

***Native Trees
and
Woodland Shrubs
of
Prince Edward Island***



FARM AND FOREST

C O N T E N T S

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PRINCE EDWARD ISLAND
FOREST COVER 2010



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Fifty Trees of Canada ----- J. L. VanCamp and T. E. Shaw.

Our Northern Shrubs ----- H. L. Keller.

The Flora of Nova Scotia -- A. E. Roland.

Textbook of Dendrology ---- Harlow and Harrar.

F O R W A R D

Because the demand has been so great for this booklet not only from people of this province, but throughout Canada as well, the 1958 edition has been exhausted. Since the demand has continued to grow the edition has been updated, and revised accordingly.

Two trees have been left out of this booklet, that had been described in the original, namely, the Balsam Poplar because it was introduced here some time ago and the Blue-leaf Birch because there seems to be some controversy as to whether it is found here or not.

All descriptions have been written in non-technical language so that even older school children will have no difficulty with the description of each species. Wherever possible, these have been drawn on one inch squared paper so that the reader gets an idea of the size of the leaf, twig or seed. In some cases the drawings have been either increased or decreased in size proportionately. In order to determine the actual size of the drawings, increase or decrease the squares to one inch, as the case may be.

It is hoped that this booklet will create a greater interest in our woodland trees and shrubs.

TREES and CONSERVATION

As people learn to know and recognize different tree species, they become more interested in learning more about the importance of our woodlands and why these same woodlands should be protected and cared for, if our country is to prosper.

Our woodlots are vitally important to the people of this province in many different ways.

First, not only do they supply fuel, but they also supply many items used in our daily needs.

Second, they are needed for the conservation of water supply in our soil and the control of the flow of streams.

Third, they reduce or avert the danger of floods and droughts.

Fourth, they protect the soil from erosion.

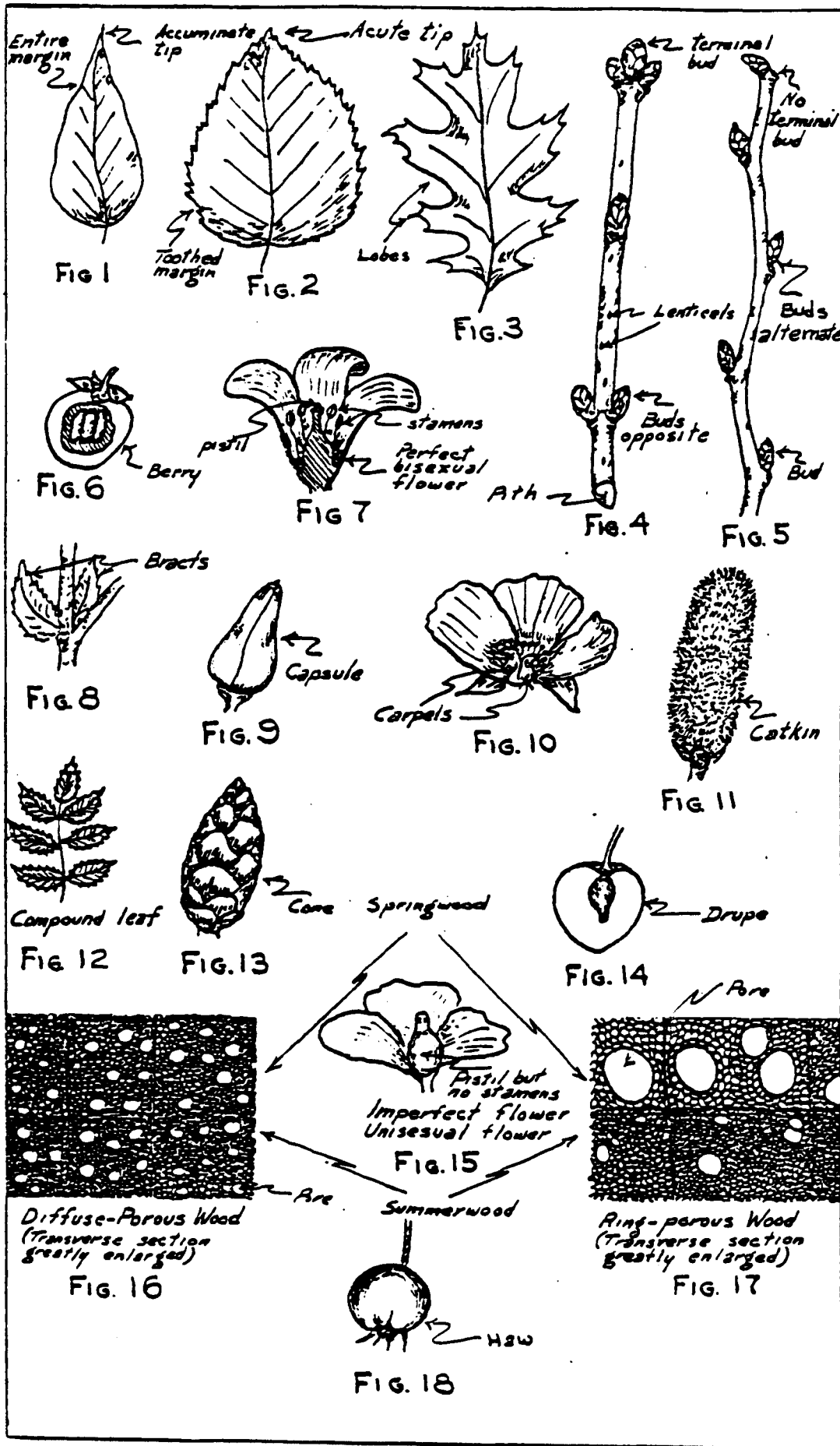
Fifth, they form a protection for our fish and wildlife.

Sixth, they provide wholesome outdoor recreation.

Conservation should be our watchword, for when we destroy woodlots either unwittingly or intentionally, we not only penalize ourselves but cheat the next generation of its rightful heritage.

EXPLANATIONS OF SPECIAL TERMS

- Acuminate ----- Gradually tapering to apex. (Fig. 1)
- Acute ----- Sharp-pointed. (Fig. 2)
- Alternate ----- Applied to that form of leaf arrangement in which only one leaf occurs at the same height on the stem. (Fig. 5)
- Berry ----- A simple fleshy fruit, with seeds embedded in the pulpy mass. (Fig. 6)
- Bisexual ----- Having both sex organs on the individual. (Fig. 7)
- Bract ----- A leaf, usually small, subtending a flower or flower cluster. (Fig. 8)
- Bud ----- An undeveloped branch or flower shoot, generally covered with bud scales and most conspicuous in winter. (Fig. 5).
- Capsule ----- A dry fruit of two carpels or more, usually opening by valves or teeth. (Fig. 9)
- Carpel ----- A floral leaf bearing ovules. (Fig. 10)
- Catkin ----- A spike of imperfect flowers subtended by scarious bracts, as in willows. (Fig. 11)
- Compound ----- Composed of two or more similar parts. (Fig. 12)
- Cone ----- A fruit, like that of a pine, consisting of woody, overlapping scales. (Fig. 13)
- Diffuse-porous- Porous wood in which the pores exhibit little or no variation in size, indicative of seasonal growth. (Fig. 16)
- Drupe ----- A simple, one-seeded, fleshy fruit, the outer wall fleshy, the inner wall bony. (Fig. 14)
- Entire ----- Wholly without teeth or other divisions such as lobes. (Fig. 1)
- Fruit ----- The seed-bearing product of a plant. (Figs. 6, 9, 13, 14, 18, 19, 23, and 24)



- Habitat ----- A plant's natural place of growth
- Haw ----- A fruit of hawthorn. (Fig. 18)
- Imperfect ----- A flower lacking either stamens or pistils.
(Fig. 15)
- Lenticel ----- Warty structure of the bark which permits the
passage of air inward or outward. (Fig. 4)
- Lobe ----- Any segment of an organ. (Fig. 3)
- Nut ----- A one-seeded fruit with a woody outer cover-
ing that does not split open when the fruit is
ripe. (Fig. 19)
- Oblong ----- Longer than broad, with the margins nearly
parallel. (Fig. 20)
- Opposite ----- When leaves are paired at the same height
one on each side of the twig. (Fig. 4)
- Ovate ----- Having the lengthwise outline of an egg, broad-
est at the base. (Fig. 21)
- Ovoid ----- Egg-shaped. (Fig. 22)
- Pendent ----- Drooping, hanging, or declining. (Fig. 24)
- Perfect ----- A flower having both stamens and pistils.
(Fig. 7)
- Pith ----- The softer central region of a twig. (Fig. 4)
- Pome ----- The fleshy fruit of the apple family. (Fig. 23)
- Pore ----- A tiny opening as in the wood, leaf, etc.
(Figs. 16 and 17)
- Pubescent ----- Downy, covered with soft hairs.
- Ring-porous --- Porous wood in which the springwood pores
are much larger than those of the summer-
wood, particularly if the transition from
springwood to summerwood is abrupt. (Fig. 17)
- Samara ----- A nut fruit with a wing, as ash. (Fig. 24)
- Seed ----- A ripened ovule. (Fig. 23)



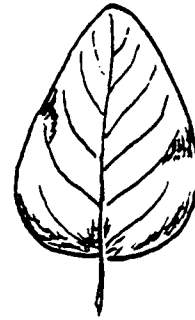
FIG. 19



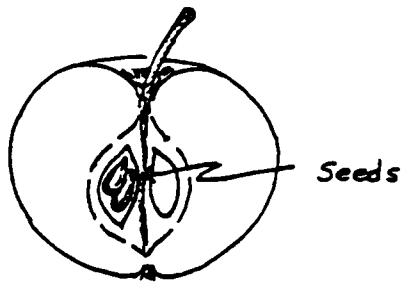
Oblong leaf
FIG. 20



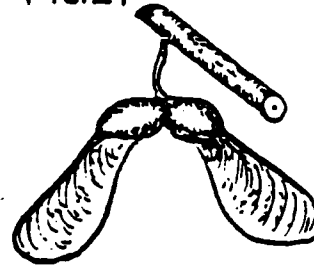
Ovate leaf
FIG. 21



Ovoid leaf
FIG. 22



Pome
FIG. 23



Pendent double samara of maple

FIG. 24



Spike
FIG. 25



A stalked bud
FIG. 26



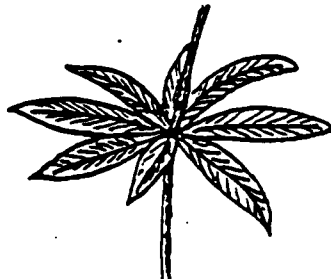
An unarmed
cone

FIG. 27



An armed
cone

FIG. 28



A whorl of leaves

FIG. 29

- Semi-ring----- Wood intermediate between ring porous and
porous diffuse porous. (Intermediate between Figs.
16 and 17)
- Spike ----- An elongated flower cluster. (Fig. 25)
- Stalked Bud --- A bud supported by a short stem. (Fig. 26)
- Terminal ----- Borne at the end of a stem or branch. (Fig. 4)
- Tolerant ----- Shade-resistant.
- Unarmed ----- Without prickles. (Figs. 2- and 28)
- Unisexual ----- Having one sex only. (Fig. 15)
- Whorl ----- A circle of three or more similar parts, as
leaves or flowers inserted at one point on an
axis. (Fig. 29)



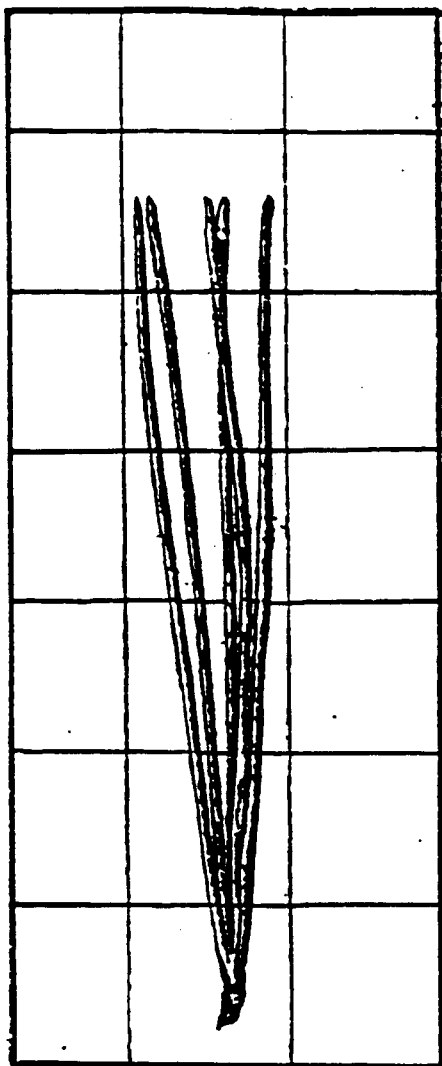
Field grown White Spruce

LIST OF ILLUSTRATIONS

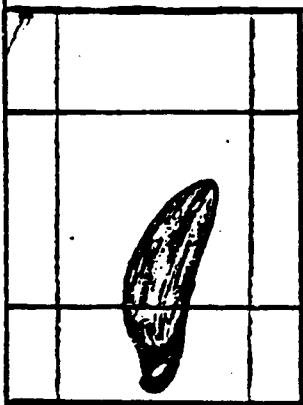
Eastern White Pine	White Elm
Red Pine	Showy Mountain Ash
Jack Pine	American Mountain Ash
Tamarack	Serviceberry
White Spruce	Hawthorn
Black Spruce	Pin Cherry
Red Spruce	Eastern Choke Cherry
Eastern Hemlock	Staghorn Sumac
Balsam Fir	Winterberry
Eastern White Cedar	Mountain Holly
Trembling Aspen	Mountain Maple
Large-tooth Aspen	Striped Maple
Willows	Sugar Maple
Ironwood	Red Maple
Yellow Birch	Red-osier Dogwood
White Birch	Alternate-leaved Dogwood
Grey Birch	White Ash
Speckled Alder	Black Ash
Mountain Alder	Common Elder
Beaked Hazelnut	Red-berried Elder
Beech	White-Rod
Red Oak	

THE CONIFERS

These cone-bearing trees, are known throughout the province as evergreens or softwoods. All retain their needles all year except tamarack which sheds them in the fall.



◀ LEAVES OR NEEDLES ARE
IN BUNDLES OF 5



▲
WINGED SEED

CLOSED CONE ▶



EASTERN WHITE PINE

(Botanical Name)-*Pinus strobus* (L).

Other Common Names:

White Pine, Cork Pine, Weymouth Pine, Pattern Pine, Sapling Pine, Pumpkin Pine, Yellow Pine and Quebec Pine.

The eastern white pine at one time was one of the predominant trees in P.E.I., but due to wholesale cutting and a series of fires that swept the province only scattered patches now remain. These patches are mainly confined to the south-eastern portion of P.E.I.

Under favorable conditions the tree reaches a height of 100 feet and 2 to 3 feet in diameter. The branches usually grow out at right angles to the trunk in more or less regular whorls of 5. This is not so apparent in old trees or trees growing in crowded stands. In young trees the crown is more or less cone-shaped becoming flat-topped when old.

It will grow on a great number of sites but the best growth is obtained on a moist sandy soil. Here on P.E.I. it grows in pure stands also mixed with spruce, balsam fir and white birch. It reaches its greatest size on rich loams with eastern hemlock, yellow birch and sugar maple.

Its wood is very valuable for pattern stock or similar uses where soft easily worked and even-textured material is required.

DESCRIPTION

LEAVES: Needle-like, in bundles of 5, slender in cross-section, 2 1/2 to 5 1/2 inches long, bluish green.

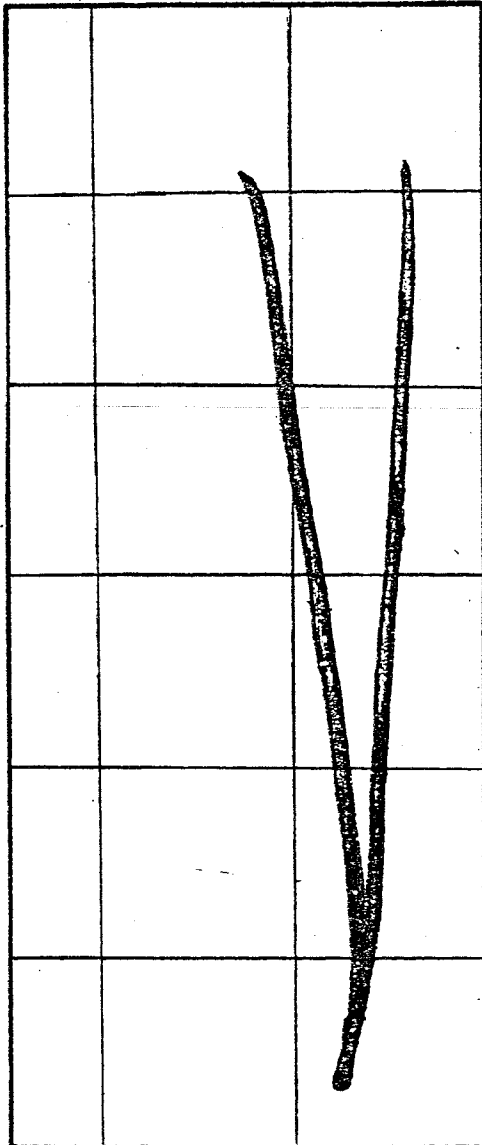
FLOWERS: May-June, unisexual; male yellow, female pink and purple, both on the same tree.

FRUIT: Late summer or early fall of the second year; a cylindrical stalked cone, 3 to 8 inches long, often slightly curved, brown with thin scales; opening at maturity, falling soon afterwards.

TWIGGS: Slender, at first green and downy, later smooth, orange brown, roughened by the leaf scars. Buds sharp-pointed, with long-pointed, reddish-brown scales.

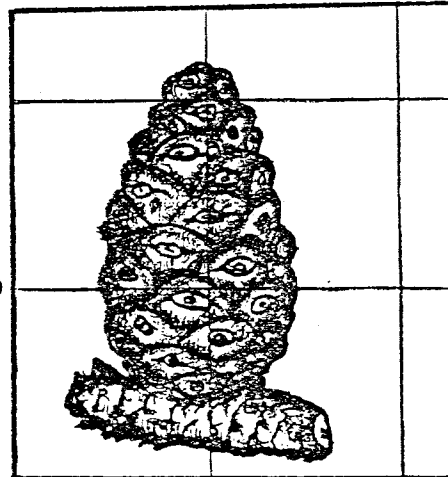
BARK: Smooth on young stems, dark green, often tinged with brown; on old trunks rough, dark-grey, deeply furrowed into broad, scaly ridges.

WOOD: Soft, light, not strong, non-porous; color creamy-white to straw brown, sapwood almost white.

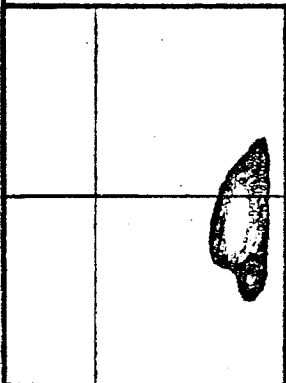


◀ LEAVES OR NEEDLES IN
BUNDLES OF 2

CLOSED CONE



◀ WINGED SEED



RED PINE

(Botanical Name)-*Pinus resinosa* (Ait.)

Other Common Names

Norway Pine, Yellow Pine and Canadian Red Pine.

Red Pine occurs mainly in three separate areas in P.E.I. These areas are around Murray River district, Fort Augustus district and New London district.

Its best development occurs on deep loamy sand or gravel, but will grow on a great variety of sites. Here, it grows in pure stands also mixed with spruce and balsam-fir. It attains a height of 60 feet with a diameter of 1 1/2 feet.

Reliable means of identifying this tree are its distinctive appearance, its long needle-like leaves borne 2 in a bundle and its light reddish, plated bark. The only other native pine of P.E.I. with 2 needles is the Jack Pine, but its needles are much shorter and twisted.

The wood is darker than that of White Pine. It is stronger and heavier than White Pine and is therefore more valuable as structural timbers. Cresote readily penetrates the thick sapwood and for this reason, it is used for poles and piling. It is very popular as an ornamental tree.

DESCRIPTION

LEAVES: Needle-like in bundles of 2, flat on one side and rounded on the other, flexible, 4 1/2 to 6 1/2 inches long, shiny, dark green.

FLOWER: May-June, unisexual; male dark purple, female scarlet, both on same tree.

FRUIT: Borne in Autumn of the second year; an ovoid cone, 1 1/3 to 1 1/2 inches long, the scales thickened at the tips and without prickles, opening at maturity; persisting on the tree until the following spring.

TWIGS: Stout, rough, orange, to reddish-brown. Buds 1/2 to 3/4 of an inch long, sharp-pointed, resinous, with loosely overlapping, chestnut-brown somewhat hairy scales.

BARK: Reddish and scaly on young stems, reddish-brown, and divided by shallow furrows into broad, flat, scaly plates on old stems.

WOOD: Relatively hard, straight grained, light, non-porous; slightly reddish with yellowish sapwood.



