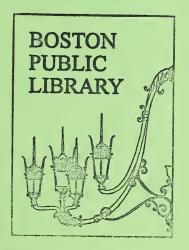
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THE FRANKLIN PARK COALITION
319 Forest Hills St., Boston, MA 02130 522-7431

an ARBOREAL GUIDE of the WILDERNESS



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INTRODUCTION

The Wilderness is a heavily wooded section of Franklin Park of about 100 acres. It is bordered by Forest Hills Street, Circuit Drive and Glen Road in Jamaica Plain. These roads make the Wilderness a self-contained section of the Park.

In the early 18th century, the area was called "the rocky wilderness area". F. L. Olmsted used this old designation when he laid out the sections of Franklin Park.

It's easy to see why the area was so named by early Roxbury residents. Even today it is rocky and heavily wooded with steep cliffs and marshy lowland. At its highest point - 185 feet above sea level - a commanding view of Jamaica Plain overlooking Moss Hill can be seen.

The Wilderness was never farmed or logged until it was purchased by the city in 1883 for Franklin Park. Two roads cut it in thirds and the edge along Forest Hills Street contained several big estates (one of which survives today at 235 Forest Hills Street).

One of these estates was that of Joseph Ellicott. He lived in a big white house near the 99 steps. The Olmsted firm used this house as a field office after Ellicott sold it and subsequently named Ellicott Arch, Ellicott Cottage (destroyed) and Ellicott Dale after the previous owner.

Architecturally, the section is dominated by a major foot entrance, a huge stone arch and causeway, 2 flights of rustic steps, an underground reservoir and bridle paths.

Olmsted designed Franklin Park with distinct yet interlocking sections each with its own ambiance. In the Wilderness he chose to keep it as 'wild' as he could and planned it as a typical New England woodland. Ellicott Arch was built in 1889-1890 and by 1892, all the walks, roadways and steps were completed and opened to the public.

Since the Wilderness already had its own tree growth, it was only necessary to thin out superfluous and diseased trees. In NOTES ON THE PLAN OF FRANKLIN PARK, Olmsted wrote:

"The woods of the Wilderness, after having been much thinned and trimmed with a view to the growth of the best of them..and to some degree of grouping, are also to be interspersed with scattered...thickets...of bushes, to keep the ground, hide its barreness and prevent the trampling of the drier ground to dust".

The ground and tree preparation for the entire Park began in earnest in 1899. Where the depth of soil was too thin for good tree growth, loam was added up to two feet. A foot of loam was added to the Wilderness which was at that time characterized with scrubby oaks. Throughout the early years of this century, the Wilderness was regularly pruned and thinned and the soil reconstituted where needed.

By 1903 - after 5 years work, the improvement of the woodlands was great. Initial pruning was completed and in 1904 the ground was prepared for oaks, dogwoods,

witchhazels and similar plants for spring planting in 1905.

This type of work continued year after year. The last entry in Park Reports of any major planting was in 1913 when hundreds of conifers, oaks and other trees were planted in the Wilderness.

The purpose of the Guide is to investigate this unique portion of Franklin Park; to learn what plantings pre-date the Park, which were added by Olmsted and which simply sprung up by cross pollination. Some of the plantings are more formal along walks and Ellicott Arch, for example. Others are typical New England specimens.

Moreover, since the Wilderness was never developed, one can see an almost pristine piece of topography which illustrates what the City of Boston appeared like to its first settlers 350 years ago.

April, 1979

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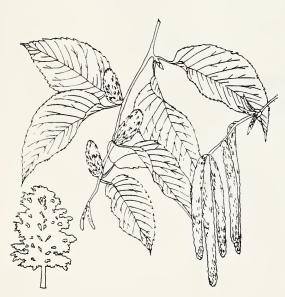
Red Oak
(Quercus borealis)

Red Oak is one of the largest and most common trees in forests of the northern states. It is certainly one of the dominant trees in the wilderness.

Red Oak leaves have from seven to eleven tapered lobes, each with about three bristle-tipped teeth at the apex. The spaces between the lobes are wide and oblique. Leaves are about six incles long, dull green and rather thin. The acorns take two growing seasons to mature. Each is about an inch long and nearly as broad with a lustrous-scaled, saucer-shaped cup surrounding the base. Because of their high tannin content, Red Oak acorns are bitter and seldom eaten by animals. In autumn they may cover the ground under the tree.

