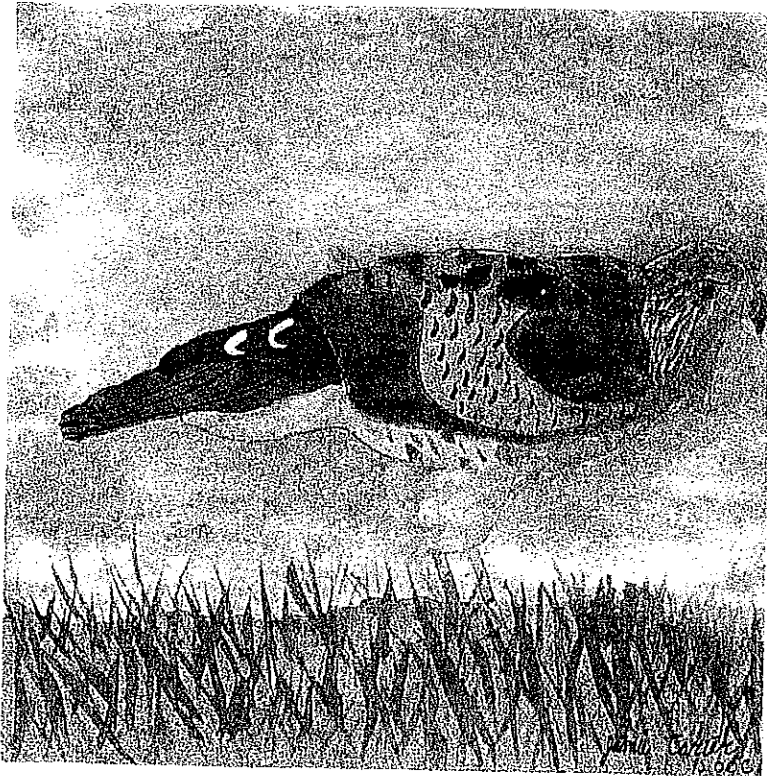
Habitat: The Red Breasted nuthatch can be found in coniferous forests, mixed forests, and suburban areas during migration and winter.

Other Interesting Facts: You may see the Red Breasted nuthatch working down a conifer tree head first and that's because it can crack open nuts to find its meals.

-Claudine

Red-Tailed Hawk

Buteo jamaicensis



Description:

- **Beak:** The Red-tailed hawk's beak is reddish yellow and is wavy, but not notched. It is strong and hooked so that it can tear apart its prey's body.
- **Body Size:** The male bird is 19-24 inches long, and the female is 24-30 inches long. Both sexes weigh anywhere from 2-6 pounds. The Red-tailed hawk's wingspan is anywhere from 46-58 inches. Their powerful feet have four toes with one turned back. The razor-sharp talons are long and curved for holding the prey.

- **Immature Coloring:** The immature bird's coloring varies from gray to dark brown. Its tail is finely streaked with gray.
- **Mature Coloring:** The mature bird's feathers vary from a light red to a deep brown. The underside of its feathers is a lighter color. It has a white breast and a dark band across its belly.
- **Voice:** The Red-tailed hawk's voice is a high faint scream that is often described as a harsh, descending "Keeeeeer."

Food/Behavior:

Eighty five percent of the Red-tailed hawk's diet consists of small rodents. Some of their favorites include rabbits, moles, mice, and other birds. They also enjoy crayfish, toads, garter snakes, and Ring-necked pheasants. When it spies its prey, it plunges into a steep, fast dive to snatch it up off the ground. The Red-tailed hawk flies above or level to the tops of forest trees. They are able to glide for hours without flapping their wings. Red-tailed hawks usually lay two or three brown spotted eggs. The babies are fed meat fragments of other species.

Habitat: The Red-tailed hawk makes its home all over North and South America. Its nest is often found in the crotches of deciduous trees on the edge of a forest. The nests that the birds return to year after year are roughly 3 feet high and 4 feet in diameter, with a lining made of long grasses, red cedar, wild grape bark strips, pine needles, and cornhusks.

Other Interesting Facts: The Red-tailed hawk is the most common and widespread buzzard hawk. It has no threatening predator except for humans.

-Jamie

Ring-Necked Pheasant

Phasianus colchicus



Description:

- **Beak:** The beak is small and pale yellow. It's pointed at the end with two small holes for nostrils. It's very strong and sharp in order to break off grains of wheat and berries. It is about ½ -1 inch long.
- **Body Size:** It has wattles which are two short "horn" like feathers at the back of the crown. It has a very long barred tail. Its body is an oval shape. The male is 35 inches long, and the female is 25 inches long.
- **Male Coloring:** The male Ring-necked pheasant has a very colorful face and a camouflaged body. Its legs are spurred; it has a green head and red wattles. Its body is a mixture of greens, browns and golds.
- **Female Coloring:** The female Ring-necked pheasant has a very dull camouflaged coloring. It's a mixture of brown, gold, green and black. For the

most part, it is rich brown with dark markings on the wings and back.