◀ LEAVES OR NEEDLES OF
JACK PINE IN BUNDLES OF 2



CLOSED CONE ▶



▲
SEED

JACK PINE

(Botanical Name)-Pinus Banksiana (Lamb.)

Other Common Names:

Banksian Pine, Princess Pine, Grey Pine, Scrub Pine, Cypress, Juniper.

Jack Pine is confined to small scattered patches in the Province, especially around East Bideford.

Being out of its range, it is stunted and inclined to be quite branchy with a crooked trunk. It grows up to 40 feet in height and around 8 inches in diameter with a narrow, open crown of many short, twisted branches.

It does not grow in pure stands in this province but is mixed with black spruce.

The bark of the Jack Pine is, as a rule, thick, light brown in color, and broken into large scales. The foliage is light green and the short needles are twisted. Most important, the scales of the mature Jack Pine cones are usually unarmed.

The species is of no commercial importance in this province but the wood takes creosote well and so could be used for railway ties and poles.

DESCRIPTION

LEAVES: Needle-like, in bundles of 2, usually much-twisted and spreading apart, stiff, 3/4 to 2 inches long, light yellowish green.

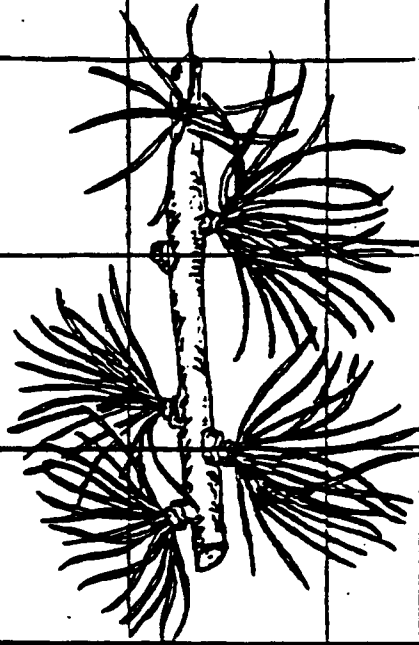
FLOWERS: May-June; unisexual; the male yellow, the female dark purple both on the same tree.

FRUIT: September, of the second year; a yellowish-brown cone, 1 to 2 inches long usually borne in pairs, usually curved and pointing towards the tips of the branches, the scales thickened, usually unarmed; often remaining closed on the tree for many years.

TWIGS: Slender, tough, smooth yellowish-green; buds pale reddish-brown, rounded, about 1/4 of an inch long.

BARK: Thin, reddish-brown, to dark grey on young stems; becoming scaly and irregularly furrowed on old trunks.

WOOD: Medium hard and heavy, not strong, variable texture, non-porous; brownish-yellow with creamy-white sapwood.



TAMARACK NEEDLES
OR LEAVES



WINGED SEED
ENLARGED 3 TIMES

MATURE CONE



TAMARACK

(Botanical Name)-*Larix laricina* (DuRoy) K. Koch.

Other Common Names:

Larch, American Larch, Hackmatack, Juniper, Black Larch, Alaskan Larch.

Juniper, as the majority of Islanders call it, occurs throughout the province. No large extensive pure stands occur but is chiefly confined to boggy areas growing with balsam fir and black spruce. In better drained areas it is found with black, red and white spruce, trembling aspen and white birch.

Tamarack seldom reaches a height of over 60 feet on P.E.I. with a diameter of over 18 inches.

It is our only conifer that sheds its needles in the autumn.

The trunk is cylindrical and nearly straight with very little taper for its length. With slight crowding, it clears itself of branches quickly. On young trees or those growing in dense stands the crown is narrowly pyramidal in outline, but as the tree becomes older the crown opens up and becomes irregular.

Tamarack is the heaviest and strongest of our softwoods. Its resistance to decay makes it very suitable for posts, railway ties and telephone poles.

DESCRIPTION

LEAVES: Needle-like, 3/4 to 1 1/4 inches long, light green turning yellow in the autumn, borne singly on new shoots, arranged in brush-like clusters of 12 to 20 on older twigs.

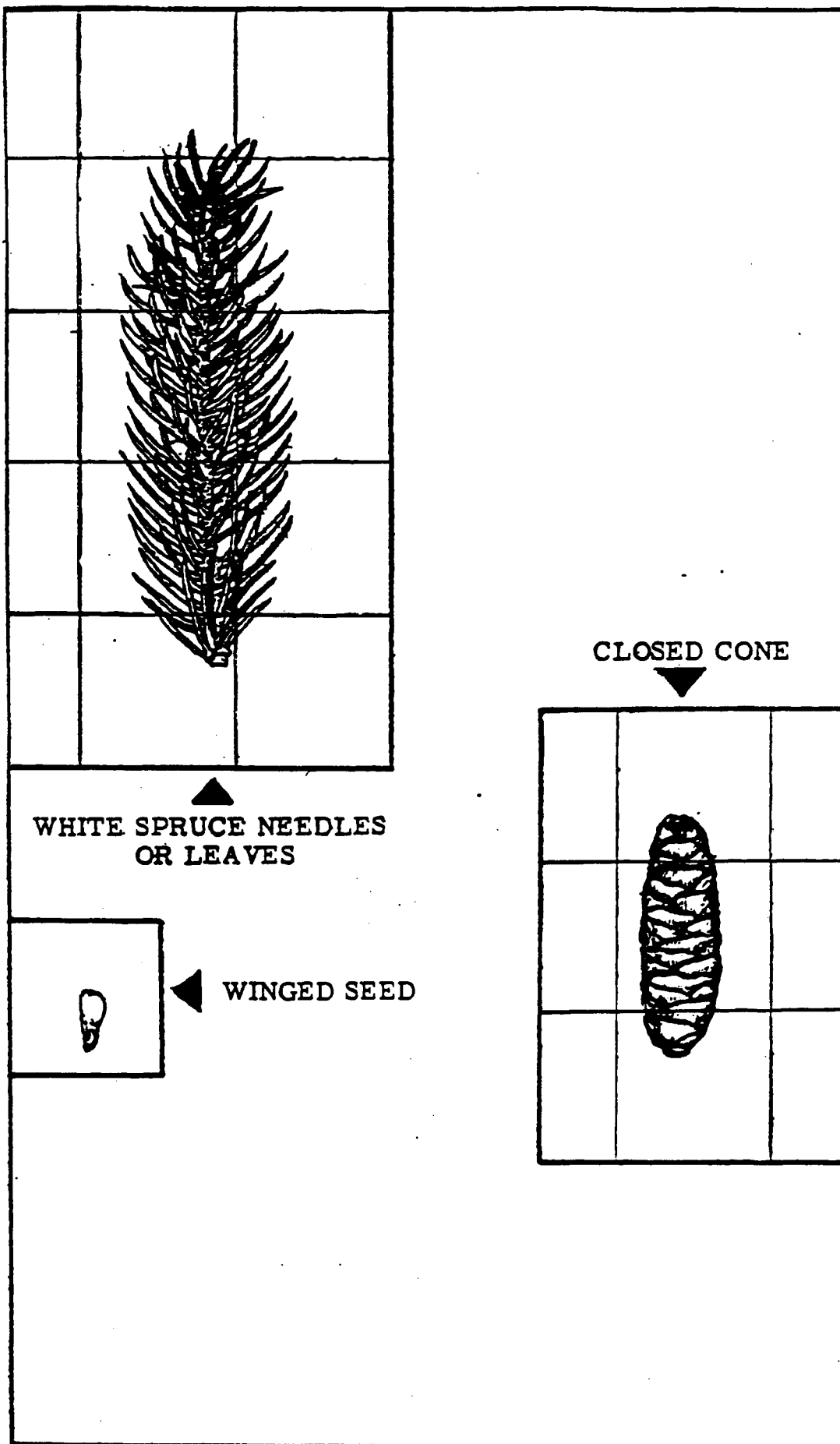
FLOWERS: May-June, with the leaves; unisexual. Male yellow female reddish, both on same twig.

FRUIT: Autumn; an erect short stalked chestnut-brown cone about 1/2 inch long, with about 20 thin scales with concealed bracts; opening during the Autumn and winter, falling the second season.

TWIGS: Slender, pliable, orange-brown developing numerous spur shoots after the first season. The buds, small, rounded, dull dark red, smooth and shiny.

BARK: Thin, at first smooth bluish-grey; later roughened by small, flaky, reddish-brown scales.

WOOD: Moderately heavy and hard, more or less oily, frequently spiral grained, non-porous; yellowish-brown with thin white sapwood.



WHITE SPRUCE

(Botanical Name)-*Picea glauca* (Moench) Voss

Other Common Names:

Single Spruce, Skunk Spruce, Northern Spruce, Pine, Cat Spruce, Yellow Spruce.

White spruce is found throughout P.E.I. in pure stands or in mixtures with red spruce, balsam fir, white birch and the aspens. White spruce is the main species regenerated on old, abandoned farms, where it forms dense stands.

It attains a height of 70 feet with a diameter of 20 inches. The trunk is often very branchy and the crown is deep except in very dense stands. The crown is also very symmetrical and narrow and at a distance has a spire-like appearance.

It grows best on well-drained, moist, gravelly soil along streams and around the borders of swamps.

White spruce is used for lumber and pulpwood. The wood is noted for its resilience. Because it has good resonant qualities it is used as sounding boards in musical instruments.

DESCRIPTION

LEAVES: Needle-like, 4 sided in cross section, stiff, sharp-pointed, usually twisted and crowded towards the upper side of the twig 1/3 to 3/4 of an inch long, bright green, pungent odor when bruised.

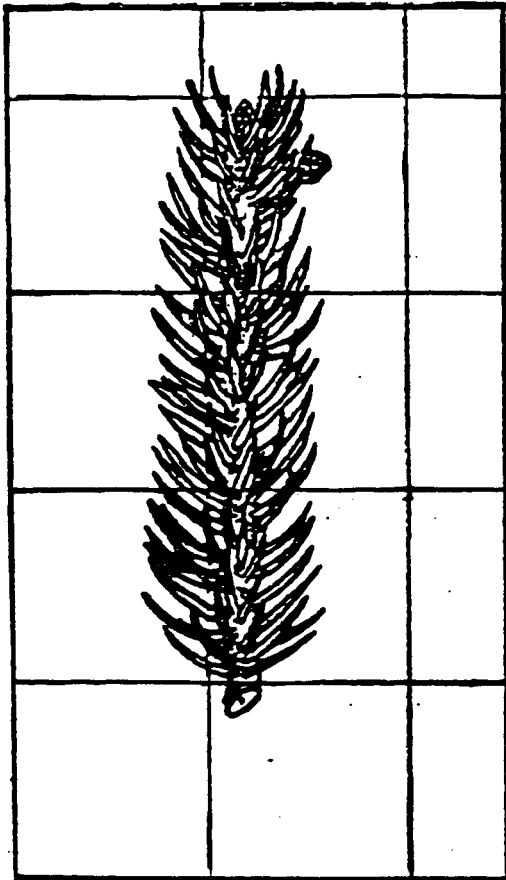
FLOWERS: May-June unisexual, male pale red, soon appearing yellow, female with red or yellow-green scales, both on same tree.

FRUIT: Autumn; a cylindrical pale green pendent cone, turning brown at maturity 1 1/2 to 2 inch long, scales thin. Flexible, straight or slightly rounded and smooth on the margins; opening at maturity falling before new cones are formed.

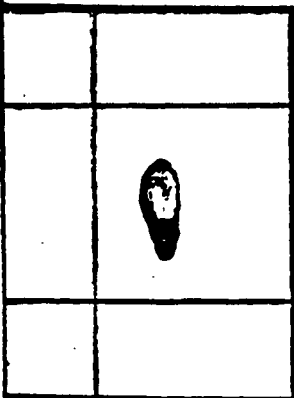
TWIGS: Slender, smooth or only sparsely hairy, orange-brown to grey; buds blunt 1/8 to 1/4 of an inch long with overlapping chestnut-brown scales.

BARK: Ash-brown to silvery, thin, the outer layers separating into thin closely attached scales, inner bark streaked with reddish brown layers.

WOOD: Straight-grained, soft, light non-porous; nearly white to pale yellowish brown.

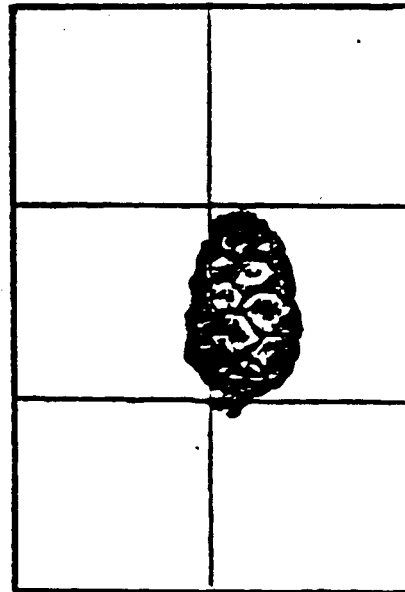


▲
BLACK SPRUCE NEEDLES
OR LEAVES



▲
WINGED SEED

CLOSED CONE
▼



BLACK SPRUCE

(Botanical Name)-*Picea mariana* (Mill.) B.S.P.

Other Common Names:

Red Spruce, Double Spruce, Water Spruce, Swamp Spruce.

Black spruce grows throughout Prince Edward Island and is confined mainly to low damp places. In sphagnum bogs it usually is dwarfed to a mere shrub.

It is a small tree from 30 to 50 feet in height and from 6 to 9 inches in diameter, although under favourable conditions it will grow much larger. The trunk is straight with little taper. On old trees the crowns are open and irregular with slender drooping branches which turn up at the ends, while on young trees, the crowns are narrow and symmetrical with short slender almost horizontal branches. The bluish-green appearance of this spruce makes it distinguishable from the other spruces.

Black spruce is very valuable for pulpwood on account of its density and long fibres. It is also used for mine timbers and similar purposes.

DESCRIPTION

LEAVES: Needle-like, 4-sided in cross-section, sharp-pointed, sometimes spreading away from the lower side of the twig, 1/2 to 3/4 of an inch long, blue-green.

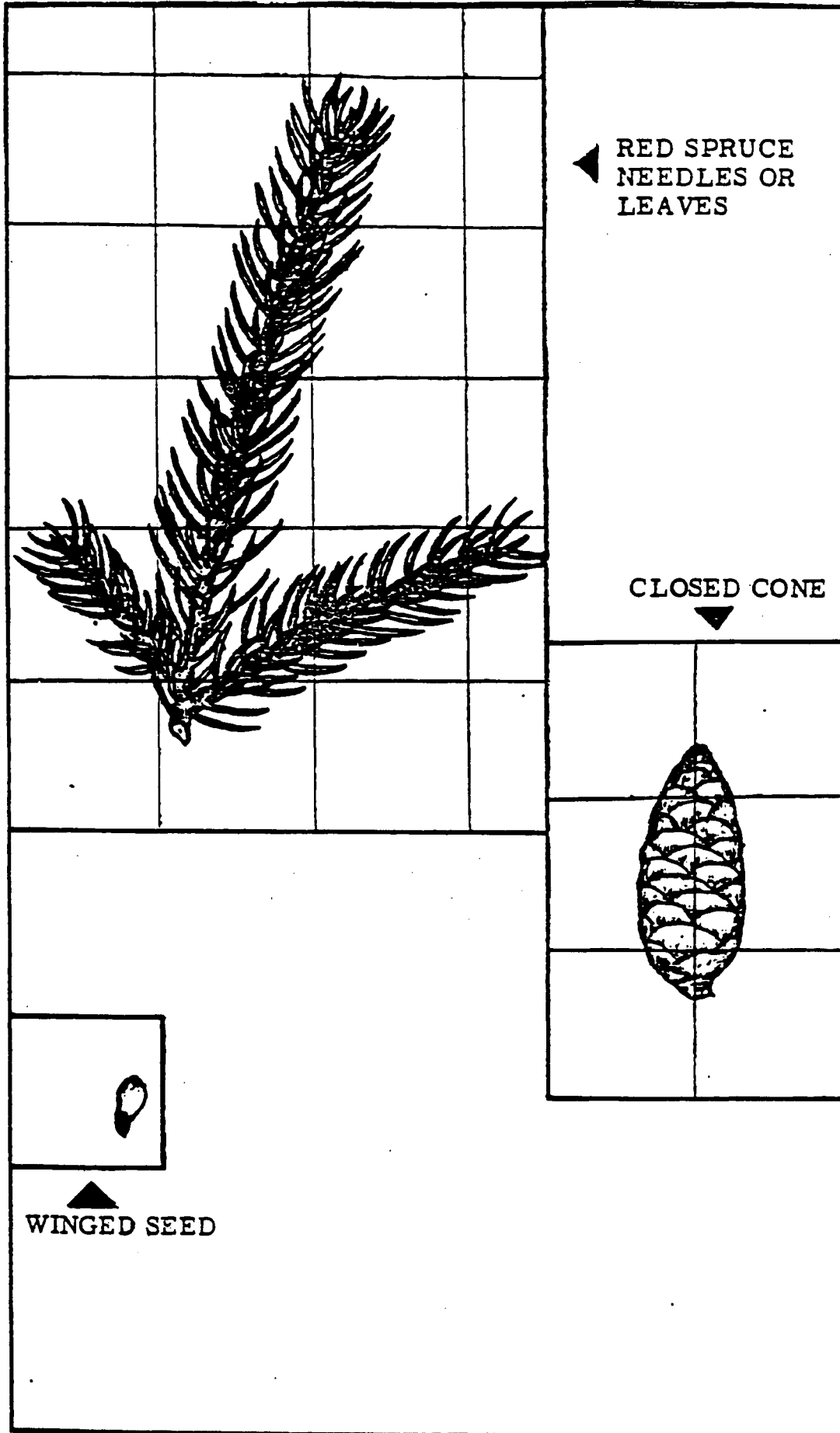
FLOWER: May-June, unisexual, male dark red, female purple both on same tree.

FRUIT: August; an ovoid, purplish-green cone 1/2 to 1 1/2 inches long, brown and spherical when open, the scales stiff, rounded, with irregular toothed markings; opening at maturity, but often remaining on the tree for many years.

TWIGS: Moderately slender, hairy, reddish-brown; buds sharp-pointed, about 1/8 of an inch long light reddish-brown, completely covered by their long, awl-like basal scales.

BARK: Thin, scaly, greyish to reddish-brown; inner bark usually olive-green

WOOD: Moderately light and soft, straight-grained, non-porous; yellowish-white with paler sapwood.



RED SPRUCE

(Botanical Name)-*Picea rubens* (Sarg.)

Other Common Names:

Yellow Spruce, Spruce.

Red spruce is found in scattered patches throughout this province.

Here it is a medium sized tree, reaching a height of 70 feet, and up to 18 inches in diameter. The trunk is straight with little taper. The crown is conical and narrow. The middle and upper branches grow out at right angles to the trunk and then curve up at the ends. The lower branches usually droop.

It is grown on many types of soils but reaches its largest size on well-drained loams in moist valleys together with balsam fir, white spruce, yellow birch, sugar maple and hemlock. Although small scattered pure stands of Red spruce do occur here, it generally is mixed with other species.

The red spruce is easily distinguished from white spruce by its orange-brown hairy twigs and ovoid cones with slightly tooth scales and from black spruce by its yellow-green foliage and the shape of the cones.

The wood is extensively used for general construction, pulpwood, boxes and crates. It is similar to white and black spruce and is usually marketed with them under the common name "spruce".

DESCRIPTION

LEAVES: Needle-like, 4-sided in cross-section, stiff, sharp-pointed, curved towards the upper side of the twig, 1/4 to 5/8 of an inch long, bright yellow-green.

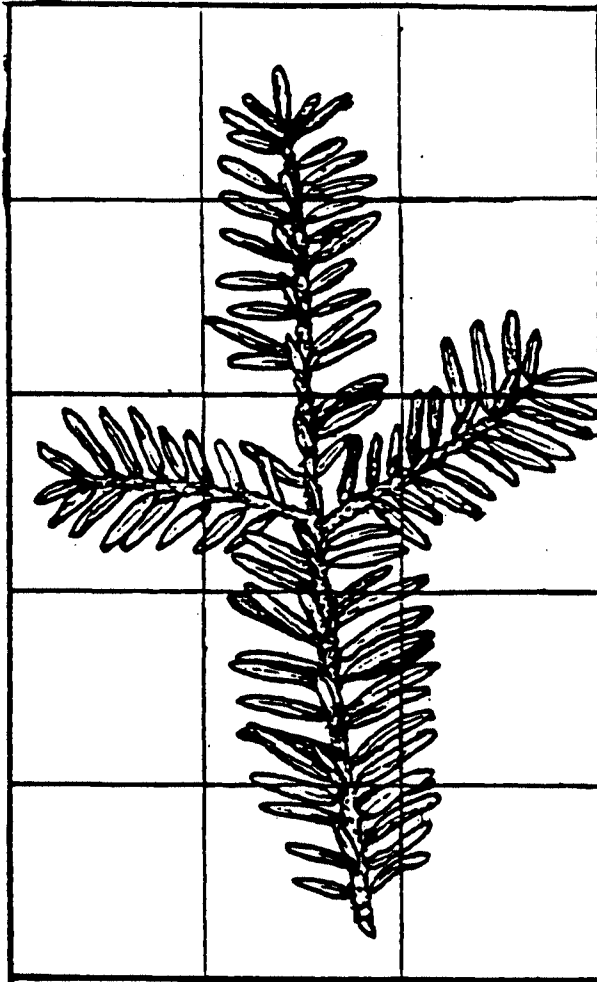
FLOWERS: May; unisexual; male bright red, female purple, on the same tree.