Red Oaks may grow to 90 feet in height. Older trees have massive branches and wide crowns. The bark of the trunk is dark graybrown, rough and broken while on the upper parts of limbs it is smooth and light gray. Red Oaks have a faster growth rate than most oaks, making them good for street and park planting. They have been planted extensively along Boston's parkways.

Sweet Birch (Betula lenta)



Another prevalent large tree in the Wilderness is the Sweet Birch. This species is native to rich woods throughout New England and south in the Appalachian Mountains to Georgia. Its bark is smooth and dark gray, marked with many short, horizontal lines similar to some Cherry bark. On older parts of the trunk it breaks in to irregular plates. Sweet Birch has a wide-spreading, graceful branching habit. Its medium-sized, oval leaves with finely toothed margins turn golden yellow in autumn.

A distinguishing feature of this birch is aromatic leaves and, especially, the twigs. They contain oil of wintergreen. The Sweet Birch was once the commercial source for this flavoring. Now oil of wintergreen can be synthesized. Birch beer is made from the sap obtained by tapping the trees in spring. A refreshing tea can be made by boiling the twigs in water.

In winter cone-like clusters of seeds remain on the branches and these provide food for many small, seed-eating birds and mammals.

Eastern Red Cedar

(Juniperus virginiana)



Juniperus virginiana, usually Eastern Red Cedar, have given Juniper Hill its name. This species is the largest of native junipers and the most widely distributed conifer in North America. It is often found on dry, sunny slopes, in abandoned fields and along fence rows where birds who eat its berries sit and drop the seeds.

In the north the Red Cedar is usually a medium-sized tree with ascending branches forming a conical or narrow crown. Its reddish brown bark shreds in thin strips. Although this tree often has a rugged, scraggy appearance, the poor condition of the ones in Franklin Park may be due to

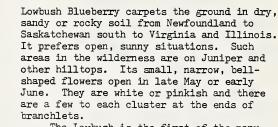
air pollution.

The needles of Red Cedar are scalelike, pressed against the branches in four ranks. On young plants and new growth the needles are awl-shaped and loosely spreading. The dark, blue-green foliage turns purplish or brown in winter.

Pencils were formerly made of this wood because of its light weight and ease of sharpening but vast stands of the tree have been eliminated by the pencil industry and now the western Incense Cedar is used.

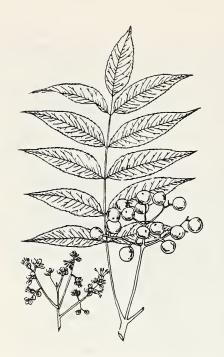
Lowbush Blueberry

(Vaccinium angustifolium)



The Lowbush is the first of the many kinds of blueberries to ripen its fruit for it grows in warm, sunny sites which hasten ripening. They may be ready by mid-July, or further north by early August. Then they are light blue, sweet and juicy, and range in size from 1/4 to 1/2 inch in diameter.





Amur Corktree

(Phellodendron amurense)

The Amur Corktrees in the wilderness are a long way from the native home of this species. It is named for the Amur River of northern China where the plant was first discovered by a Russian botanist in the 1850's. In 1874 the Amur Corktree came to this country as seed sent by the Botanical Garden at St. Petersburg to the then new Arnold Arboretum. Mature trees from this original seed shipment can be seen along the Meadow Road in the Arboretum.

The Armur Corktree has light tan, thick, corky bark marked with deep fissures.

Mature trees have massive, wide-spreading branches. The leaves are opposite each other along the stem and each leaf consists of about five pairs of oval leaflets with a single leaflet at the tip. All parts of the tree have a strong, sharp, citrus-like odor when crushed, for Phellodendrons are in the citrus family. The Amur Corktree produces large clusters of greenish white flowers in June.

Red Maple
(Acer rubrum)

Red Maple is among the first trees to bloom each spring. In late March or early April its bare crown becomes suffused with a red glow as numerous clusters of tiny flowers open. Later, the three- or five-lobed leaves expand. They are bright green above and contrasting whitish green beneath. The lobes and the narrow angles between them are sharply, irregularly toothed. The lobes of Red Maple leaves point forward while those of other maples with which it might be confused point outward. The leaf stalks are red.

All maples produce winged seeds in pairs, joined at the base. Those of Red Maple mature by late spring and at this time, fruiting trees are laden with pendent clusters of red or brown seed-pairs. On young branches the bark is smooth and gray and could be mistaken for beech, but on older parts the trunk is darker, rough and furrowed.