- **Voice:** The peasant has a loud two-syllable call, followed by a muffled rapid beating of wings. When they are flushed, both sexes cackle and chuckle "kuttuc kuttuc." The male's territorial call is loud and sounds like "kok-cack." Both male and female give hoarse, cracking alarm notes. The male gives a "swagock" then the female of the species responds with a "kia-kia."

Habitat: The pheasant makes a scrape, which is like a burrow only not as deep, under a bush, tussock of grass, or among dead leaves on the forest floor. They often live in shrubby copses, farmlands with woods edges and hedgerows, and open country with scattered woods. They nest on the ground.

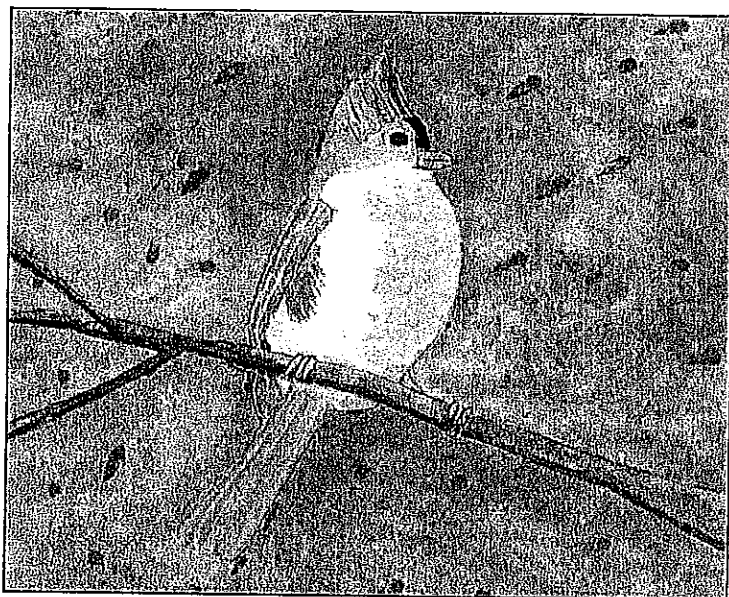
Food/Behavior: The Ring-necked pheasant spends a lot of time on the ground searching for food. They scratch the ground with their feet looking for seeds, worms, and insects. The Ring-necked pheasant doesn't migrate. They are able to run far and fast, and they'd rather run than fly to escape the jaws of their predators. When they do fly, it is vertically. Some males only have one mate, but 45% of them have a harem of females with whom they mate.

Other Interesting Facts: The Ring-necked pheasant is one of the most popular game birds in North America. In most states only cock pheasants are legally fair for game.

-Shereen

Tufted Titmouse

Parus bicolor



Description:

- **Beak:** The tufted titmouse has a short, slim beak that is used for eating ground dwelling foods like insects, seeds, fruits, and nuts. The beak is black with white spots and is approximately ½ inch long.
- **Body Size:** The tufted titmouse is four and a half to five and one half inches (11.5-14 cm.) long. It is shaped like a chickadee, small and well rounded, although a small crest sits on top of its head. When it is perched on a branch, it balances by keeping its tail closed and facing in the down direction. It also sits with its wings folded.

- **Coloring:** The titmouse has a grayish blue top half and a white breast with buff colored flanks. It comes in two color mixtures. They are the northern and southern titmice. The only visible difference is that the southern titmice have a black crest instead of a light blue crest. Males and females look alike, but the juvenile has duller colors.
- **Voice:** A titmouse's songs are a loud, whistled *peter-peter-peter*, or for territorial reasons it becomes a high *seea-seea*. They are also known to make the sound *peto-peto-peto*, as it also makes the sound *day-day-day-day*. Its harsh, scolding tone is said to sound like *jway-jway-jway* or *jwee-jwee-jwee*.

Food/ Behavior: The tufted titmouse's diet is mainly insects. In winter it will eat plant foods like berries, nuts, seeds, and fruits. It travels in mixed flocks while migrating.