FRUIT: September, an ovoid, green to purplish-green cone, 1 1/4 to 2 inches long, the scales stiff, rounded, and entire or slightly toothed on the margins; turning reddish-brown and opening at maturity, falling during the winter

TWIGS: Moderately stout, more or less hairy, orange brown, completely covered by their sharp-pointed basal scales.

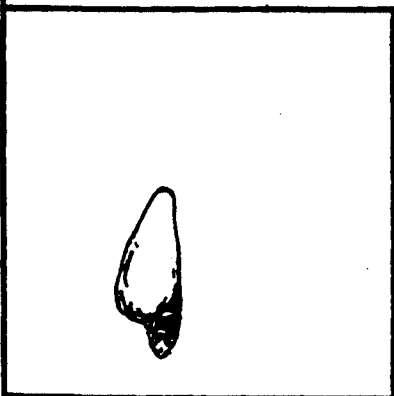
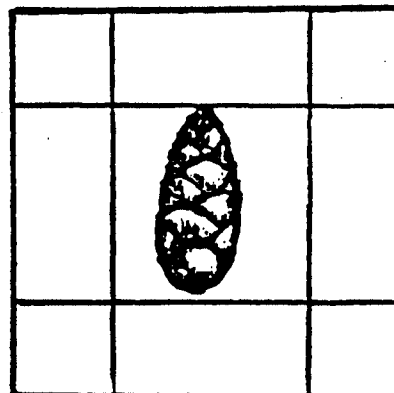
BARK: Thin, the outer layers separating into small, thin closely attached, reddish brown scales; inner bark buff-colored.

WOOD: Moderately soft, strong and light, straight grained, non porous; nearly white to light yellowish-brown.



◀ HEMLOCK NEEDLES
OR LEAVES

MATURE CLOSED CONE.



▲
WINGED SEED (ENLARGED)

EASTERN HEMLOCK

(Botanical Name)-*Tsuga canadensis* (L) (Carr.)

Other Common Names:

Hemlock, Canadian Hemlock, Hemlock Spruce, White Hemlock.

Hemlock, like white pine, at one time was one of the principal species of our native trees but due to fires and cutting, this tree now exists in small isolated areas principally in gullies formed by brooks or rivers.

It is one of the largest trees reaching a height of 70 feet or more and a diameter of up to 2 feet. Its best growth is attained mixed with sugar maple and yellow birch, but occurs in pure stands. Around here it is generally mixed with white pine, red and white spruce, balsam fir and various hardwoods. It will grow in the shade of other trees.

A very reliable distinguishing feature of this tree is its leaves. Always appearing in two ranks, each is attached by a tiny thread-like stalk to the side of the twig. No other eastern conifer has this stalked leaf.

The wood is harder and more coarse-textured than most softwoods. It has a great tendency to split between the annual rings. It is used mainly for general construction and railway ties.

DESCRIPTION

LEAVES: Blunt, narrowly elongated, flattened in cross-section, stalked, 2 ranked, $1/3$ to $2/3$ of an inch long; dark green and grooved above, marked with 2 white lines below.

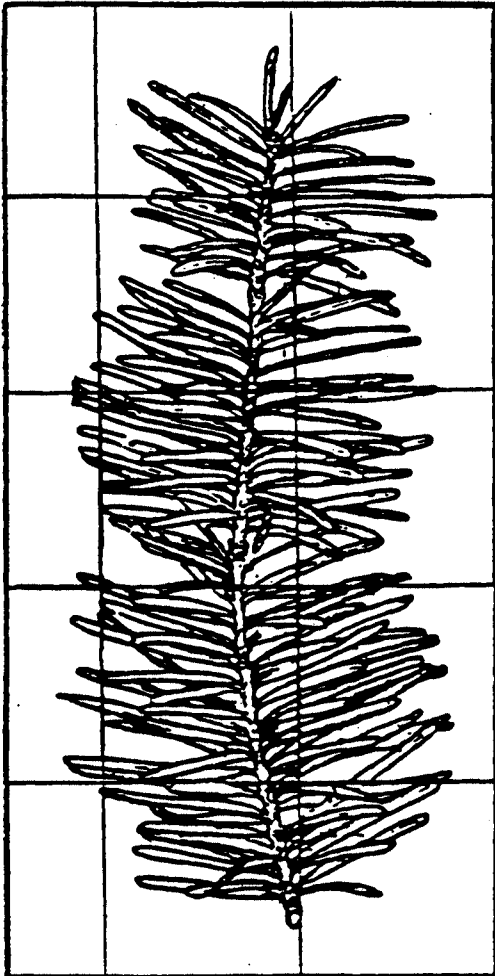
FLOWERS: May; unisexual; male yellow, female pale green, on same tree and usually on same branch.

FRUIT: Autumn; a small short-stalked cone, pale green at first, turning red-brown at maturity, $1/2$ to $3/4$ of an inch long, scales thin, with rounded margins; opening during autumn and early winter, falling soon afterwards.

TWIGS: Slender, hairy and yellow-brown at first; buds $1/16$ of an inch long, blunt, chestnut-brown.

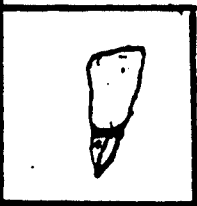
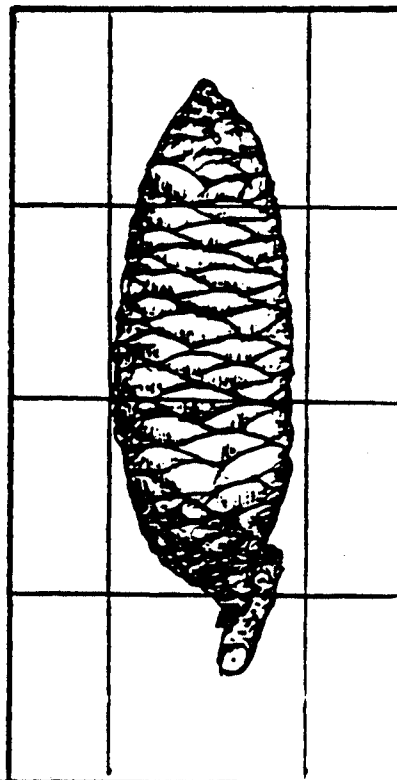
BARK: Reddish or greyish-brown, scaly, becoming deeply furrowed into broad ridges.

WOOD: Light, moderately hard, non-porous, light brown with paler sapwood.



BALSAM FIR
NEEDLES OR LEAVES

MATURE CONE



WINGED SEED

BALSAM FIR

(Botanical Name)-*Abies balsamea* L. (Mill.)

Other Common Names:

Fir, Balsam, White Fir, Var, Silver Pine, White Spruce, Canadian Fir.

Next to the spruces, the balsam fir is the most common of our softwoods, however, the balsam woolly aphid is rapidly killing off large areas.

The tree is usually from 40 to 60 feet high and from 8 inches to 16 inches in diameter. The crown is slender and spire shaped.

The branches, extending down to the ground in young trees, come out from the stem in regular whorls. The bark on all but the old trees is very thin, smooth, and conspicuously marked with raised blisters containing balsam.

The tree is found in pure stands also mixed with white, red and black spruce, tamarack, aspens and white birch. It is found on a variety of sites but does best on a moist, well-drained loam.

The wood, although inferior in strength and quality to the spruce, is used extensively for pulp and lumber.

DESCRIPTION

LEAVES: Needle-like, flattened in cross-section, rounded or notched at the tip, usually appearing two-ranked, $3/4$ to $1\ 1/4$ inches long, dark shiny green above, whitish below.

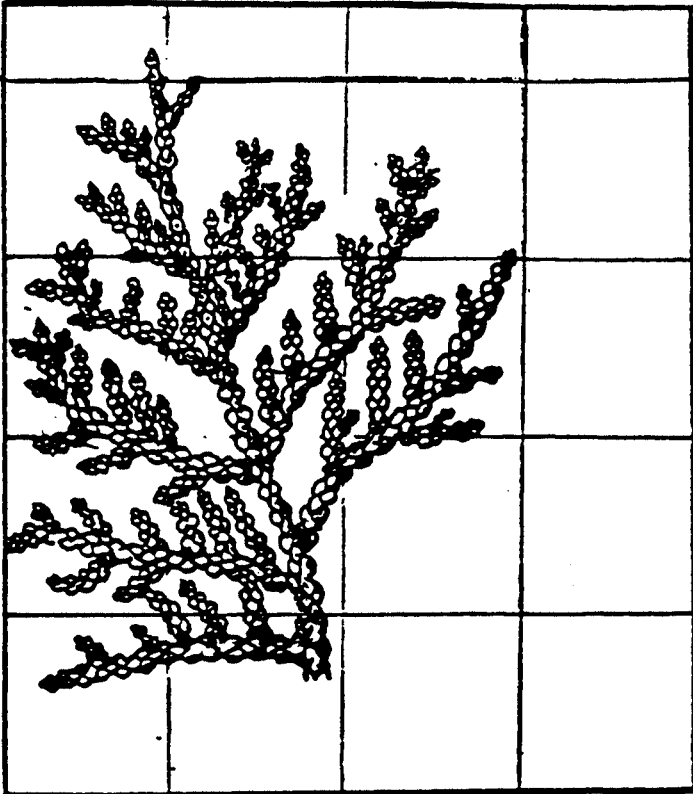
FLOWERS: Male, unisexual; male yellowish to red, female purple, both on same tree.

FRUIT: October; an erect, oblong, dark purple cone 2 - 4 inches long, scales fan-shaped, slightly longer than broad, with short-pointed, bracts disappearing at maturity; seeds purple.

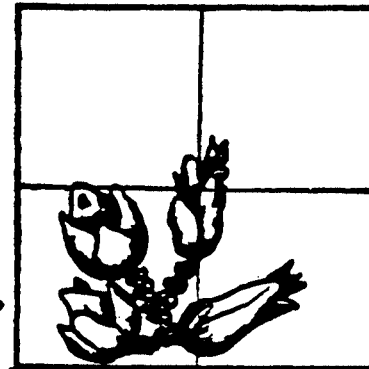
TWIGS: Slender, smooth, more or less hairy, yellow-green. Rounded buds, $1/8$ to $1/4$ of an inch long, orange-green.

BARK: Smooth, pale grey on young stems with prominent resin blisters; becoming roughened somewhat scaly, red-brown; on very old trunks broken into small irregular plates.

WOOD: Light, soft, not strong, somewhat brittle, non-porous; pale yellow to light reddish-brown.



▲
CEDAR LEAVES



OPENED CONES ►



▲
SEED

EASTERN WHITE CEDAR

(Botanical Name)-*Thuja occidentalis* L.

Other Common Names:

Cedar, White Arbor-vitae, Northern White Cedar, Eastern Cedar, American Arbor-vitae.

White Cedar is found only in scattered patches west of Summerside. It is a small tree reaching a height of 40 feet with a diameter up to 1 foot. The trunk tapers greatly and is often twisted. Its crown is conical, dense, long and narrow. Growing in the open, the tree often has a trim artificial appearance, almost as if it had been pruned.

Eastern white cedar commonly occurs in swamps or similar wet sites but will grow on thin, often dry limestone ridges. It grows in pure stands or in mixtures of spruce, balsam fir, larch, black ash, speckled alder and white elm.

Its wood is the lightest and most resistant to decay of all our Canadian woods. In P.E.I. it is used mainly as posts but other uses are made of it for shingles, poles and boat building.

DESCRIPTION

LEAVES: Scale-like, pointed, 1/8 to 1/4 of an inch long, dark yellow-green, overlapping in pairs pressed closely to the twig, each pair at right angles to the pair below.

FLOWERS: April-May; unisexual, tiny cone-like bodies, male yellowish, female pinkish at pollination; both sexes terminal on different twigs of the same tree.

FRUIT: Late summer; an oblong erect cone, 1/3 to 3/4 of an inch long, composed of 4 to 6 pairs of thin brown scales, containing the small winged seeds; opening at maturity, but persisting on the tree over winter.

TWIGS: Slender, flattened, arranged in flat, fan-shaped sprays. Buds minute, without scales, protected by the leaves.

BARK: Thin reddish-brown, shreddy, forming a network of narrow ridges and shallow furrows on old trunks.

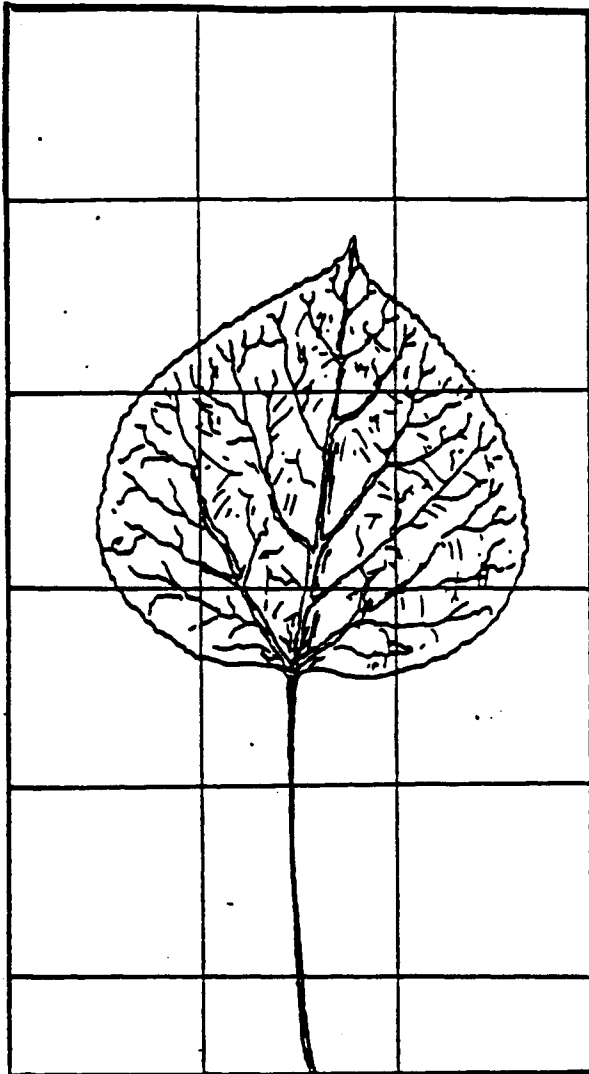
WOOD: Very light, soft, not strong, brittle, non-porous, fragrant; light brown with nearly white sapwood.



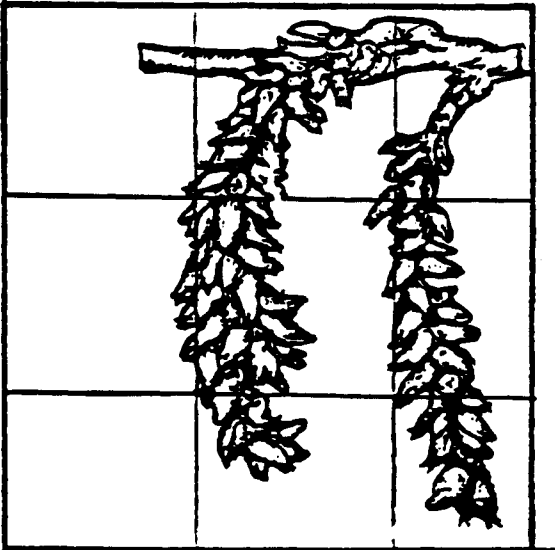
Fuelwood for home heating

BROAD-LEAVED TREES

All broad-leaved trees, commonly called hardwoods or deciduous trees, shed their leaves in the fall.

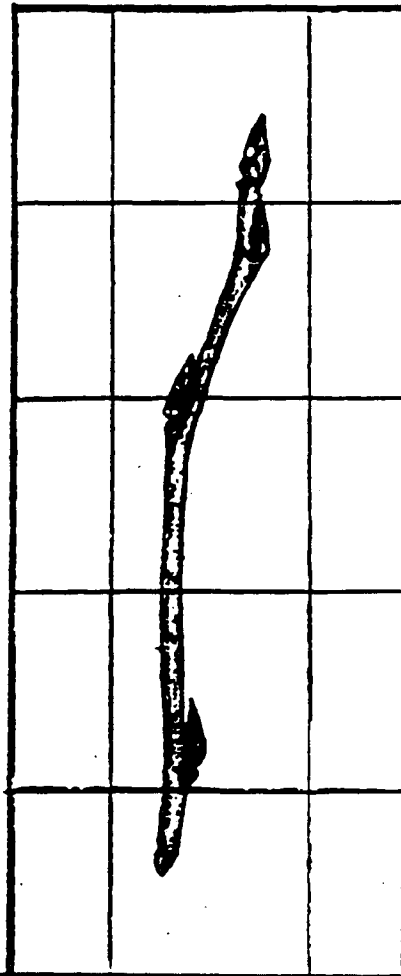


▲
TREMBLING ASPEN LEAF



▲
FRUIT (CAPSULES)

WINTER TWIG



TREMBLING ASPEN

(Botanical Name)-Populus tremuloides (Michx)

Other Common Names:

Poplar, Aspen, Aspen Poplar, White Poplar, Popple and Smooth-barked Poplar.

Trembling aspen is found throughout Prince Edward Island. It is not a large tree, averaging about 40 feet in height and 8 to 10 inches in diameter, when mature.

The trunk is slender, with a gradual taper, and extends almost to the top of the tree. The moderately stout crown is round-topped and open.

Poplar, as it is called here, grows best on a well-drained loam, but is found on a wide variety of soils. It will not grow in the shade of other trees and occurs frequently in pure stands, or mixed with white birch, pin cherry, large-toothed aspen. It reproduces very quickly and easily by means of root suckers.

The wood is used for veneer, matches and boxes. It is also used in the manufacture of pulp.

DESCRIPTION

LEAVES: Alternate, simple, nearly circular in outline, abruptly pointed, fine toothed with rounded teeth, 1 1/2 to 3 inches long, borne on long, flattened stems; shiny dark-green above, yellowish-green below; quivering in the slightest breeze.

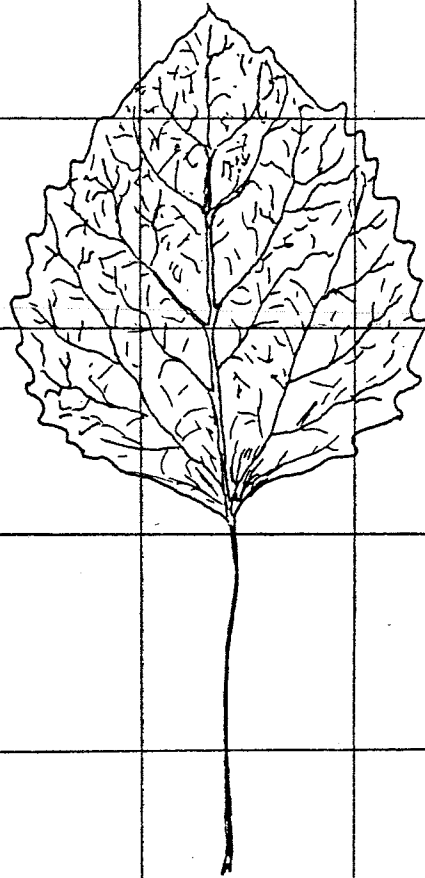
FLOWERS: March-April; from special flower buds before the leaves, unisexual; in drooping, hairy catkins, the male and female on different trees.

FRUIT: May-June, before the leaves are fully grown; a greenish capsule, about 1/4 of an inch long, arranged in catkins and containing the small tufted seeds; opening at maturity.

TWIGGS: Slender, shiny, reddish brown. Terminal buds about 1/4 of an inch long, sharp-pointed, slightly resinous, reddish-brown, similar to the lateral buds; flower buds larger.

BARK: Smooth, greenish-brown at first; becoming rough, furrowed, grey to brown.

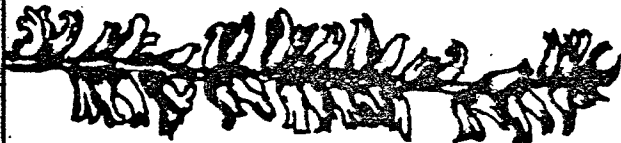
WOOD: Light, soft, not strong, fine-textured, diffuse-porous; greyish-brown to almost white sapwood.



WINTER
TWIG



LARGETOOTH ASPEN LEAF



SEEDS (ENLARGED)



LARGETOOTH ASPEN

(Botanical Name)-*Populus grandidentata* (Michx)

Other Common Names:

Largetooth Poplar, Poplar and Bigtooth Aspen.