Tree of Heaven

(Ailanthus altissima)



When mature, the Tree of Heaven is a 50- to 70-foot tree with smooth, pale-striped bark and a rounded crown. Its leaves are about 15 inches in length with several pairs of oval leaflets. Each leaflet has a few large teeth along the margin toward the base and gradually tapers toward the apex. On young plants and stump-sprouts the leaves may be twice as long and the twigs are quite thick. In winter these stout branchlets are marked with conspicuous heart-shaped leaf-scars.

Tree of Heaven was introduced to this country from its native China via England in 1784. It was widely planted in the 1800's especially in industrial cities where its rapid growth and tolerance of dirt and smoke in the atmosphere were considered assets.

In its homeland China the Tree of Heaven is not as weedy because any excess growth is used for fuel. In traditional Chinese medicine all parts of the plant are used for a number of curative purposes. Its leaves are food for moths which produce Shantung or pongee silk.

Witch Hazel



In autumn as most trees and shrubs turn color, lose leaves and shed fruits in preparation for winter dormancy, the Witch Hazel comes into bloom. Its foliage, too, turns a lovely golden yellow but at the same time its flowers unfurl four narrow, crumpled, yellow petals. These small, fragrant flowers are clustered in groups of three along the twigs. They remain in bloom after the leaves have fallen. It is always surprising to come upon the delicate flowering branches so late in the season when most of the woodland is bare.

Witch Hazels are fairly large shrubs and may reach 20 feet in height. They grow in moist, shady habitats - along streams, in deep ravines. Their leaves are broad - oval or nearly rhombic with large rounded teeth on the margin and rather prominent, straight veins.

Witch Hazel has had a long history of medicinal use to reduce swelling and inflammation. It is still the source of a pleasant-smelling astringent which is distilled from its leaves and twigs. The name witch Hazel probably refers to the use of its forked branches as divining rods.



American Beech

(Fagus grandifolia)

American Beech can be recognized by its smooth, light-gray bark which is most striking when illuminated in winter sunlight. Slender sharp-pointed buds nearly an inch in length confirm the identity of Beech in winter. The trees may attain 70 to 80 feet in height and usually have a straight trunk, fluted at the base. Sometimes its roots send up suckers which form thickets around the parent tree. The shallow, fibrous roots and shade cast by Beeches prevent other vegatation from growing beneath their dense canopy.

American Beech leaves are oval, three to five inches long, with coarsley serrated margins. Their texture is papery, and several pairs of straight veins extend from the mid rib to the marginal teeth. They turn brown in autumn and some leaves may cling to the branches, especially on young plants, all winter long.

Young American Beeches are tolerant of shade and they thrive to become dominant members of eastern forests in association with Birch, Maple, Hemlock and White Pine. It also forms pure stands of considerable extent.



Blackhaw

(Virburnum prunifolium)

Blackhaw is one of several species of Viburnums which are native to the eastern United States. Many of them, along with related species introduced from Asia, are cultivated for their showy white flower clusters, excellent foliage and attractive fruit.

The Blackhaw is a multi-stemmed shrub or small tree usually reaching 15 feet in height. Its branches are crooked and stiff, forming a broad, rounded crown. This habit resembles Hawthorns, hence the name Haw is applied to this plant. Like all viburnums, its leaves are opposite each other along the stems. Blackhaw can be distinguished by its small, smooth oval leaves. They are firm-textured and have very fine teeth along the margins. Creamy white flowers in three-inch wide, flat-topped clusters bloom in mid-May as the leaves are unfolding.

White Oak

(Quercus alba)



The White Oak is one of the grandest of North American trees. When mature it has a broad open crown with thick, sturdy, wide-spreading branches. They attain heights of 90 feet or more under favorable conditions and are known to live for hundreds of years.

White oak leaves are 3 to 7 inches in length with about seven rounded, irregular, deeply-cut lobes. Along with the leaf features and its massive branching habit, this tree can be recognized and distinguished from other oaks by its light, ashy tan bark, broken into soft looking flakes or deeply fissured.

One of the most beautiful details of the White Oak is the color of the young leaves as they emerge in mid-spring. At this time they are pale tan tinged with red, and covered with a soft felt.

It is easy to miss the acorns of White Oak for they are the sweetest of all acorns, and are quickly eaten by squirrels, chipmunks, bluejays and many other animals. Young plants and some branches on older ones may retain their leaves all winter.