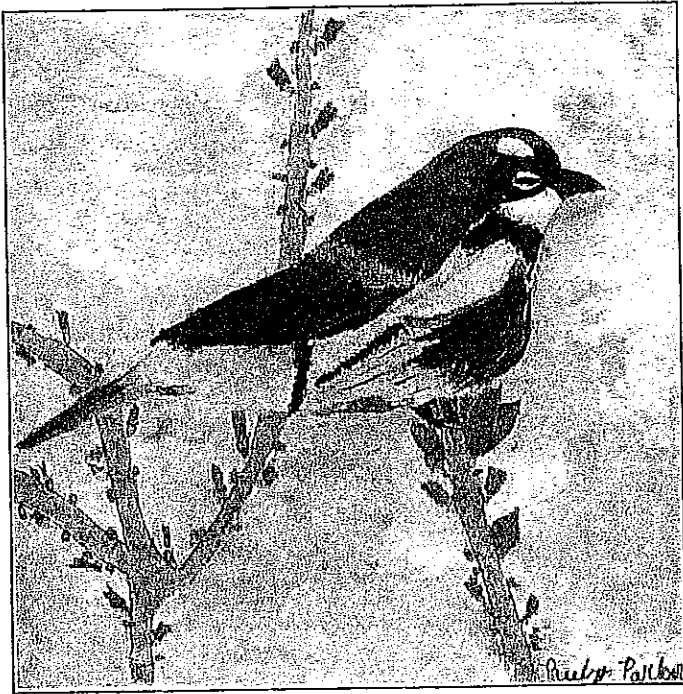
Habitat: The tufted titmice like to live in mixed and deciduous forests, brushy swamps, residential parks, and suburban areas. Some migrate to the Western areas of the USA, but some live in the Eastern areas of the USA year round. Their nests are usually in cavities of a tree, which are mostly one and one half inches in diameter. They use leaves, moss, cotton, wool, bark strips, and hair for their nests.

Other Interesting Facts: The tufted titmouse is said to be the only small bird with a crest. They lay about four to eight eggs that are one and one quarter inch in diameter.

-Timothy John

Yellow-Rumped Warbler

Dendroica coronata



Description:

- **Beak:** The Yellow-rumped warbler has a straight, slender, pointed bill. It's coloring is a charcoal black to a chocolate brown. It's ranges from $\frac{1}{4}$ to $\frac{1}{2}$ an inch long.
- **Body Size:** A small, very attractive, brightly colored songster with a short tail and a small head. Its body is roundish and varies anywhere from 4 $\frac{1}{2}$ to 6 inches long. (11cm.-15cm.)
- **Male Coloring:** They have a small bright yellow mark on the crown, breast, and rump. Males are a bluish gray color with white marks by the eye and

under the beak. They also have white wing bars and white tail spots.

- **Female Coloring:** They range between a brown to a grayish blue with a white and a yellow tint on the underside. They have white around the eye and a yellow rump but are much duller than the males.
- **Voice:** For warblers the males do the singing, not the females. Their song is a colorless trill of "tuwee-tuwee-tuwee-tuwee" usually dropping in pitch at the end of the call.

Food/ Behavior: They eat bayberries and poison ivy berries in cold weather. In warm weather they eat small insects and aphids. They migrate mainly at night but look for them flying within 500 feet of the tree tops on early fall mornings, for they are very common during their southward migration. Their nests are bulky nests of twigs, rootlets, and grass lined with hair and feathers. Their eggs are spotted and blotched with brown and there are usually 4-5 eggs. Their nests are found within 10 feet of the ground in spruce-fur forests.

Habitat: They are found in many types of forests. They breed in North America and Central America. They winter in western and southern U.S.A., West Indies and in Central America. Other places to find them are in city parks, residential areas, and coastal thickets during migration.

Other Interesting Facts: Yellow-rumped warblers get their name from their yellow spot on their tail. They might come to your feeder for suet and fruit.

-Ruby

Glossary

broadleaf- a plant or tree that has wide, flat leaves rather than needles.

conifer- a tree or shrub that is evergreen and bears cones.

margin- the edge of the leaf, it has many different shapes.

entire- when the margin of the leaf has no indentation.

undulate- when the margin of the leaf has a wavelike appearance.

serrate- when the margin of the leaf has a saw-toothed edge that points outward from the leaf.

dentate- when the margin of the leaf has a saw-toothed edge that points toward the tip of the leaf.

linear- when the shape of the leaf is long and narrow.

chordate- when the leaf is shaped like a heart.

deltoid- when the leaf is oval-shaped with a tapered point.

lobed- when the shape has deep indentations that make it look as if the leaf has fingers.

mosaic- the way the leaves are arranged on the stem.

spiral- when the leaves grow from all sides of the stem in a staggered pattern, one above the next.

opposite- when the leaves grow from only two sides of the stem in an even pattern straight across from each other.

whorled- when the leaves grow in small bunches surrounding the stem .

alternate- when the leaves grow from only two sides of the stem in a staggered pattern, one above the next.

venation- the pattern of the veins in the leaf.

parallel- when the veins run side by side from the base to the tip of the leaf.

simple pinnate- when there is one central vein from which smaller veins branch out toward the margin.

compound pinnate- the same as a simple pinnate except that there are many simple pinnate leaflets joined together to make one large leaf.

simple palmate- when there are five main veins that branch out from the base of the leaf.

compound palmate- when the leaf consists of a group of five or more simple palmate leaflets.

catkins- a long flower cluster bearing many tiny flowers.

cambium- the layer of a tree trunk where cells divide to make new ones.

fissure- a crack or indentation in the bark on a tree.

habitat- the environment in which a life form makes it's home .

wattles- two, short, horn-like feathers

- Charlotte and Katie

BIBLIOGRAPHY

Allen, B. Thomas. 1983. *Birds of North America*. New York: The National Geographic Society.