Largetooth Aspen occurs in scattered patches throughout Prince Edward Island and is often mistaken for Trembling Aspen.

It is medium-sized tree, 50 to 60 feet in height and a diameter of 12 to 16 inches.

The trunk is tall and straight, and in a crowded stand is frequently clear of limbs for more than two-thirds its length. The narrow, round-topped, open crown is composed of somewhat horizontal-spreading branches.

It grows on the same types of soil as the trembling aspen, but reaches its best development on moist sandy slopes or borders of streams.

It is found in pure stands also in mixtures of white pine, trembling aspen and white birch. It also reproduces easily from root suckers.

The wood, like that of trembling aspen, is used for veneers, matches, boxes and in the manufacture of pulp.

DESCRIPTION

LEAVES: Alternate, simple, nearly circular in outline, short-pointed, very coarse-toothed with large teeth, 2 to 4 inches long, borne on flattened stems, dark green above, pale green below.

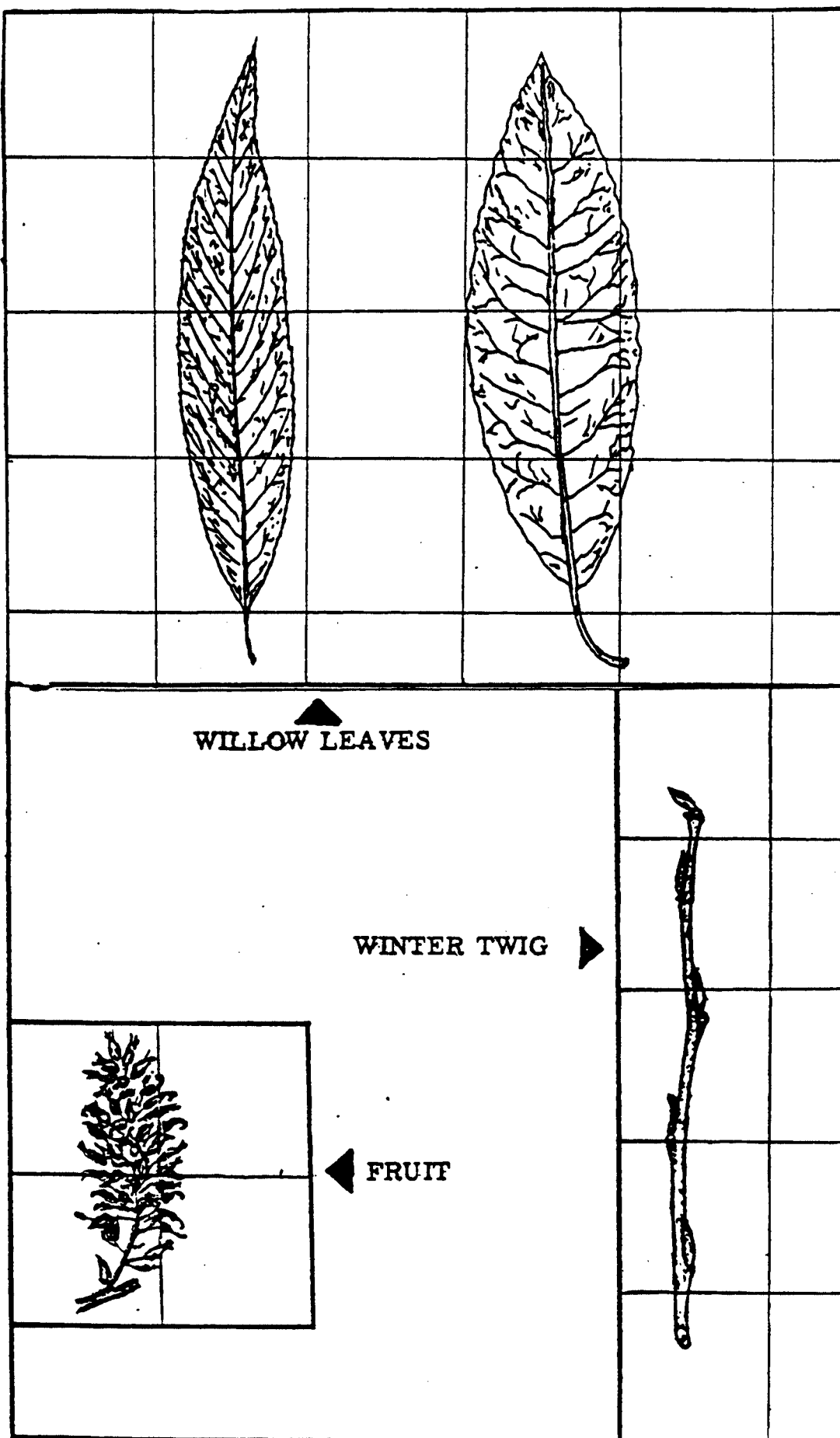
FLOWERS: March-April, before leaves from separate flower-buds; unisexual; in drooping hairy catkins, male and female on different trees.

FRUIT: May-June; as the leaves open; a pale green, downy capsule, 1/8 to 1/4 of an inch long, borne loosely in drooping catkins; opening at maturity.

TWIGGS: Moderately stout, reddish-brown to brownish grey, more or less downy. terminal bud about 1/4 of an inch long, grey-downy, similar to the lateral buds. Flower buds larger.

BARK: Smooth at first, and greenish-grey; becoming brownish or almost black and deep-furrowed at the base of old trunks.

WOOD: Light, soft, not strong, fine-textured, diffuse-porous; light brown with thin almost white sapwood.



THE WILLOWS

(Botanical Name)-Salix (L.)

The Willows comprise a large and distinctive genus of deciduous shrubs and trees, 75 of which are found in North America.

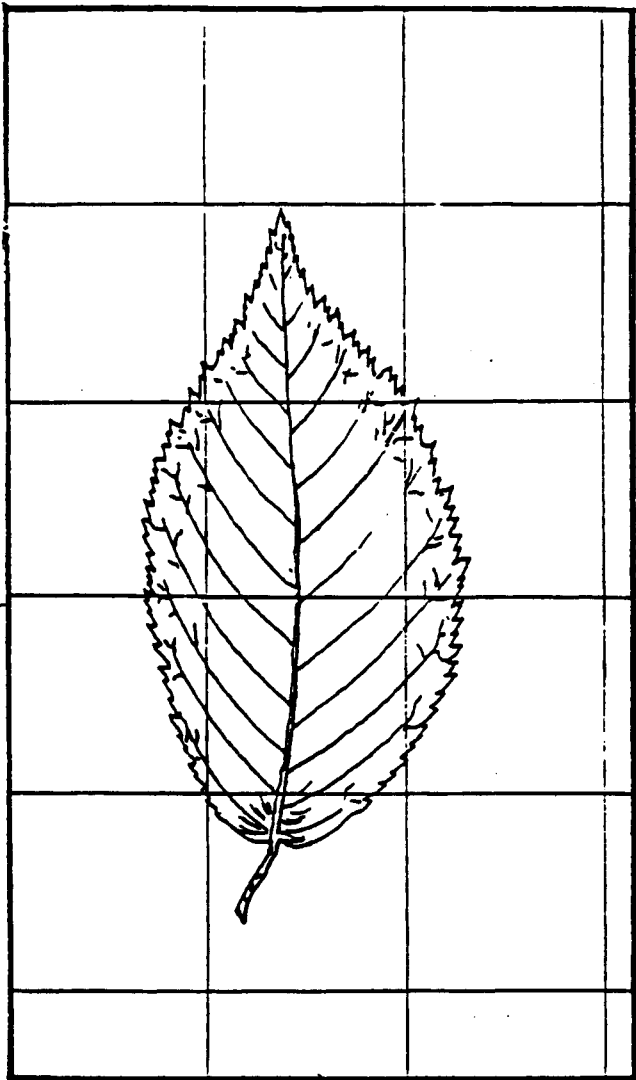
The more common ones in P.E.I. do not reach tree size but are merely shrubs. Some of these with their common and botanical names are listed below:

Shining Willow-	Salix lucida (Muhl.)
Heart-Leaved Willow-	Salix cordata (Michx.)
Bog Willow-	Salix pyrifolia (Anders.)
Pussy Willow-	Salix discolor (Muhl.)
Beaked Willow-	Salix Bebbiana (Sarg.)
Humble Willow-	Salix humilis (March.)

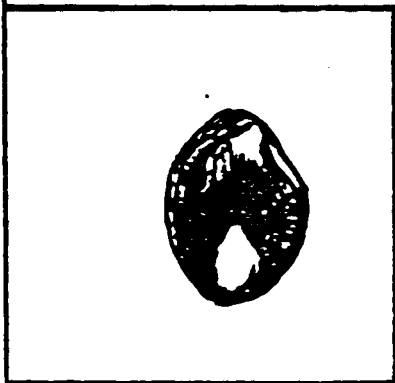
Two distinguishing characteristics of the willows are their bitter bark and their winter buds which have a single cap-like scale. The winter buds, in most species are long, narrow and pointed and have the appearance of being pressed against the side of the twig. The slender, often brittle twigs are usually highly colored.

The leaves are alternate, simple, usually fine toothed, mostly long, narrow and pointed at both ends, usually smooth and dark green above, paler and covered with a fine down or a whitish bloom underneath. The male and female flowers are borne in unisexual catkins on different plants, appearing in the spring before or with the leaves. The fruit is a small capsule about 1/4 of an inch long and matures in early summer about the same time as the leaves reach their full size. The seed, shed at maturity, is very small, light and tufted and can be carried long distances by wind.

The wood in all species is similar. It is light and soft, but possesses considerable toughness and shock-resistance for its weight. The wood is of little economic importance in Canada.

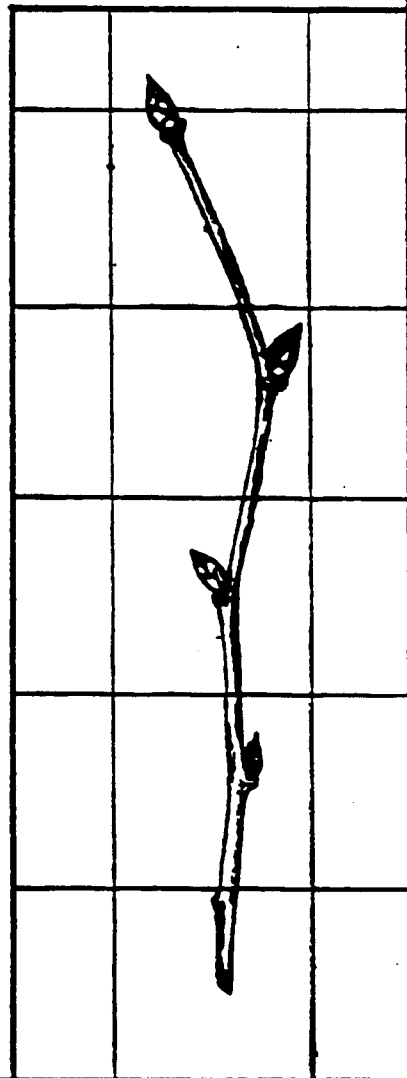


▲
IRONWOOD LEAF



▲
SEED ENCLOSED IN
PAPERY SAC

WINTER TWIG



IRONWOOD

(Botanical Name)-*Ostrya virginiana* (Mill.) K.Koch.

Other Common Names:

Rough-barked Ironwood, Hornbeam, Hop Hornbeam.

Ironwood, or as it is sometimes called, hop hornbeam, is not very common to this province. It has been seen in the western section of the province.

It is a small tree commonly 25 to 35 feet in height and 6 to 10 inches in diameter on average sites. The trunk is slender, nearly always erect, and usually extends to the top of the tree. In the open, the crown is broad and round-topped, while in dense stands it is narrow and cone-shaped.

It prefers rich, moist but well-drained, gravelly or loam slopes and ridges and is seldom, if ever, found in pure stands. It does not like shade and is commonly found with striped and mountain maples, beech, sugar maple, yellow birch, white ash and cedar.

Ironwood produces one of the hardest and toughest native woods and is used for vehicle stock, tool handles and spring-poles. Because of its small size it is not important as a lumber producer.

DESCRIPTION

LEAVES: Alternate, simple, oval in outline, sharp-pointed, fine double-toothed, thin, 2 1/2 to 5 inches long; dark yellow-green above, paler below with tufts of hairs in the angles of the veins.

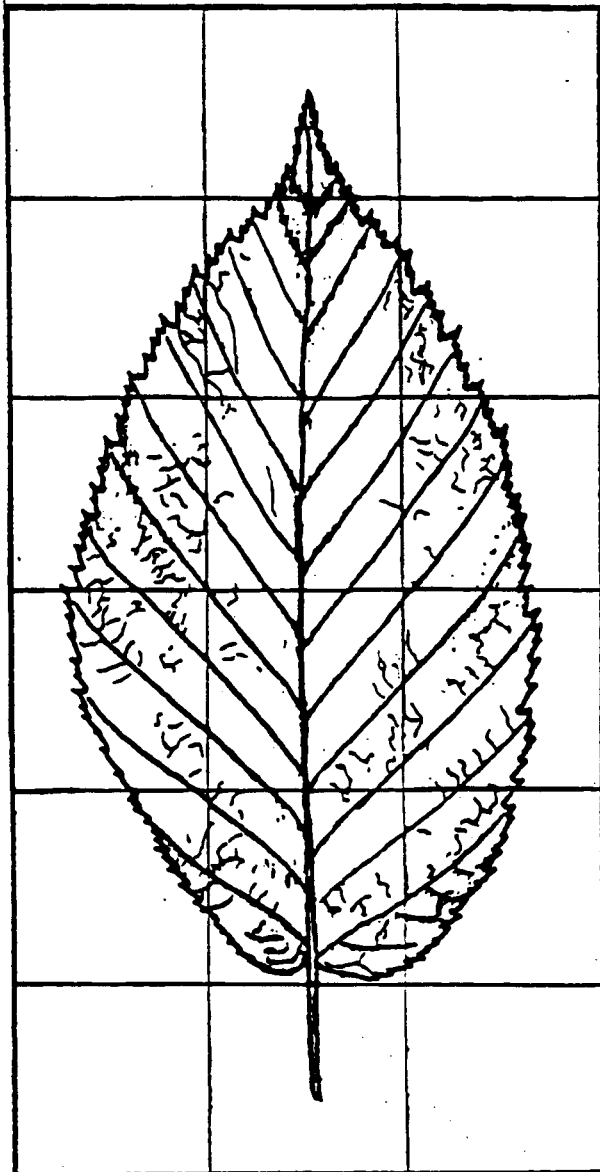
FLOWERS: April-May; unisexual; in greenish catkins, the male formed the preceding autumn, the female appearing with the leaves; both sexes on the same twig.

FRUIT: September; a small greenish nut, enclosed in an oval bristly, papery sac; borne in dense elongated clusters on a slender stem.

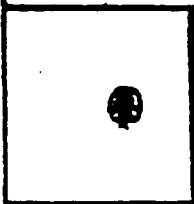
TWIGS: Very slender, tough shiny, dark reddish-brown. No terminal bud; lateral buds sharp-pointed, slightly hairy, chestnut-brown, about 1/4 of an inch long.

BARK: Light brown, soon roughened by narrow, elongated, shreddy scales which loosen at the ends.

WOOD: Very heavy, hard and tough, close-grained, diffuse-porous; light-brown with almost white sapwood.

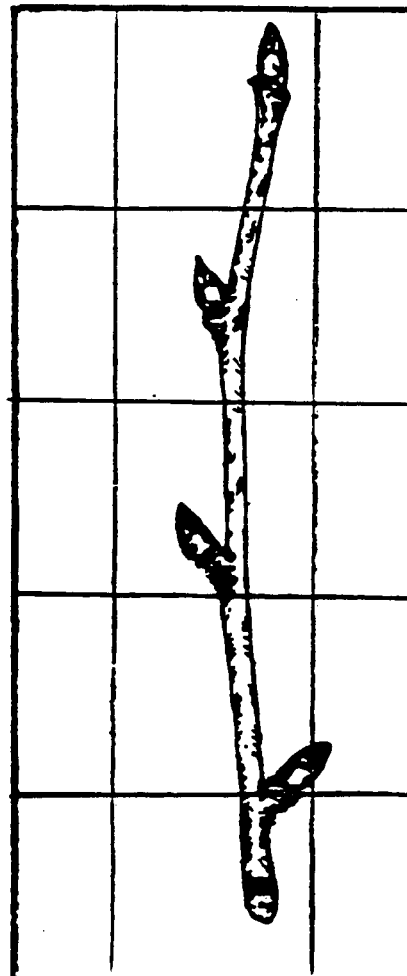


▲
YELLOW BIRCH LEAF



▲ WINGED SEED

WINTER TWIG



YELLOW BIRCH

(Botanical Name)-*Betula alleghaniensis* (Britton)

Other Common Names:

Curly Birch, Black Birch, Hard Birch, Tall Birch, Gold Birch, Red Birch, Silver Birch.

Although yellow birch occurs scattered throughout the province, its main concentration is now confined to south-eastern P.E.I. The birch-bark beetle has taken a heavy toll of this valuable tree, especially the old mature ones.

It averages 60 to 70 feet in height with a diameter up to 2 feet.

The trunk is usually long and straight with little taper. The crown is short and relatively narrow.

It grows on a variety of sites from rich, moist bottom-lands to the drier soils of hilltops and ridges. In this province it seldom occurs in pure stands but is mixed with red and white spruce, hemlock, balsam fir, beech, sugar maple and red maple.

Yellow birch takes its name from its yellowish bark, which is smooth on young trees. As they grow older the bark peels into papery curls. On very old trees it may become almost black and broken into flat plates.

The wood is used for flooring, furniture, plywood, veneer and vehicle stock.

DESCRIPTION

LEAVES: Alternate, simple, oval in outline, sharp-pointed, coarse-double-toothed, 2 to 4 1/2 inches long; dark green above, yellow-green below. Distinguished from the other birches by having more than 8 lateral veins.

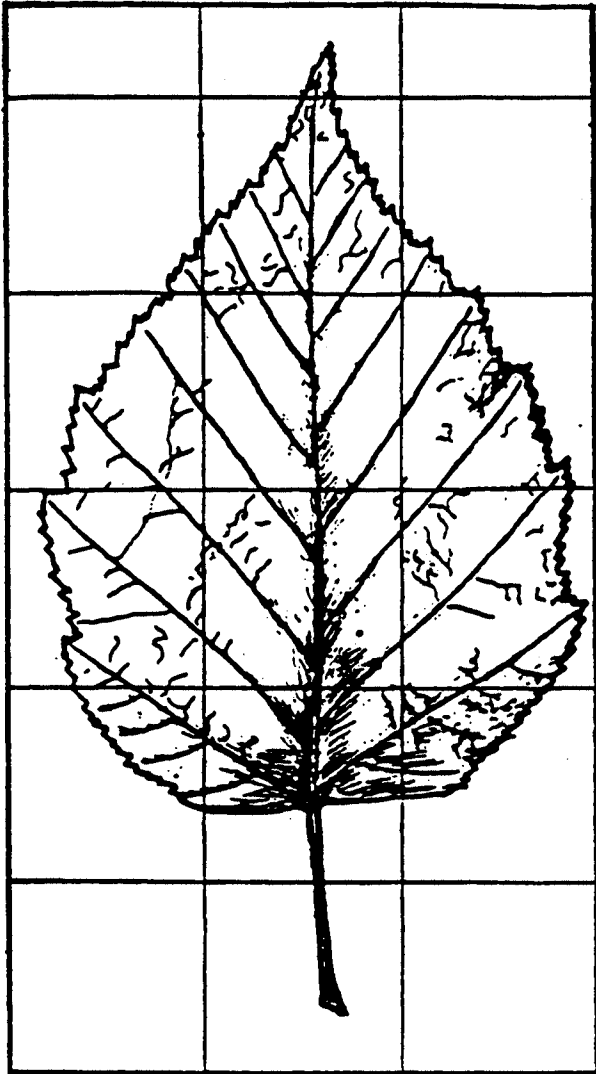
FLOWERS: April-May; unisexual; borne in greenish catkins; male clustered, formed the preceeding autumn, female solitary, appearing before the leaves.

FRUIT: Autumn, a tiny 2-winged nut, about as broad as the wings; borne in a stout, erect cone, 1 to 1 1/2 inches long, sometimes persisting on the tree over winter. Cone scales hairy, with ascending lobes.

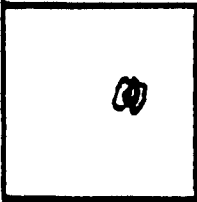
TWIGS: Slender, smooth or hairy. Yellowish-brown to reddish-brown, with a strong wintergreen taste. No terminal bud; lateral buds sharp-pointed, slightly hairy, chestnut brown, about 1/4 of an inch long.

BARK: At first thin, smooth yellowish-brown; soon separating into thin papery curls. On old trunks thick, reddish brown to almost black and broken into large, flat plates.

WOOD: Heavy, hard, moderately strong, fine-grained diffuse-porous; brown to reddish-brown with whitish sapwood.