Sassafras

(Sassafras albidum)



Sassafras is one of the easiest of American trees to recognize, because of its unusual leaf-shapes. Irregular mitten-shaped leaves with one or two fingers and simple broadoval leaves all occur on the same tree.

Sassafras commonly grows in clumps along fence rows, roads or edges of fields and forests where it is a medium-sized tree, from 20 to 40 feet in height. Isolated trees such as can be seen in the Wilderness, attain larger dimensions. The twigs and young shoots are bright, yellow-green and the bark is reddish brown with thick ridges.

In spring before the leaves expand, Sassafras trees bloom with rounded clusters of yellow-green flowers. They are followed, in early autumn by dark blue, berry-like fruits each on a red club-shaped stalk.

The leaves, twigs, fruit and root bark have a spicy, root-beer odor and taste. The root bark was formerly much used for tea and was considered to have medicinal value.



Cucumber Tree

(Magnolia acuminata)

Magnolias are well known as gorgeous flowering small trees with large white or pink flowers, such as are planted in front yards along Commonwealth Avenue in Back Bay, Boston. But here is growing a species of Magnolia notable more for its large size than its flowers, the Cucumber Tree. It is native of southeastern United States where it is seldom abundant but rather is a widely scattered associate in oak and beechbirch-maple forests. The trees in the Wilderness were most likely planted, since this magnolia ranges north only to New York in the wild.

Although the Cucumber Tree's flowers are as large as tulips they are inconspicuous because of their yellow-green color and the late spring bloom is obscured by nearly mature, large leaves. The leaves are broadly oval with wavy margins, from 5 to 10 inches long, and whitish on the undersurface. The bark of mature trunks is light brown and scaly, becoming thick and furrowed on older tree. This tree was given its common name because the immature fruit resemble cucumbers.

Periwinkle (Vinca minor)



Also known as Myrtle, this evergreen trailer covers the ground in several places in the Wilderness. Periwinkle is native to woodlands of Europe and western Asia, but it has been in cultivation so long that the limits of its natural distribution are uncertain. In the United States it has become naturalized and may seem to be growing wild in places that were once cultivated. It forms a dense carpet of lustrous dark green foliage.

In spring vertical flower branches rise slightly above the prostrate vegetative shoots. The lilac-blue flowers occur singly at the ends of these branches. In bud the five petals overlap and are twisted to the left. When open the squared petals keep their twisted, pinwheel effect. In the center, surrounding the opening of the floral tube is a pale, whitish star or pentagon.

Periwinkle thrives in shade and is tolerant of many soil types and is one of the most useful ground cover plants. There are forms with white, pink, violet and redpurple colored flowers.

Bear Oak

(Quercus ilicifolia)



The Scrub or Bear Oak is a good example of the range of diversity within the Oak genus. Although it occasionally becomes a small tree of ten feet in height, the Bear Oak is usually a low, straggly shrub with stiff, contorted branches. Its leaves are roughly similar to the Red Oak but are smaller, measuring only two to four inches, and simpler in outline. There are usually only five bristle-tipped lobes and they have only a few broad teeth. They are thick and leathery, dark green above and pale with a soft felt beneath. The acorns, which take two years to mature, are 1/2-inch in length, light brown with longitudinal stripes. A bowl-shaped, downy cup surrounds the acorn for half its length.

The Bear Oak is usually found on barren mountain tops, forest clearings and rocky outcrops such as are found in the Wilderness. It will not grow in shade and often covers extensive areas after fire has destroyed a

forest.



Black Locust

(Robinia pseudoacacia)

Black Locusts are gaunt looking with narrow crowns of numerous slender, scraggly branches. Their bark is dark brown and deeply fissured even on young plants. They leaf-out quite late in the year, adding to their stark quality. But when they do expand, the leaves are an unusual shade of blue-green. They are composed of several broad-oval leaflets pinnately arranged along a main stalk. At the base of each leaf-stalk is a pair of thorns - these are especially noticeable on young branches and sucker growth. In June, one-inch, white flowers like pea-flowers bloom in long, drooping clusters. They are wonderfully fragrant and the nectar makes good honey. The fruit is a flattened pod, 3 inches in length, dark brown with several small, flattened, bean-like seeds inside.

Black Locusts sprout from the roots often forming thickets such as the one near the picnic area on Hagborn Hill.

Because its wood is heavy, strong and durable in contact with the soil, Black Locust was formerly used for posts, rail-road ties, wheel hubs, and shipbuilding nails.