Brand, Keith. 1982. *Discovering Trees*. New Jersey: Troll Associates.

Brockmen, Frank. 1986. *Trees of North America*. Washington: Golden Books Publishing Company.

Burn Barbara S. 1984. *North American Trees*. New York: Bonanza Books.

Bruun, Bertel. 1996. *Birds of North America*. New York: Golden Express.

Clements, Edith. 1947. *Flowers of Prairie and Woodland*. New York: The H. W. Wilson Co.

Collingwood, G.H. 1947. *Knowing Your Trees*. New York: American Forestry Association.

Coombes, J. Allen. 1992. *Trees*. New York: DK Publishers, Inc.

Crocket, James. 1971. *Annuals*. New York: Time Life Books.

Department of Conservation. 1991. *Forest Trees of Maine*.

Eastman, John. 1997. *Birds of Forest, Yard, and Thicket*. New York.

Ehrlich, R. Paul. 1988. *Birder's Handbook*. New York.

Forshaw, Joseph. 1994. *Nature Company Guides - Birding*. New York.

Graves, Arthur. 1984. *The Illustrated Guide To Trees and Shrubs*. New York: Dover Publications, Inc.

Grimm Willam C. 1983. *Trees*. Philadelphia: Stackpole Books.

Grimm, William C. 1967. *Familiar Trees of America*. New York: Harper & Row, Publishers.

Grimm, Will. 1983. *The Illustrated Book of Trees*. New York: Stackpole Books.

Gulliet, Alma. 1962. *Make Friends of Trees and Twigs*. New York: Double Day Co. Inc.

Kricher, John C. 1998. *Eastern Forests*. Boston: Houghton Mifflin Company.

Labonte, A. George. 1973. *Forest Trees of Maine*. Farmington: Maine Forestry Dept.

Lanzara, Poala and Mariella. 1978. *Simon and Schuster Guide to Trees*. New York.

Martin, Laura. 1993. *Wild Flower Folklore*. New York: The Globe Pequot Press.

McDonald, Elvin. 1995. *The 100 Best Trees and Shrubs*. New York: Random House.

McNally, Rand. 1993. *Forests*. New York: Rand McNally Company.

Moore, David. 1999. *Trees and Leaves*. New Jersey: Troll Associates.

National Geographic Society. 1994. *Birds of North America*.

Niering, William. 1995. *National Audubon Society Field Guide to North American Wildflowers*. New York: Alfred A. Knopf.

Peattie, C. Donald. 1991. *The Natural History of Trees*. Boston: Houghton Mifflin Company.

Peattie, Donald C. 1964. *Trees*. Boston: Houghton Mifflin Company.

Peterson, R. Wayne. *National Audubon Society Pocket Guide to Song Birds and Familiar Backyard Birds East*

Peterson, Lee. 1977. *Edible Wild Plants*. New York: Houghton Mifflin Company.

Peterson, Roger. 1986. *Wild Flowers*. Boston: Houghton Mifflin Company.

Petrides, George. 1993. *Trees*. New York: Houghton Mifflin Company.

Preston, Richard. 1989. *North American Trees*. Iowa: Iowa State University Press.

Pizzetti, Mariella. 1977. *Trees*. New York: Simon and Schuster Inc.

Priebe, Mac. 2000. *The Peregrine Falcon*. New York: Mindful Publisher.

Robbins S. Chandler. 1983. *Birds of North America*. New York: Houghton & Mifflin.

Rushforth, Keith. 1990. *Trees*. New York: Mitchell Beazley Publishers.

Sabin, Francene. 1982. *Wonders of the Forest*. New Jersey: Troll Associates.

Stokes, Donald. 1996. *Field Guide to Birds*. London: Little Brown Co.

Tomlinson, Jocelyn. 1995. *Trees of the Northern United States and Canada*. Montreal: Fitzhenry and Whiteside Limited.

Venning, Frank. 1984. *Wild Flowers of North America*. New York: Golden Books.

Wallner, Jeff. 1997. *New England Mountain Flowers*. Montana: Mountain Press Publishing Company.

Wyman, Donald. 1965. *Trees*. New York: The Macmillan Company.

Zim, S. Herbert. 1949. *Birds*. New York: Golden Press.

Illustration of James Phinney Baxter done by Zach

Cover Illustration done by Jamie