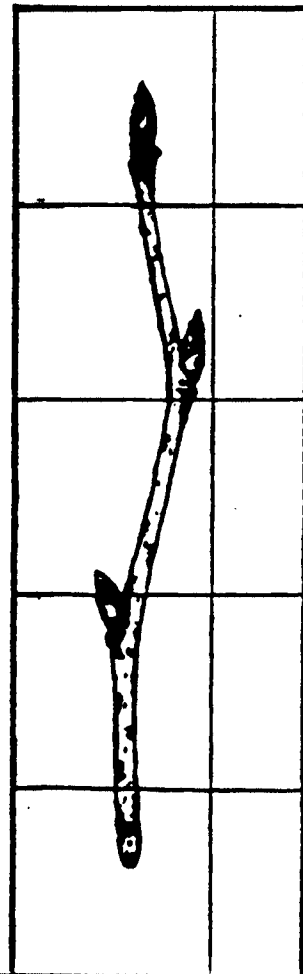


WHITE BIRCH LEAF



WINGED SEED

WINTER TWIG



WHITE BIRCH

(Botanical Name)-*Betula papyrifera* (Marsh.)

Other Common Names:

Birch, Paper Birch, Canoe Birch, Silver Birch.

White Birch, one of our more common hardwoods, is found throughout P.E.I. The birch-dieback has killed off a portion of our old mature trees but the disease seems to be lessening in severity. It is medium sized tree 60 to 70 feet in height with a diameter up to 18 inches.

In the woodlot, the trunk is long and clear, often leaning and crooked. In the open it is short and the crown is large, composed of many stout limbs and ascending branches.

It grows in pure stands, especially after a fire, but more often is mixed with white and red spruce, balsam fir, grey birch, red maple and poplar.

The wood is used mainly for lumber and fuel here, but is excellent for spoolwood, plywood and small turnery.

DESCRIPTION

LEAVES: Alternate, simple, mostly oval in outline, coarse and double-toothed, 1 1/2 to 4 inches long; dark green and smooth above, paler and more or less hairy below.

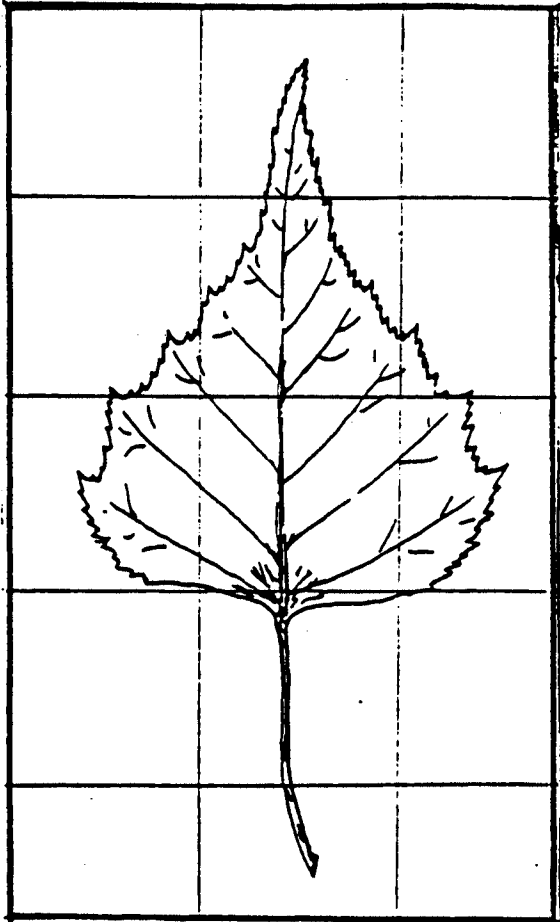
FLOWERS: April-May, in unisexual catkins, the male formed the preceding autumn, the female appearing with the leaves, both on the same tree.

FRUIT: Autumn, a tiny, two-winged nut, narrower than its wings; borne in a drooping cone, the scales with diverging lateral lobes usually shed at maturity.

TWIGS: Moderately stout, hairy at first, becoming smooth, shiny, reddish-brown, speckled with whitish lenticels; no terminal bud; laterals sharp-pointed, about 1/4 of an inch long, chestnut brown, slightly resinous, the scales slightly downy.

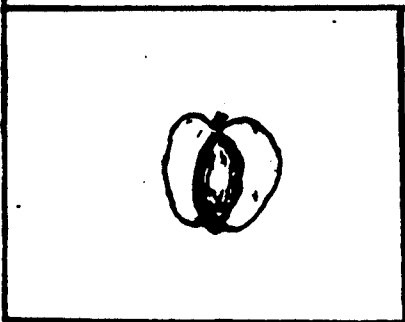
BARK: Thin, smooth, at first dark brown, soon becoming shiny creamy-white to pinkish-white, easily separated into papery layers.

WOOD: Moderately hard, heavy and strong, straight-grained, diffuse-porous; light reddish-brown with nearly white sapwood.

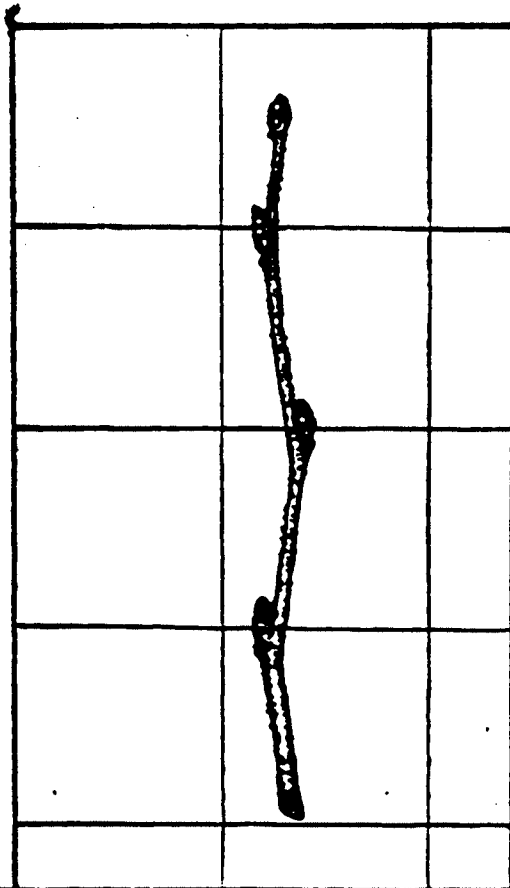


◀ GREY BIRCH LEAF AND
CONE

WINTER TWIG
▼



▲
SEED (ENLARGED)



GREY BIRCH

(Botanical Name)-*Betula populifolia* (Marsh.)

Other Common Names:

Wire Birch, White Birch Water Birch, Swamp Birch, Birch.

The grey birch, common throughout P.E.I., is a small tree, rarely over 35 feet in height and a diameter of 8 inches. The trunk is slender and usually extends undivided to the top of the open, pyramidal crown. The slender branches divide into many fine flexible branchlets that are inclined to droop. A characteristic mark of this birch is the triangular black spot beneath each branch. It is one of the first trees to spring up after a fire, and is found on dry gravelly or sandy soils, however, it sometimes is found on wet soils along the margins of streams and swamps.

Grey birch exists in pure stands but is more commonly mixed with spruce, balsam fir, larch, white birch and poplar.

Its wood is of little commercial importance being used locally for fuelwood and barrel hoops.

DESCRIPTION

LEAVES: Alternate, simple, triangular in outline, coarse and double-toothed, 2 to 3 inches long; dark green and shiny above, pale below.

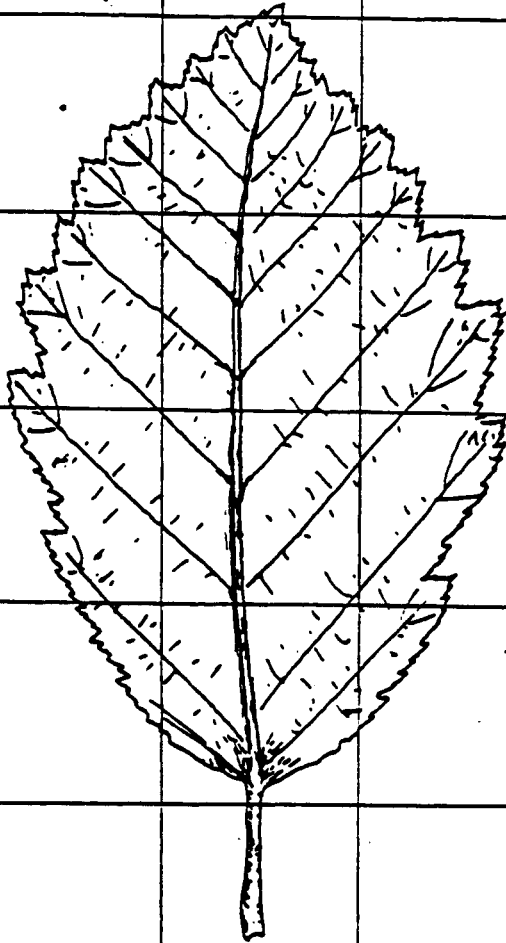
FLOWERS: April-May; unisexual, in separate catkins on the same twig; male usually solitary, formed the preceding autumn, female solitary appearing with the leaves.

FRUIT: Autumn; a tiny two-winged nut, slightly narrower than its wings; borne in a drooping or semi-erect cone, about 3/4 of an inch long, the scales hairy, set nearly at right angles to the cone axis, with broad diverging lateral lobes; shed at maturity.

TWIGS: Very slender, shiny, reddish-brown, densely covered with whitish, wart-like glands. No terminal bud; lateral buds sharp-pointed, somewhat resinous, chestnut-brown, about 1/4 of an inch long.

BARK: At first reddish-brown; becoming dull chalky white, or almost black at the base of old trees; does not peel easily.

WOOD: Light, soft, not strong, fine textured, diffuse-porous; light reddish-brown with paler sapwood.

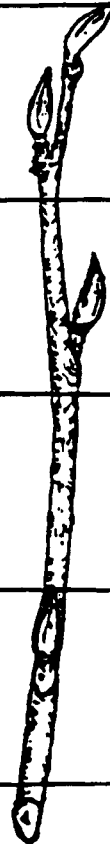


▲
SPECKLED ALDER LEAF



◀ WINGED SEED

WINTER TWIG



SPECKLED ALDER

(Botanical Name)-*Alnus rugosa* (DuRoi) Spreng.

Other Common Names:

Grey Alder, Hoary Alder, Alder.

The speckled alder, common throughout P.E.I., is a low, crooked, often declining shrub from 6 to 15 feet in height and a diameter up to 4 inches. It often grows in clumps of many stems which branch off close to the ground.

It is commonly found in thickets along streams, around lakes, in swamps, and on areas that are subject to spring flooding. Its best development is reached on a wet, well drained, sandy or gravelly soil.

It is readily distinguished from the Mountain or Downey alder by its stalked buds and triple-toothed leaves.

The wood, although sometimes used for fuelwood, has no commercial value. The tree does serve a useful purpose in checking the rush of water during spring floods.

DESCRIPTION

LEAVES: Alternate, simple, broad oval in outline, sharp-pointed usually triple-toothed, 1 1/2 to 4 inches long, dull, dark green, conspicuously-veined above, smooth or hairy, covered with a whitish bloom below.

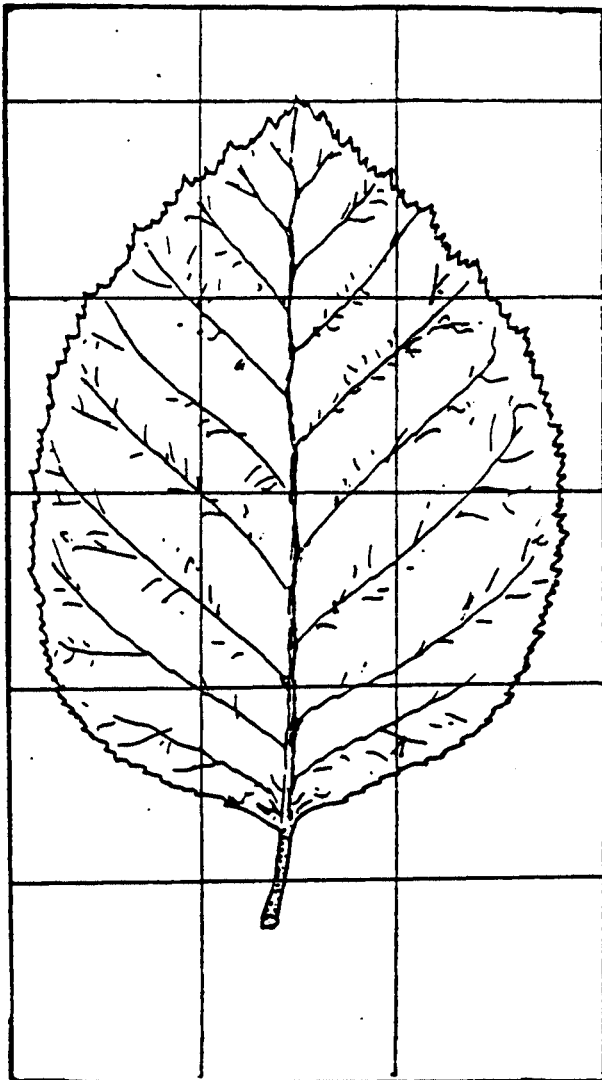
FLOWERS: March-May; unisexual, in clustered, reddish-brown catkins, formed the preceding autumn and opening before the leaves; both sexes on same twig.

FRUIT: Autumn, a tiny, two-winged nut, wider than its very narrow wings; borne in a stout nearly black cone 1/4 to 1/2 inch long; shed at maturity.

TWIGS: Slender, greyish-brown, slightly hairy. Buds reddish-brown, usually downy, distinctly stalked about 1/3 of an inch long. Has a terminal bud.

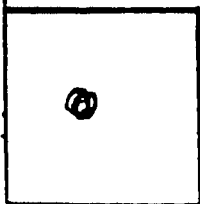
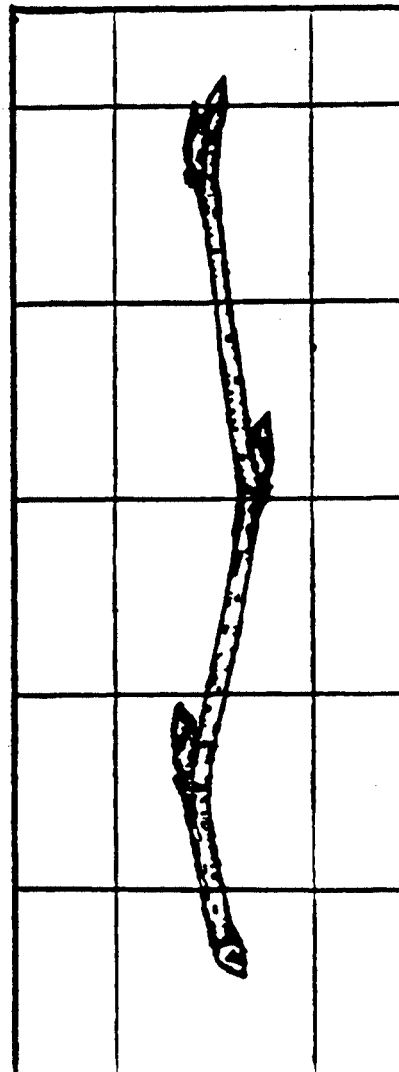
BARK: Smooth, greyish-brown with conspicuous, whitish lenticels.

WOOD: Light, soft, weak, diffuse-porous; pale brown, turning red on exposure to air.



◀ MOUNTAIN ALDER
LEAF

WINTER TWIG
▼



◀ WINGED SEED

MOUNTAIN ALDER

(Botanical Name)-*Alnus crispa* (Ait.)

Other Common Names:

Downy Alder and Alder.

The Mountain Alder is found throughout P.E.I. and is often mistaken for the Speckled Alder. It is a small shrub seldom exceeding a height of 10 feet.

Stems frequently grow in clumps, dividing close to the ground. The ascending branches form a bushy, rounded crown.

The Mountain Alder, unlike its close relative, the Speckled Alder, prefers well-drained locations. It is frequently found on old abandoned farms, along fences and roadsides.

Its unstalked, blackish, winter buds and lighter green, finer-toothed leaves makes it readily recognizable from the speckled alder.

Its wood is sometimes used for fuel, but has no commercial value. The tree serves a useful purpose in checking the rush of water during spring floods.

DESCRIPTION

LEAVES: Alternate, simple, round to round-oval, base ovate to heart-shaped, 1 to 3 inches long, shiny green above, paler below with veins slightly downy, irregularly toothed with fine sharp crowded teeth, margins often puckered.

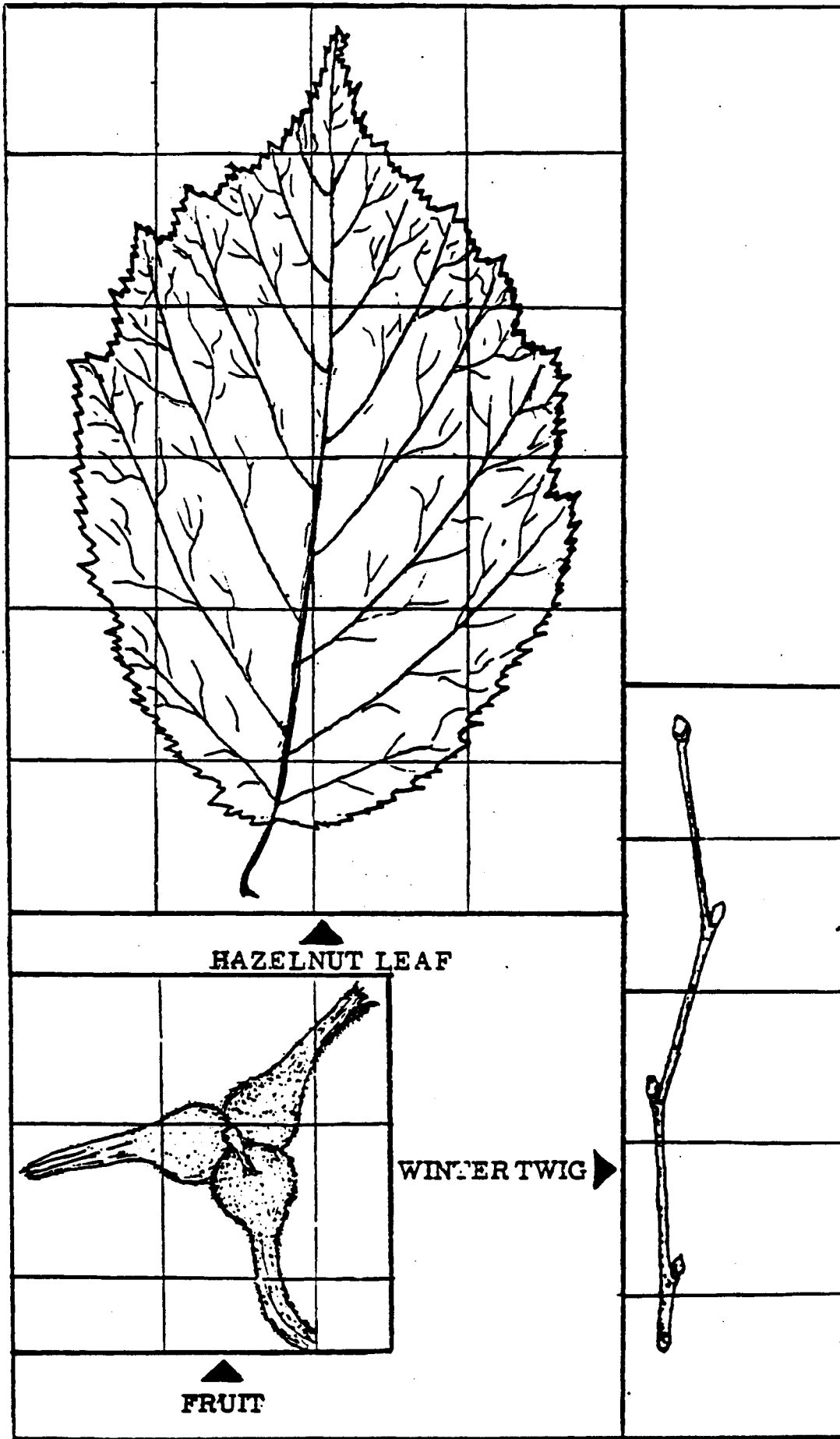
FLOWERS: May-June, unisexual; in clustered reddish-brown to dark brown catkins, formed the preceding autumn and opening with the leaves; both sexes on the same twig.

FRUIT: Autumn; a tiny, conspicuous-winged nut; borne in a stout, nearly black cone 1/4 to 1/2 inch long; shed at maturity.

TWIGS: Zigzag, slender, slightly downy, reddish brown. Terminal bud reddish brown to dark brown, very slightly hairy, unstalked about 1/4 of an inch long; lateral buds similar.

BARK: Smooth, dark to reddish brown with small orange lenticels.

WOOD: Light, soft, weak diffuse-porous; light brown with lighter sapwood.