Eastern Hemlock

(Tsuga canadensis)



The large, dark evergreens in groves in several sites in the Wilderness are the Eastern Hemlock. This tree has a straight trunk and and a conical crown with graceful branches which often sweep the ground.

Eastern Hemlock occurs where soils are cool -- the borders of swamps, shadowy ravines and mountains in the south. Its short, blunt needles are shining dark green above and have two white lines beneath. They are arranged in a single plane along the drooping branchlets. Light brown, 1/2-inch cones with a few thin scales hang from the ends of branchlets.

Hemlock bark contains large amounts of tannins and was used extensively for the leather industry. Great trees were felled, stripped of their bark and left to rot because the wood was considered inferior. Now tropical plants are the main source of commercial tannins. Native Americans also used the bark, boiled and pounded, for an antiseptic poultice.

White Pine (Pinus strobus) is the other common large evergreen here. Its needles are long, arranged in fluffy-looking clusters.



Sugar Maple

(Acer saccharum)

The most famous of New England's trees is the Sugar Maple, source of syrup and sugar products. This tree is at its best when grown in the open where it forms a broad dense crown, but in the Wilderness, as in other forests, its grayish brown vertically furrowed trunk is free of branches for more than half its height. Thus it yields many feet of knot-free wood. Because of its strength and durability, lumbermen refer to this wood as Hard or Rock Maple. It also has a high fuel value.

Sugar Maple can be distinguished by its thin, five-lobed leaves. They are generally wider than long and have few coarse, long-pointed teeth on the lobes and v-shaped margins between the lobes. The Sugar Maple is an important feature of New England's spectacular autumn foliage, when its coloration is a mixture of yellow, orange and red.

Flowering Dogwood

(Cornus florida)



When in bloom, in mid-May, Flowering Dogwoods are the loveliest of trees in the Wilderness. The true flowers are green and insignificant but several are clustered together in a head surrounded by four large, creamy-white bracts, the whole cluster measuring up to five inches across.

Native throughout the eastern United States, they are understory trees, ones that can utilize the space and low light intensity beneath the canopy of larger forest trees. As such they seldom grow to heights of more than 20 feet and their branching is more or less horizontal.

Their leaves are broad oval with somewhat wavy margins, 3 to 5 inches in length. Several pairs of impressed veins which curve to the margins are a prominent characteristic of all Dogwood leaves. It is easy to recognize Flowering Dogwood by its bark which is brown and broken into roughly square plates.

If you walk through the Wilderness in winter you can recognize the Flowering Dogwood by its light grey, turban-shaped flower buds on short stalks at the ends of branches. These plants flower poorly when our winters are especially harsh; here in Franklin Park, Flowering Dogwood is close to the northern limit of its natural range.

Sweet Fern

(Comptonia peregrina)



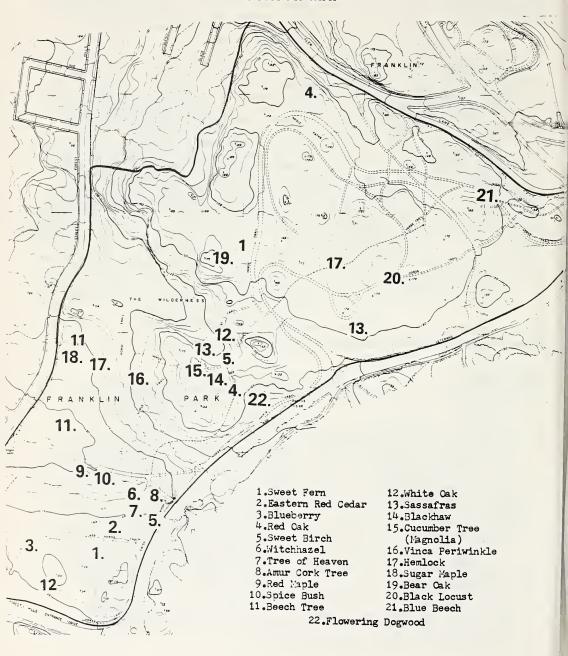
Sweet Fern is so called because its foliage is aromatic and resembles fern fronds. It is not related to ferns, however, and one of its closest relatives is Bayberry.

Sweet Fern is a graceful, low shrub with many slender stems spreading by creeping roots. Its linear, deeply lobed leaves are soft and clothed with fine hairs. Tiny, shining, resinous dots cover the surfaces of leaves and stems. When the plant is brushed or squeezed, these emit a pleasant, spicy fragrance.