BEAKED HAZEL-NUT

(Botanical Name)-*Corylus cornuta* (Marsh)

Other Common Names:

Hazel-nut and Hazel.

The Beaked Hazel-nut is found in scattered patches throughout the province. It is a small shrub growing from two to six feet high and seldom exceeding an inch in diameter. The trunk is usually straight and slender often whip-like. The ascending branches form a rounded crown.

It prefers a rich sandy-clay loam but will grow on poorer sites. It is often associated with our sugar maple and yellow birch but also grows with mostly all other hardwoods.

The wood, although moderately hard and flexible is of no commercial importance due to its size. The nuts are edible.

DESCRIPTION

LEAVES: Alternate, simple, oval in outline, heart-shaped or rounded at the base, 2 to 4 inches long, doubly serrate, acute or acuminate at the tip; bright green, hairy or smooth above, paler, sparingly hairy or very downy below.

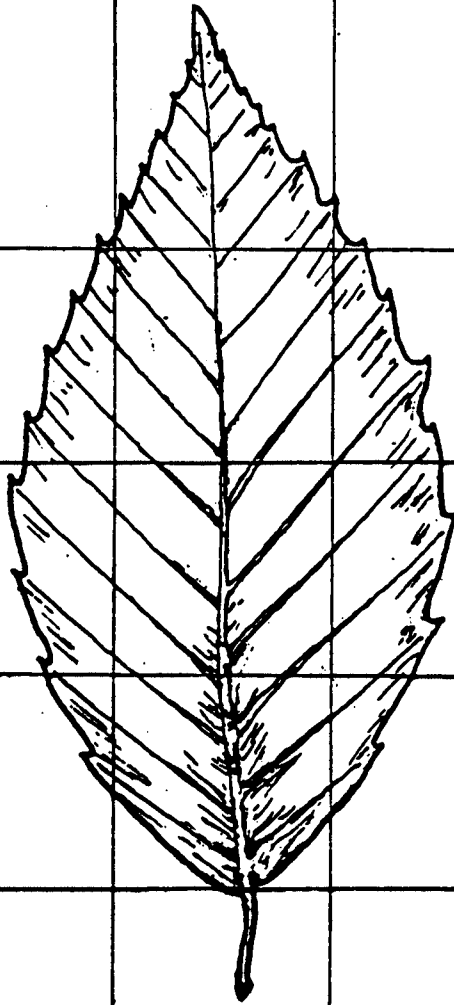
FLOWERS: April-May; before leaves; unisexual, male borne in slender catkins 3 to 4 inches long, solitary or rarely clustered, female in clusters in a scaly bud, crimson thread-like stigmas, both on same twig.

FRUIT: September, a pale brown ovoid nut, 1/2 to 3/4 inch in diameter, enclosed in two bristly, hairy bractlets united to the tip and lengthened into a tubular beak about twice the length of the nut, bractlets pale green, becoming pale yellow-brown; kernel sweet.

TWIGS: Slender, densely hairy or smooth; no terminal bud, lateral buds, small, somewhat hairy or smooth.

BARK: At first brown to dark brown, becoming darker and rougher as tree becomes older.

WOOD: Moderately hard, heavy, straight-grained, diffuse-porous; light yellow with lighter sapwood.

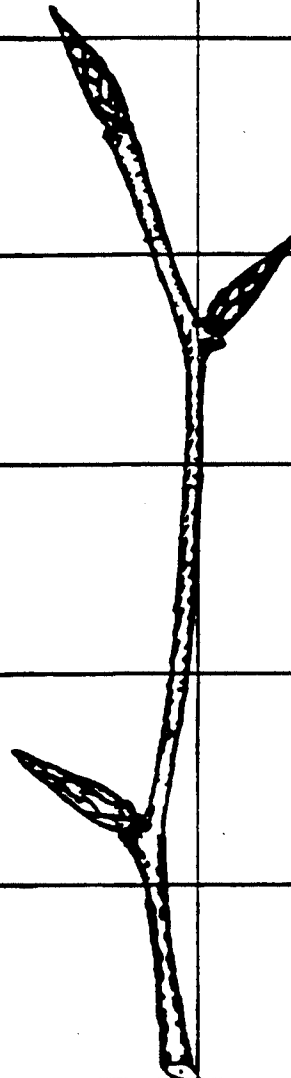


▲
BEECH LEAF



◀ BEECH NUT

WINTER TWIG
▼



BEECH

(Botanical Name)-*Fagus grandifolia* (Ehrh.)

Other Common Names:

American Beech, Red Beech.

Beech is common throughout the hardwood areas of P.E.I. but is rapidly being killed or deformed by the beech canker. It grows up to 60 feet with a diameter of 18 inches. The trunk is usually short, often crooked and breaks up not far from the ground into a dense, massive crown of wide-spreading tough and flexible branches.

It is usually found on rich bottom lands and moist, well-drained slopes and ridges. It is sometimes found in pure stands but more often is mixed with our other native hardwoods.

The smooth, close-fitting, light blue-grey bark of the trunk makes it readily discernable from any other tree, even in the winter.

The wood is used for flooring, furniture, vehicle stock, railway ties, cooperage, handles and woodenware.

DESCRIPTION

LEAVES: Alternate, simple, elliptical in outline, sharp-pointed, coarse-toothed with sharp incurved teeth, 2 1/2 to 6 inches long; dark blue-green above, paler below.

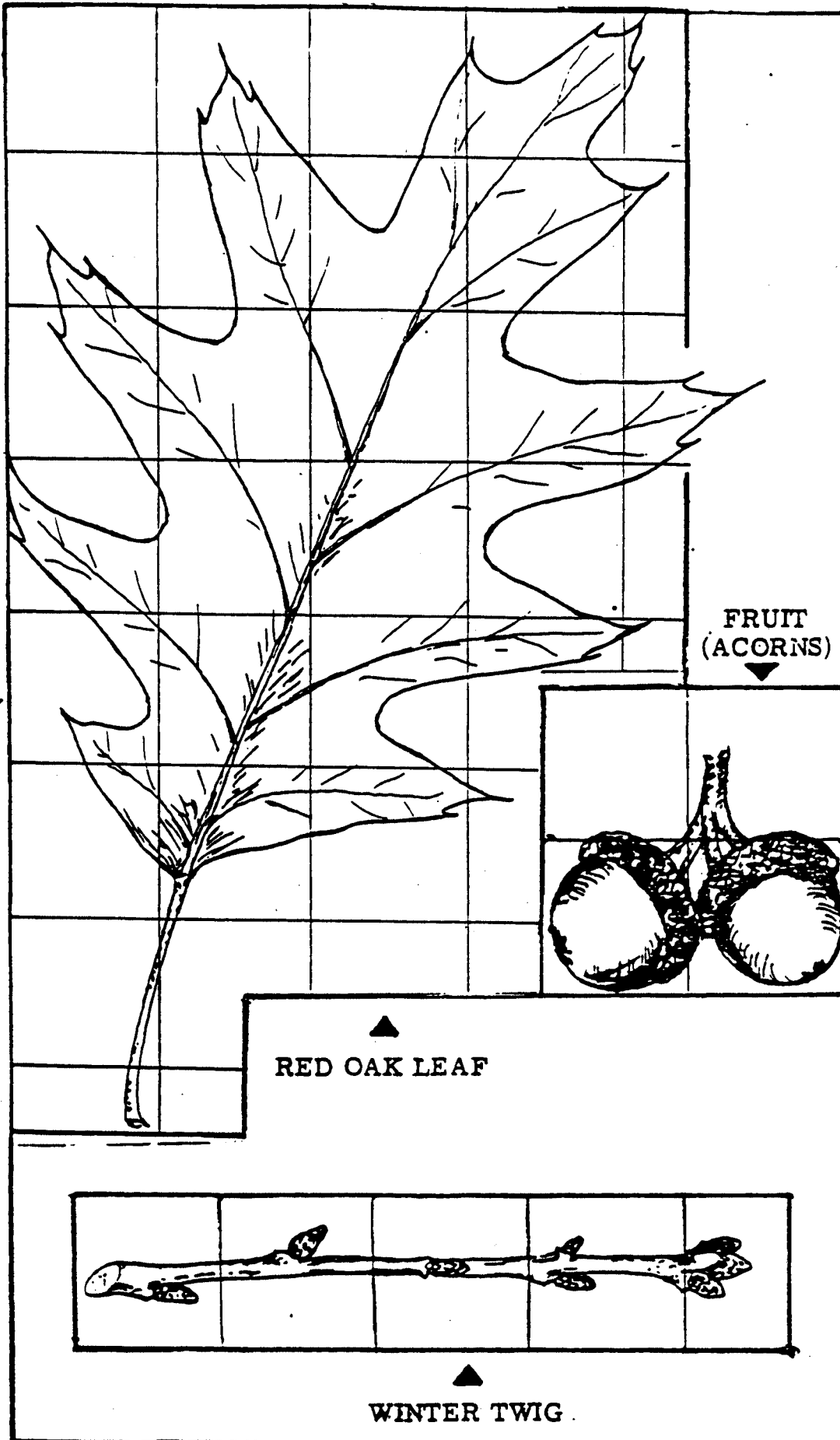
FLOWERS: April-May, after the leaves; unisexual, male in drooping, yellow-green heads, female in short spikes, both on the same tree.

FRUIT: October; a three-cornered, sharp-pointed, shiny, brown, edible nut, about 3/4 of an inch long; borne usually in pairs in a prickly brown husk, opening at maturity.

TWIGS: Slender, slightly zigzag, shiny reddish-brown to brownish-grey. Buds 3/4 to 1 inch long, cylindrical, with shiny, brown, slightly hairy, scales, diverging from the twig. Has a terminal bud.

BARK: Thin, smooth, light blue-grey, often mottled with darker patches

WOOD: Heavy, hard, strong, diffuse-porous; reddish-brown with almost white sapwood.



RED OAK

(Botanical Name)-*Quercus rubra* (L.)

Other Common Names:

Northern Red Oak and Black Oak.

Red Oak, at one time widely distributed in the hardwood areas of P.E.I., is now confined to small scattered areas around Charlottetown, Tracadie and Georgetown. Around here, it seldom exceeds 60 feet in height with a diameter of 16 inches. Growing in the forest the trunk is tall and frequently clear of branches for more than 2/3 of its length. Open grown trees develop broad-rounded crowns of stout branches.

It is a fast growing tree and will do well on a wide variety of soils, but prefers a well-drained one.

It is commonly found with white birch, poplars, red and white pine.

Trees that grow on poor sites are usually low and scrubby.

The wood is not as resistant to decay as the white oak, nor is it as suitable for tight cooperage. It is mainly used for flooring, interior finish and furniture.

DESCRIPTION

LEAVES: Alternate, simple, with 7 to 11 more or less deeply cut, bristle-tipped lobes extending about halfway to the midvein, 5 to 8 inches long; dull green, smooth above, yellow-green, smooth, except for small tufts of hair in the angles of the veins below.

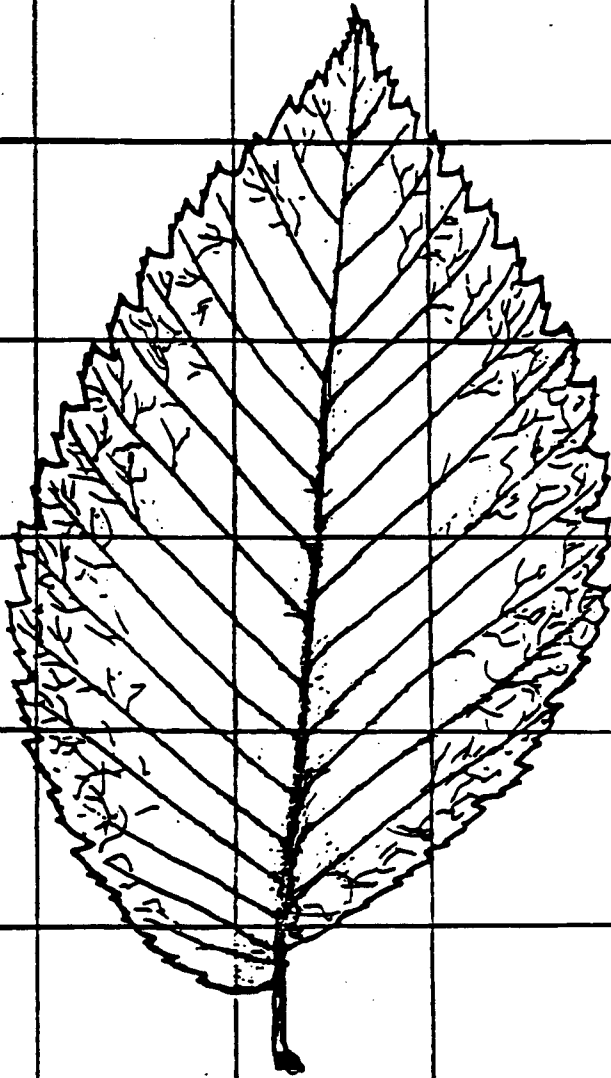
FLOWERS: May-June, after the leaves; unisexual; male in greenish-yellow catkins, female greenish, usually clustered, both on same tree.

FRUIT: Autumn of second year; a bitter acorn; the nut 1/2 to 1 1/4 inches long, enclosed for 1/4 to 1/3 of its length in a thick, somewhat hairy, reddish-brown cup of small tightly overlapping scales.

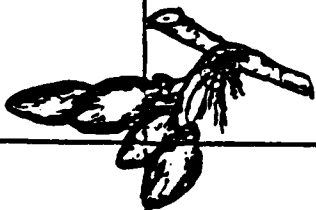
TWIGS: Moderately stout, dark red to greenish-brown, smooth. Terminal bud pointed, about 1/4 of an inch long, covered by more than 12 reddish-brown, more or less hairy scales; lateral buds similar, but smaller

BARK: Smooth, greenish-brown on young stems; becoming darker, shallow-fissured into hard, flat-topped, scaly ridges on older trunks.

WOOD: Hard, heavy, strong, close-grained, ring-porous; reddish-brown with paler sapwood.



▲
AMERICAN ELM LEAF



◀ FRUIT

WINTER TWIG
▼



WHITE ELM

(Botanical Name)-*Ulmus americana* (L.)

Other Common Names:

American Elm, Water Elm, Swamp Elm and Rock Elm.

White Elm is confined mainly to the western portion of the province where it occurs in scattered patches especially in low-lying areas. It is a medium sized tree here, about 50 to 60 feet high with a diameter of a little over a foot.

In the forest, it forms a tall straight trunk which rises to a considerable height before branching. In the open, it often divides near the ground into several limbs which gradually spread out to form a fan-shaped crown. The lower limbs and small branchlets are inclined to droop.

White Elm does well on rich, moist, well-drained sandy loam or gravelly soils, where the water table is near the surface. It grows singly or in mixtures with other hardwoods and softwoods.

The wood is valuable for its strength and toughness. This tree is widely planted for ornamental purposes.

DESCRIPTION

LEAVES: Alternate, oval in outline, abruptly sharp-pointed, unequal at the base, coarse and double-toothed, 3 1/2 to 6 inches long; dark green and smooth or roughened above, paler and usually hairy below.

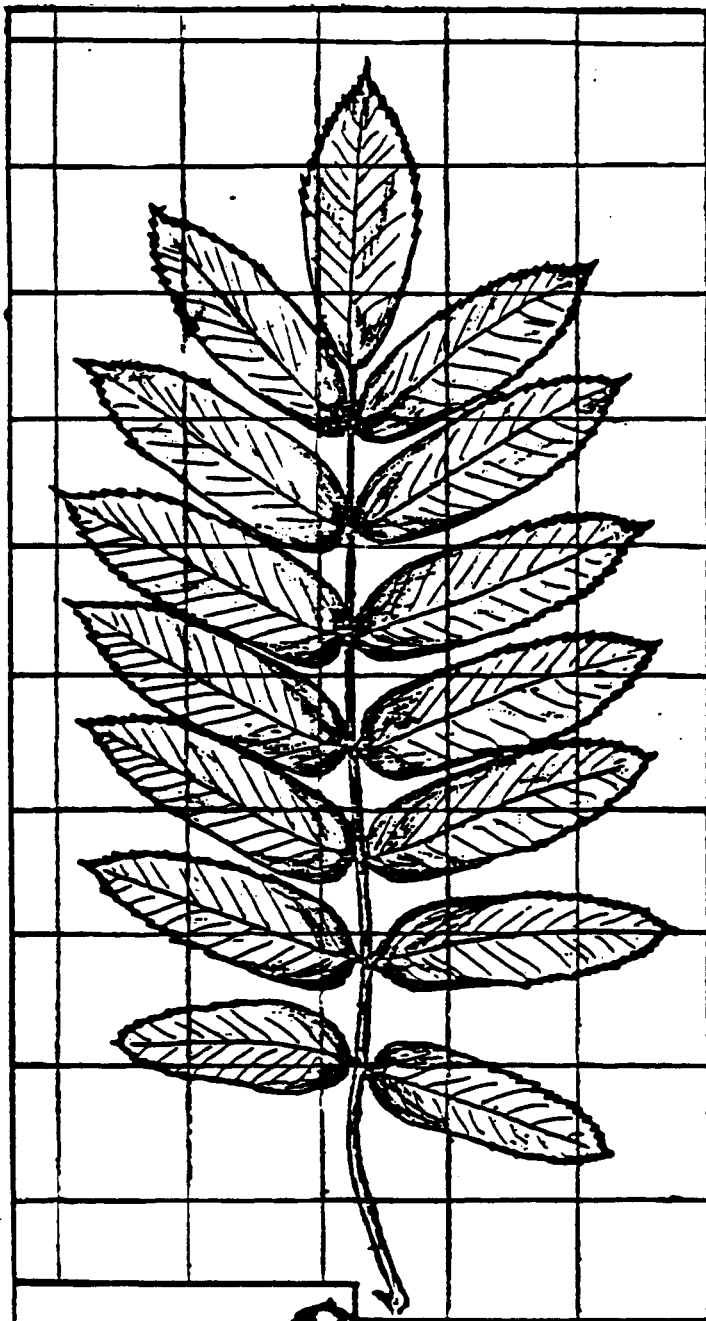
FLOWERS: April-May, before the leaves, from special flower buds; bisexual; borne on long stems in loose clusters.

FRUIT: June; an oval one-seeded, flattened, greenish samara, about 1/2 inch in diameter, the thin encircling wing usually notched at the tip and hairy on the margin, falling at maturity.

TWIGGS: Slender, smooth or hairy, reddish-brown. No terminal bud; leaf-buds pointed, about 1/8 of an inch long, reddish-brown with somewhat hairy scales. Flower buds rounded, larger.

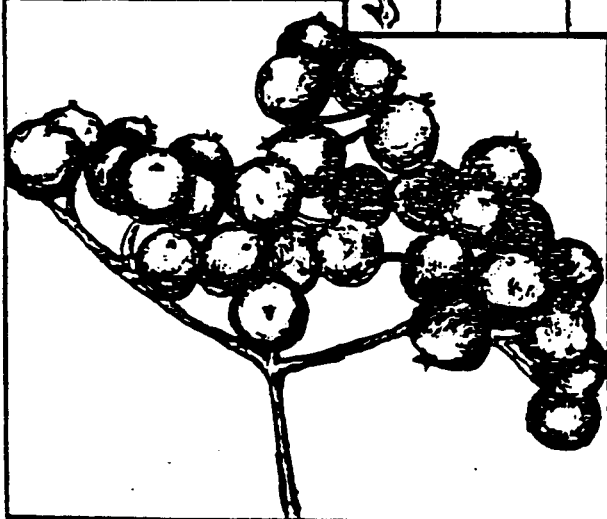
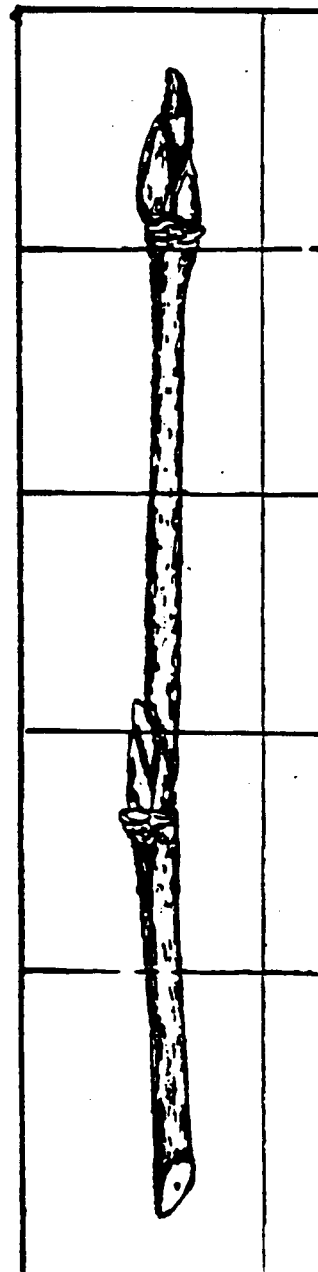
BARK: On old stems, rough, dark grey, furrowed into broad, intersecting ridges or with a flaky appearance; inner bark streaked with buff-coloured patches.