Sweet Fern grows in exposed sites on peaty or sandy soil. It can thrive under such sterile soil conditions because of its ability to fix its own nitrogen. In many areas such as road cuts and abandoned gravel pits, this shrub is important as a soil binder.

A tea from Sweet Fern leaves and twigs has been used as a tonic and astringent.

LOCATOR MAP



ADDITIONAL WOODY PLANTS IN THE WILDERNESS

TREES

Acer ginnala - Amur Maple Acer negundo - Box-elder Acer platanoides - Norway Maple Amelanchier Species - Serviceberry Allegheniensis - Yellow Birch Betula pendula - European White Birch Carya glabra - Pignut Hickory Castanea dentata - American Chestnut Crataegus species - Hawthorn Fraxinus pennsylvanics - Green Ash Malue species - Crabapple Nyssa sylvatica - Black Gum Ostrya virginiana - American Hophornbeam Pinus rigida - Pitch Pine Pinus strobus - White Pine Populus termuloides - Quaking Aspen Prunus serotina - Black Cherry Quercus coccinea - Scarlet Oak Quercus palustris - Pin Oak Quercus velutina - Black Oak Salix nigra - Black Willow Tilia cordata - Littleleaf Linden Tilia americana - American Linden Ulmus species - Elm

SHRUBS AND VINES

Acanthopanax sieboldianus - Fiveleaf Aralia Amorpha species - Indigobush Aronia melanocarpa - Black Chokeberry Berberis koreana - Korean Barberry Campsis radicans - Common Trumpetcreeper Celastrus orbiculatus - Oriental Bittersweet Chionanthus virginicus - White Fringetree Cornus sanguinea - Bloodtwig Dogwood Cornus species - Dogwood Cytisus scoparius - Scotch Broom Lonicera species - Honeysuckle Philadelphus species - Mockorange Physocarpus species - Ninebark Rhamus cathartica - Common Buckthorn Rhamnus frangula - Glossy Buckthorn Rhus aromatica - Fragrant Sumac Rhus typhina - Staghorn Sumac Smilax species - Greenbrier Symphoricarpos - Coralberry and Snowberry Viburnum dentatum - Arrowwood Viburnum Xanthorhiza simplicissima - Yellowroot

BIBLIOGRAPHY

- Bailey, L. H. The Standard Cyclopedia of Horticulture. New York: The MacMillan Company. 1942.
- Bean, W. J. Trees and Shrubs Hardy in the British Isles, 8th Edition London: John Murray. 1970.
- Dame, L. L. and H. Brooks. Handbook of the Trees of New England. Boston: Ginn and Company, Publishers. 1902.
- Dirr, M. A. Manual of Woody Landscape Plants. Champaign: Stipes Publishing Company. 1977.
- Fernald, M. L. and A. C. Kinsey. Edible Wild Plants of Eastern North America. Revised Edition by R. C. Rollins, New York: Harper. 1958.
- Fowells, H. A. Silvics of Forest Trees of the United States.

 Agricultural Handbook No. 271. Washington, D.C.:

 USDA Forest Service. 1965.
- Graves, A. H. Illustrated Guide to Trees and Shrubs. New York:
 Harper & Row, Publishers. 1956.
- Grimm, W. C. The Book of Trees. Harrisburg: The Stackpole Comp. 1957.
- Hu, S. Y. Ailanthus. Arnoldia 39(2):29-50. 1979.
- Illick, J. S. Pennsylvania Trees. Pennsylvania Dept. of Forest and Waters. 1914.
- Keeler, H. L. Our Northern Shrubs. New York: Dover Publications, Inc. 1969. (Chas. Scribner. 1903)
- Martin, A. C., H. S. Zim and A. L. Nelson. American Wildlife and Plants. New York: Dover Publications, Inc. 1961. (McGraw-Hill Book Company, Inc. 1951)
- Medsger, O. P. Edible Wild Plants. New York: Collier Books. 1966.
- Peattie, D. C. A Natural History of Trees, 2nd Edition. Boston: Houghton Mifflin Company. 1966.
- Rehder, A. Manual of Cultivated Trees and Shrubs. New York: The MacMillan Company. 1940.
- Ross-Craig, S. Drawings of British Plants. London: G. Bell and Sons Ltd. 1948.
- Sargent, C. S. The Silva of North America. New York: Peter Smith. 1947. (Illustrations by C. E. Faxon)
- Weiner, M. A. Earth Medicine Earth Foods. New York: Collier Books. 1972.