WOOD: Heavy, hard, strong, tough, ring porous; light brown with paler sapwood.



◀ SHOWY MOUNTAIN
ASH LEAF

WINTER TWIG
▼



FRUIT CLUSTER ▲

SHOWY MOUNTAIN ASH

(Botanical Name)-*Sorbus decora* (Sarg.) Schneid.

Other Common Names:

Rowan Tree, Rowan Berry, Mountain Ash, Service Tree.

Showy Mountain Ash is common throughout the province. It is a small, often bushy tree, seldom over 30 feet high with a diameter of over 6 inches, but may, under suitable conditions, grow much larger.

It is commonly found on moist sites along the banks of streams and on the margins of swamps. It is quite common in old pastures and along fences.

It grows singly or in small clumps with red maple, yellow and white birch, balsam fir, white and black spruce. Around this province it is frequently a low shrub.

The wood is of no commercial importance. However, the tree is sometimes used for ornamental planting.

DESCRIPTION

LEAVES: Alternate, compound, 5 to 10 inches long, composed of 11 to 15 leaflets borne in pairs on a stout grooved stem. Leaflets oblong in outline, rounded at the base, rounded or blunt-pointed at the tip, coarse-toothed to the middle or below, 1 1/2 to 3 inches long; blue-green above, paler and sometimes hairy below.

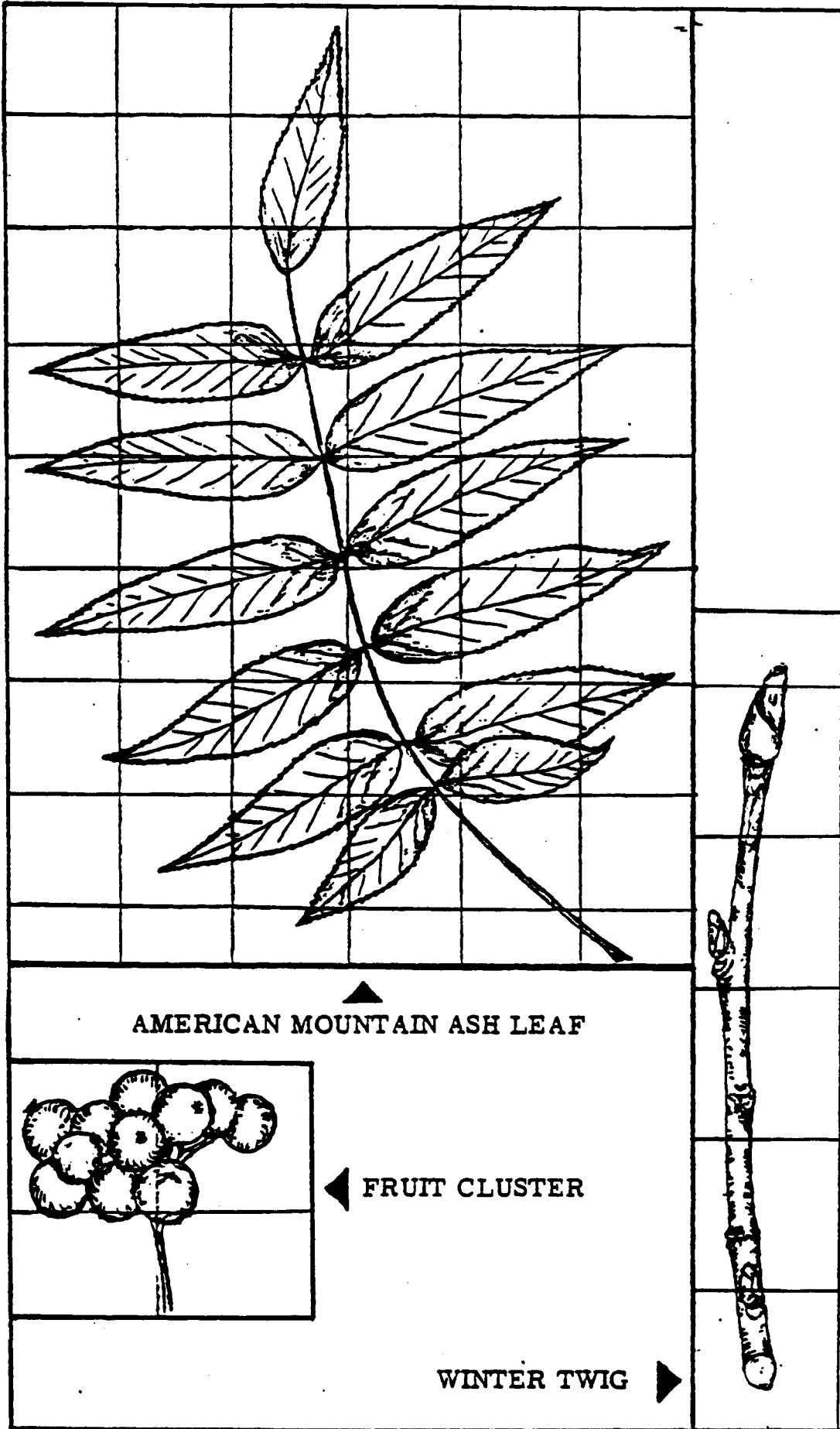
FLOWERS: June, after leaves, bisexual, white, about 1/2 inch in diameter; borne on slightly hairy stems in broad, flat-topped clusters.

FRUIT: August; rounded, berry-like, between 1/4 to 1/2 inch in diameter, scarlet or vermilion; often remaining on the tree over winter.

TWIGGS: Stout, smooth, greyish-brown, with a few scattered lenticels. Terminal bud large, conical, about 1/2 inch long, the outer scales smooth, gummy, dark purplish-red, the inner scales somewhat hairy on the margins, lateral buds smaller.

BARK: Thin, greyish-brown smooth on young stems; dark grey, almost smooth or covered with loose papery scales on old trunks.

WOOD: Light, soft, weak, close-grained, diffuse-porous, pale brown with lighter colored sapwood.



AMERICAN MOUNTAIN ASH

(Botanical Name)-*Sorbus americana* (Marsh.)

Other Common Names:

Rowan Tree, Rowan Berry, Mountain Ash, and Service Tree.

Like the Showy Mountain Ash, the American Mountain Ash is found throughout P.E.I.

It is a small tree, often bushy or shrub-like, rarely exceeding 30 feet in height and 8 inches in diameter.

The trunk is usually short with a flat-topped crown made up of stout ascending branches. It can be easily separated from the Showy Mountain Ash by its small flowers and fruit, and its narrow, lance-shaped, fine-toothed leaflets.

It prefers rich open sites but is not confined to these. It never grows in pure stands but is found growing alone or in small clumps along the borders of streams, margins of swamps and in damp woods.

Like its close relative, the Showy Mountain Ash, the wood has no commercial importance. It is used in ornamental planting but is not nearly as handsome or as hardy as the Showy Mountain Ash.

DESCRIPTION

LEAVES: Alternate, compound, 6 to 10 inches long, composed of 11 to 17 leaflets borne in pairs on a moderately stout stem. Leaflets lance-shaped, rounded to wedge-shaped at the base, sharp-pointed at the tip fine-toothed almost to the base, 2 to 3 1/2 inches long; bright green above, paler and slightly hairy below.

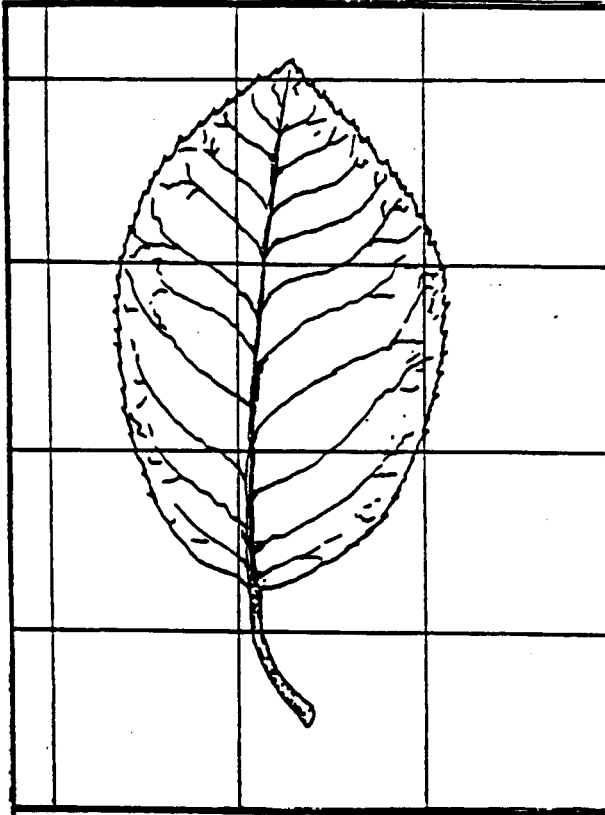
FLOWERS: May-June, after the leaves, bisexual, white about 1/4 of an inch in diameter; borne in broad, flat-topped clusters.

FRUIT: August, rounded, berry-like, about 1/4 of an inch in diameter, bright red, glossy; often remaining on the tree over winter.

TWIGS: Stout, smooth, sometimes slightly hairy, reddish-brown, spotted with numerous lenticels. Terminal bud large, conical, about 1/2 inch long, with gummy, dark purplish-red, smooth or slightly hairy scales; lateral buds smaller.

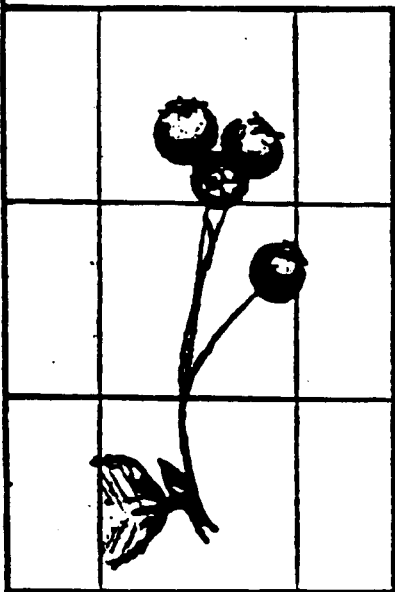
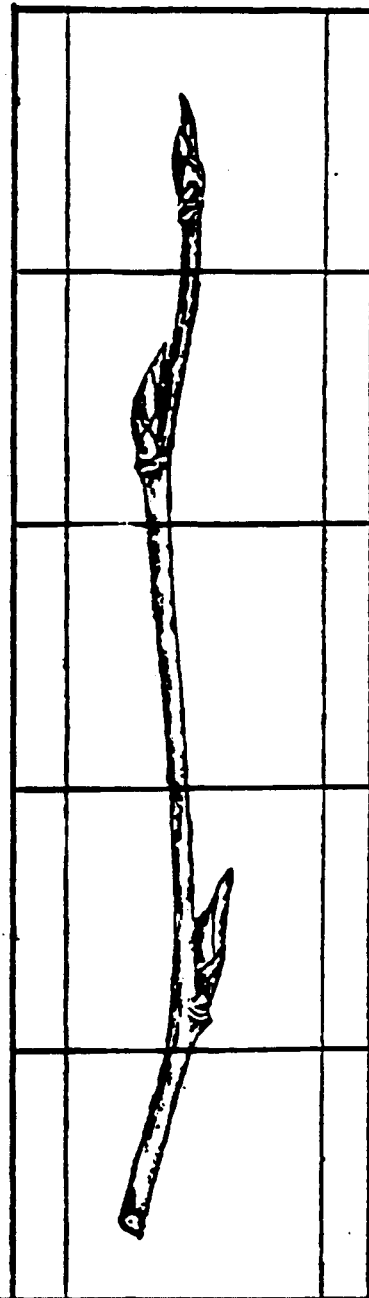
BARK: Thin, smooth, reddish-brown on young stems; light grey, smooth or with a few loose scales on old trunks.

WOOD: Light, soft, weak, close-grained, diffuse-porous; pale brown with lighter colored sapwood.



◀ SERVICEBERRY LEAF

WINGED TWIG ▶



▲
FRUIT CLUSTER

THE SERVICEBERRIES

(Botanical Name)-Amelanchier (Med.)

Other Common Names:

Shadbush, Wild Pear, Bilberry, Juneberry, Allegheny Serviceberry.

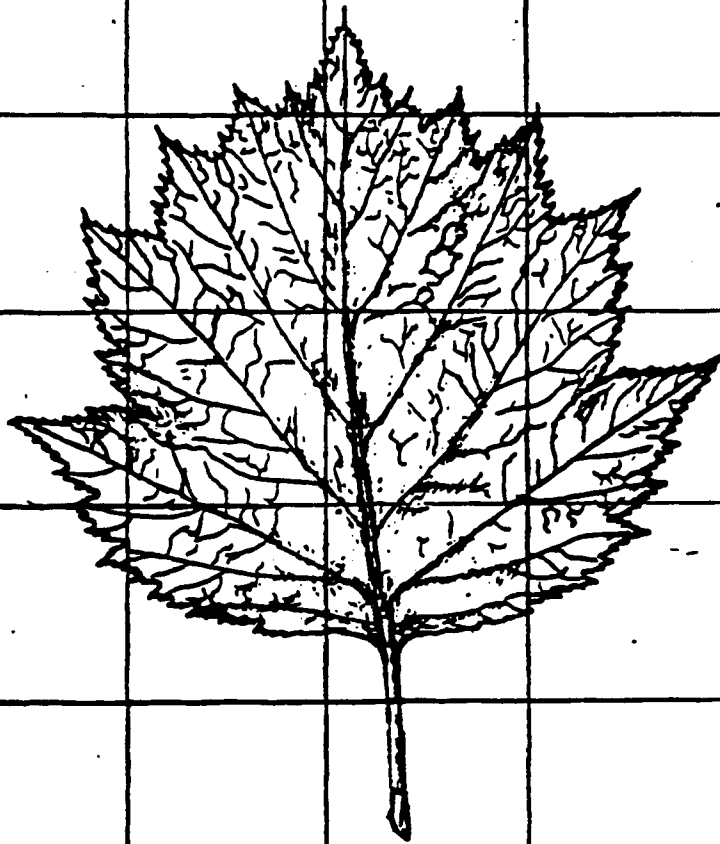
The four species, known to exist in P.E.I., are found throughout. Of these four, only one, the Allegheny Serviceberry (Botanical Name) Amelanchier laevis, regularly attains the status of a small tree, the other three are shrubs.

The leaves are simple, usually sharp-toothed, mostly oval, widely elliptical or heart-shaped in outline and seldom exceed 3 inches in length.

The flowers, which are white and perfectly bisexual, appear in the spring before or with the leaves. They are usually borne in clusters, sometimes in such dense masses that the branches appear to be covered with them.

The fruit, a pome, is small, sweet, berry-like, and edible. It matures in one season, and is usually marked on top by the remains of the flowers.

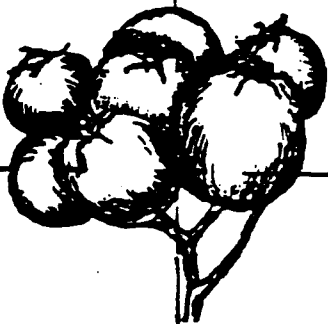
The wood is hard and heavy. It is used in small quantities for fishing rods and lancewood. The tree itself, is sometimes used for ornamental planting.



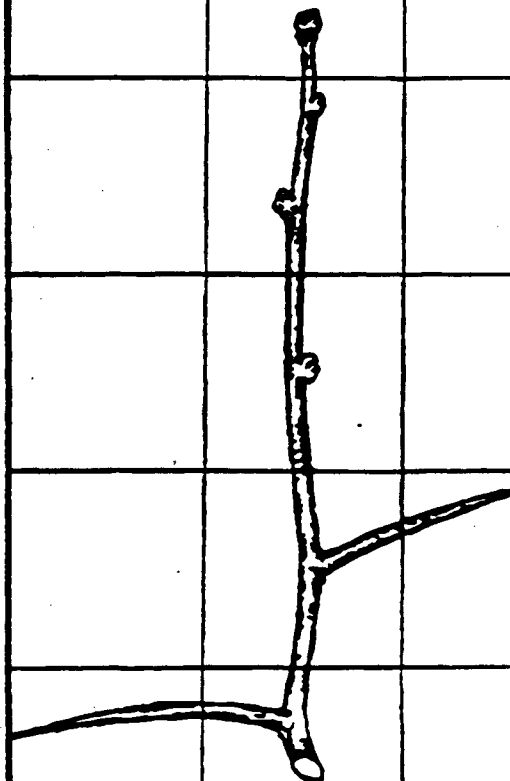
WINTER TWIG



HAWTHORN LEAF



FRUIT CLUSTER



THE HAWTHORNS

(Botanical Name)-Crataegus (L.)

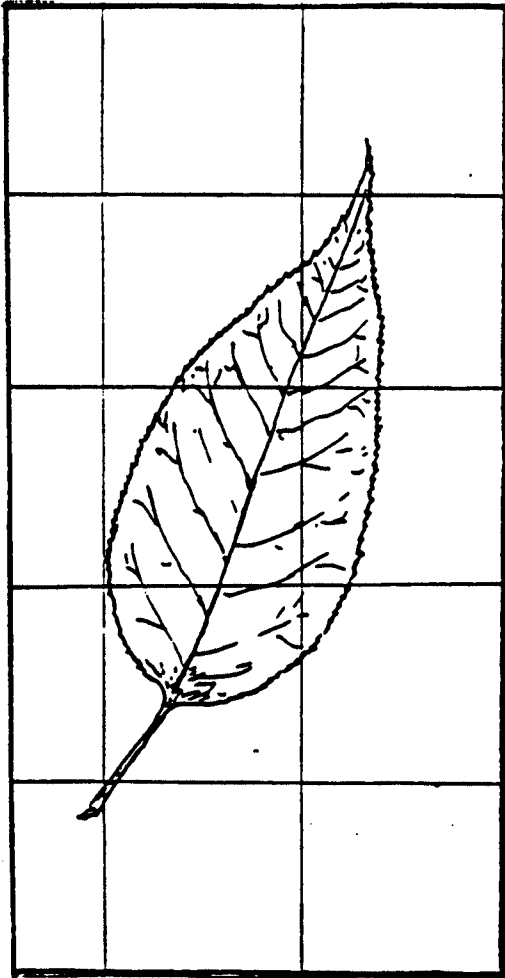
A little over twenty-five species of hawthorn are found in Canada, a number of which occur in this province.

There is no group of trees in Canada in which it is more difficult to separate one species from another. The group is so large and so closely related that only one who has time to study the different species can hope to distinguish them all. The flower and fruit are mainly relied upon to distinguish one species from another.

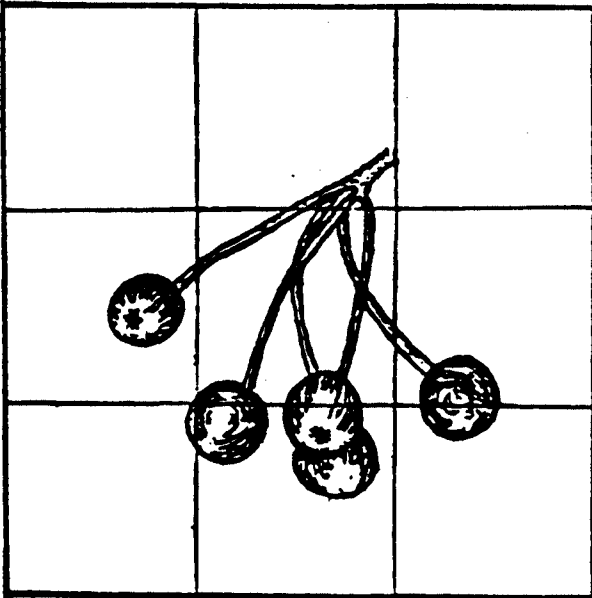
Hawthorns are usually low, wide-spreading, bushy trees, frequently found growing as shrubs in thickets. They are common along roadsides, in fence corners, old pastures, and in open places in the woodlot. They prefer rich, moist, well-drained soils.

Hawthorns, in general, can be distinguished from other trees by their somewhat zigzag twigs, which are armed with long thorns. The thorns occur just above the point at which the leaf is attached and are commonly unbranched and exceedingly sharp. The winter buds are small, shiny, chestnut-brown, rounded and covered with numerous overlapping scales. The leaves are alternate, simple, generally toothed and usually lobed. The white or rarely pink flowers are bisexual and are borne in showy clusters on the tips of short, leafy branches. The fruit or haws, as they are sometimes called, resemble tiny apples and are edible, although the proportion of bony seeds to pulp is so great that they are hardly worth gathering. Very often they remain on the tree all winter.

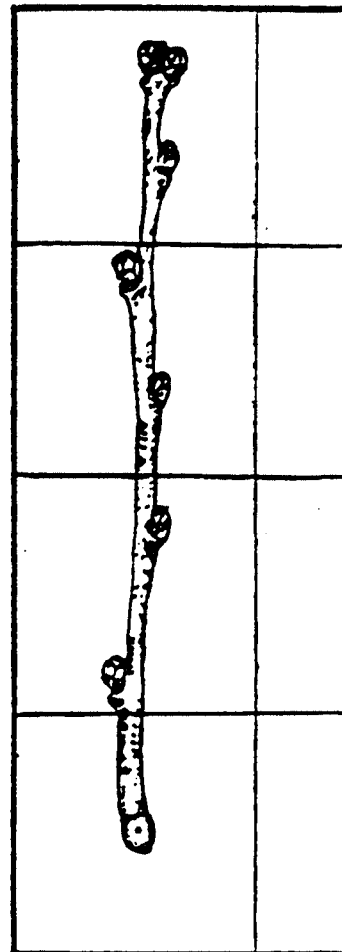
The hard, heavy wood is of no commercial importance although it makes excellent handles, mallets and wooden novelties.



◀ PIN CHERRY LEAF



▲
FRUIT



▲
WINTER TWIG

PIN CHERRY

(Botanical Name)-*Prunus pensylvanica* (L.f.)

Other Common Names:

Fire Cherry, Red Cherry, Bird Cherry, Pigeon Cherry, Wild Red Cherry.

Pin Cherry is common throughout the province. It is a small tree 10 to 25 feet in height and 4 to 8 inches in diameter but may, under favourable conditions, reach a much greater height and diameter. The trunk is slender and erect, usually extending to the top of the tree. The narrow, round-topped crown is composed of very slender horizontal branches.

It is one of the first trees to spring up after a fire but is also found in new clearings, and along roadsides. It grows on a wide variety of sites from a dry sandy soil to a wet loam. It will not grow in the shade of other trees so is very rare in dense stands.

The wood is used locally for fuel. The tree is quite useful in preventing erosion and in providing shade for seedlings of the more tolerant species.

DESCRIPTION

LEAVES: Alternate, simple, lance-shaped, sharp-pointed, fine-toothed, 2 1/2 to 4 1/2 inches long; bright shiny green above, paler below.

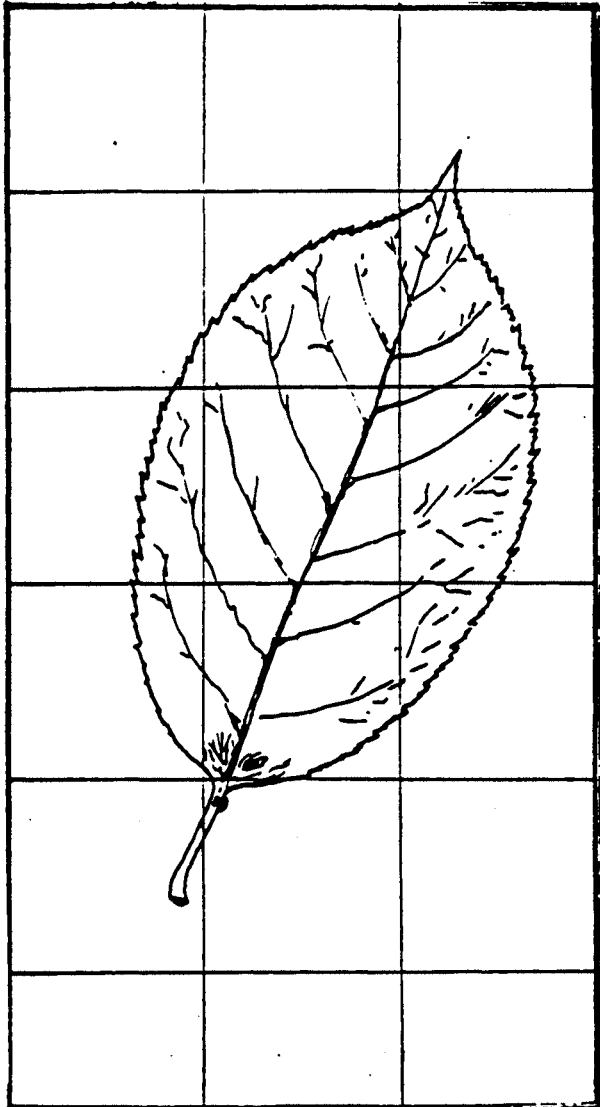
FLOWERS: May-June, after the leaves, bisexual; white, about 1/2 inch in diameter, borne in 4 to 5 flowered clusters.

FRUIT: August-September; round, 1/4 to 1/3 of an inch in diameter, light red with sour edible flesh.

TWIGS: Slender, smooth, shiny bright red, often coated with a greyish varnish. Terminal bud small, about 1/12 of an inch long, rounded, bright red-brown; lateral buds similar.

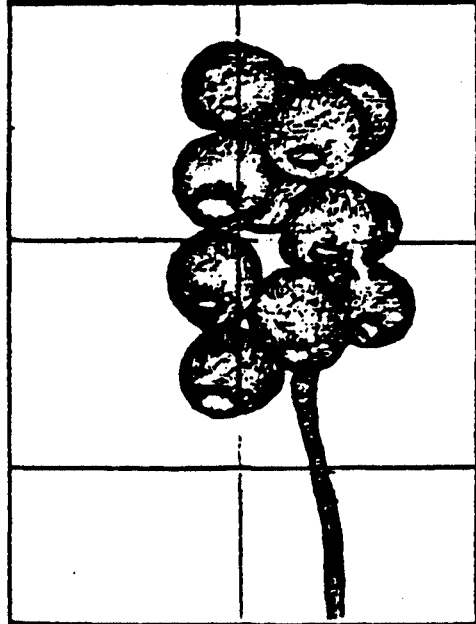
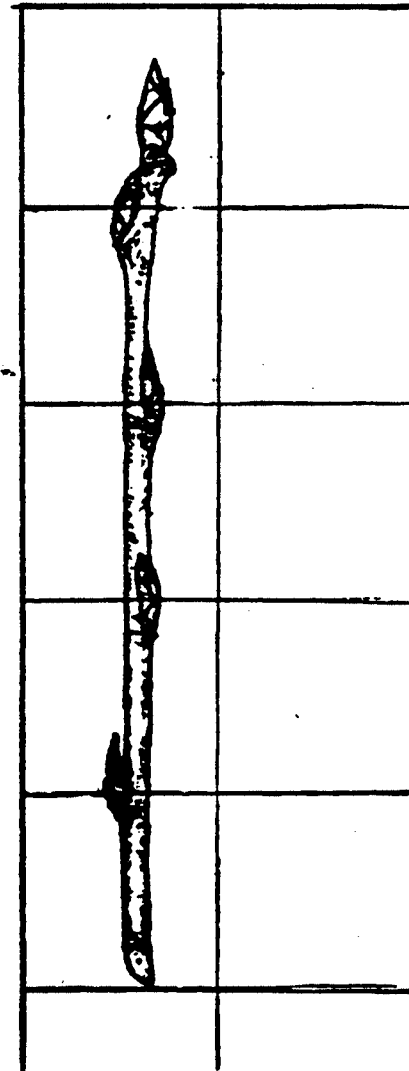
BARK: Thin, smooth, reddish-brown, marked by conspicuous, raised, horizontally-elongated, orange-colored lenticels.

WOOD: Light, soft, not strong, diffuse-porous; light brown with paler sapwood.



◀ CHOKE CHERRY LEAF

WINTER TWIG
▼



▲
FRUIT

EASTERN CHOKE CHERRY

(Botanical Name)-*Prunus virginiana* (L.)

Other Common Names:

Wild Cherry, Red-fruited Choke Cherry, Red Choke Cherry, Choke Cherry.

Eastern Choke Cherry is fairly common throughout P.E.I. It is generally a shrub about 10 feet high. The trunks are slender often crooked and inclined, with narrow irregular crowns of slender erect or horizontal spreading branches.

The Choke Cherry, like its relative the Pin Cherry, will not grow in the shade of other trees. It prefers a rich moist soil. It occurs scattered in small thickets along streams, fences, highways, the borders of forests and in small clearings.

The wood of the Choke Cherry, due to its small size, is of no commercial importance. The fruit is gathered for preserves and jellies.

DESCRIPTION

LEAVES: Alternate, simple, usually widest above the middle, abruptly pointed, rounded or slightly heart-shaped at the base, fine-toothed, thin 2 to 4 inches long, dark green above, paler and smooth except for tufts of hair along the veins below.

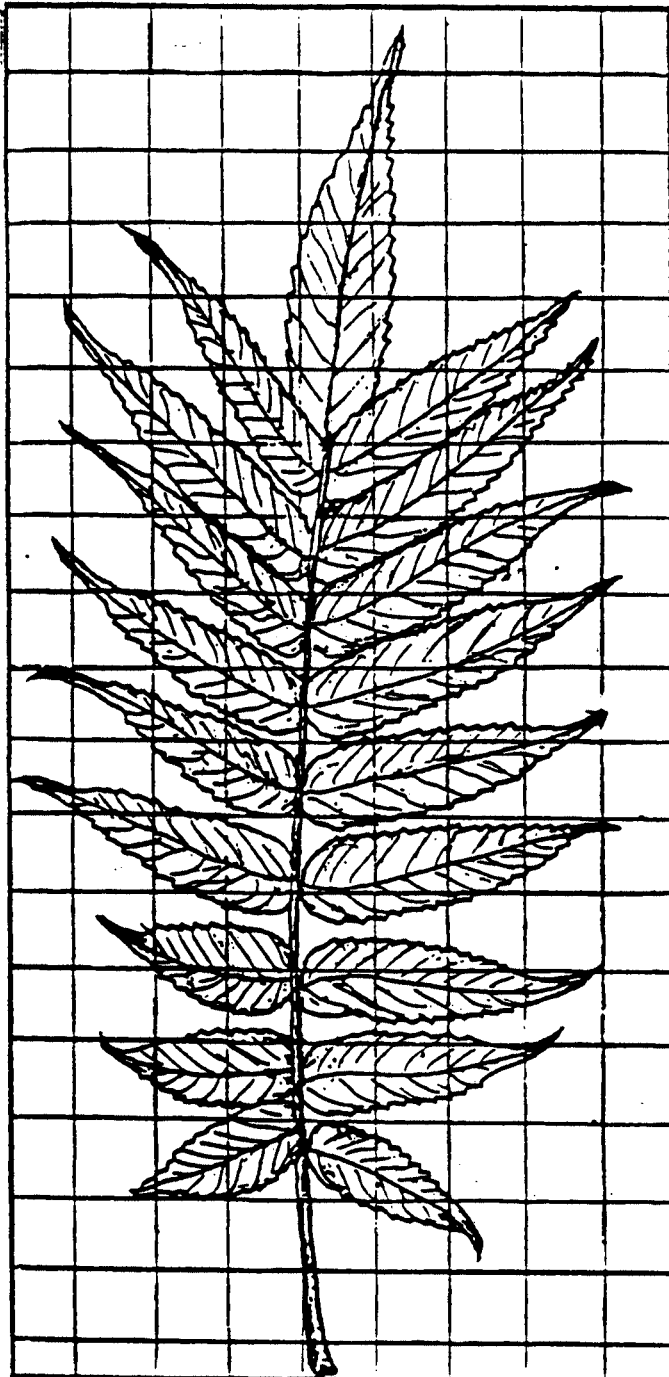
FLOWERS: May-June, after the leaves; bisexual, white, 1/3 to 1/3 inch in diameter, clustered along a central stalk.

FRUIT: August-September; rounded, 1/4 to 1/2 inch in diameter, red to dark red with juicy, edible astringent flesh.

TWIGS: Slender to moderately stout, brown to greyish-brown smooth. Terminal bud sharp-pointed, 1/8 to 1/4 of an inch long, chestnut-brown, similar to the laterals.

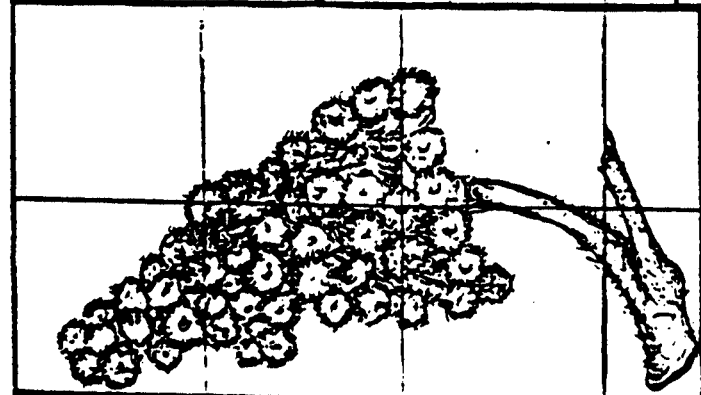
BARK: Thin, smooth greyish or reddish-brown, slightly furrowed and scaly on very old trunks.

WOOD: Heavy, hard, weak, fine textured, diffuse-porous; light brown with paler sapwood.



◀ STAGHORN SUMAC
LEAF

WINTER TWIG



▲
FRUIT CLUSTER

STAGHORN SUMAC

(Botanical Name)-*Rhus typhina* (L.)

Another Common Name:

Sumac.

The Staghorn Sumac, a small tree or upright shrub, is found in this province mainly east of Charlottetown. Ordinarily it is 10 to 15 feet high with a short, more or less crooked and inclined trunk. The branches are irregular in form and divide into a comparatively small number of stout curved twigs which suggest the horns of a stag - hence the name.

The beautiful scarlet, fern-like foliage in the autumn and the persistent, bright red cone-shaped fruit clusters are the two main distinguishing characteristics.

It will not grow in the shade of other trees and is usually found on dry rocky or sandy soils, along fences, roadsides and in old pastures. It is seldom found with other trees.

The wood is used for decorative finishing and in making wooden novelties. The tree is also planted as an ornamental.

DESCRIPTION

LEAVES: Alternate, compound, 16 to 24 inches long, composed of 11 to 31 leaflets borne in pairs on a stout, hairy stem. Leaflets lance-shaped, sharp-pointed, sparse-toothed, 2 to 5 inches long; dull dark green above, paler below.

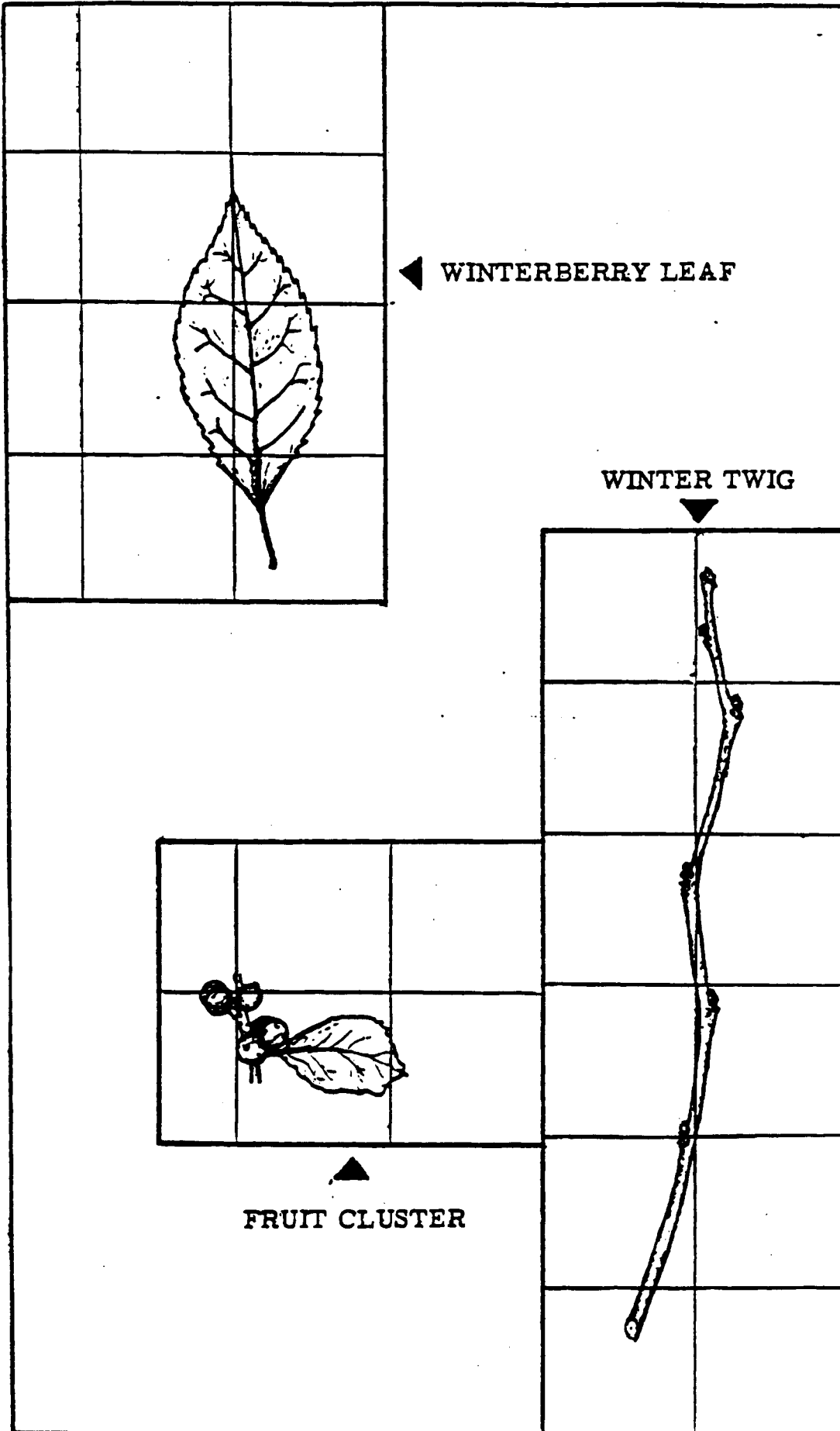
FLOWERS: June-July, after the leaves, unisexual, in dense yellowish-green clusters; the male and female on separate trees.

FRUIT: Autumn; rounded, thin fleshed, berry-like, about 1/8 of an inch in diameter, densely coated with bright red hair; borne in large cone-shaped clusters; persisting on tree over winter.

TWIGS: Very stout, densely covered with brownish to almost black hair, and yielding a milky juice when broken. No terminal bud; lateral buds small, covered with brown hair.

BARK: Thin, dark brown smooth on young stems; smooth or scaly on old trunks.

WOOD: Light, soft, brittle, coarse-grained, ring-porous; orange-colored streaked with broad green rays.



WINTER-BERRY

(Botanical Name)-*Ilex verticillata* (L.)

Another Common Name:

Black Alder

Winter-berry is a small shrub, found throughout the province. It grows from 5 to 10 feet high and rarely exceeds one inch in diameter.

It is mostly found in low grounds, moist woods and swamps.

It is a handsome shrub, belonging to the Holly Family, with bright green glossy leaves. Clusters of small greenish-white flowers appearing in May and June turn into bright scarlet berries in the autumn. These berries cling to the branches in the axil of the leaf all winter.

The wood is of no commercial importance.

DESCRIPTION

LEAVES: Alternate, simple, 2 to 3 inches long; oval, wedge-shaped at the base, single-toothed; smooth, thick, bright green above, paler, somewhat downy below.

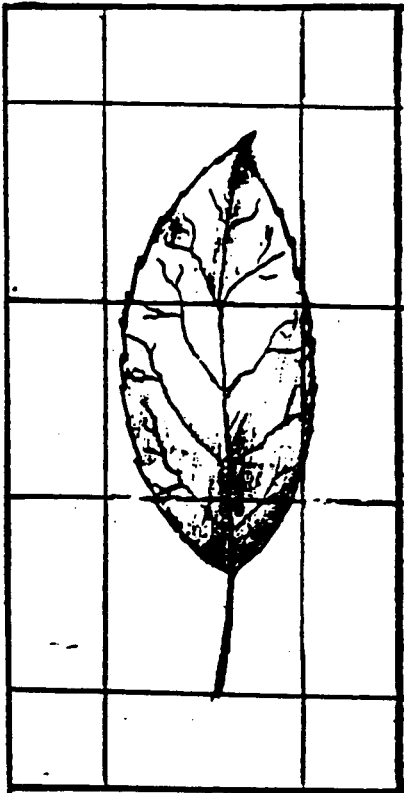
FLOWERS: May-June, with or after the leaves, bisexual; greenish-white; borne in crowded clusters of 3 to 12 in the axils of the leaves; flower stems short with small brown scales.

FRUIT: September; berry-like, 1/4 to 5/16 of an inch in diameter, round or slightly depressed, alone or in clusters of 2 or 3, scarlet; pulp nauseous, yellowish; seeds 3 to 8.

TWIGS: Slender, much-branched, pale grey to yellowish grey. Terminal bud extremely minute, light brown; laterals similar.

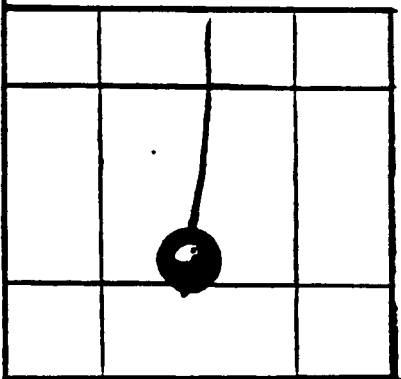
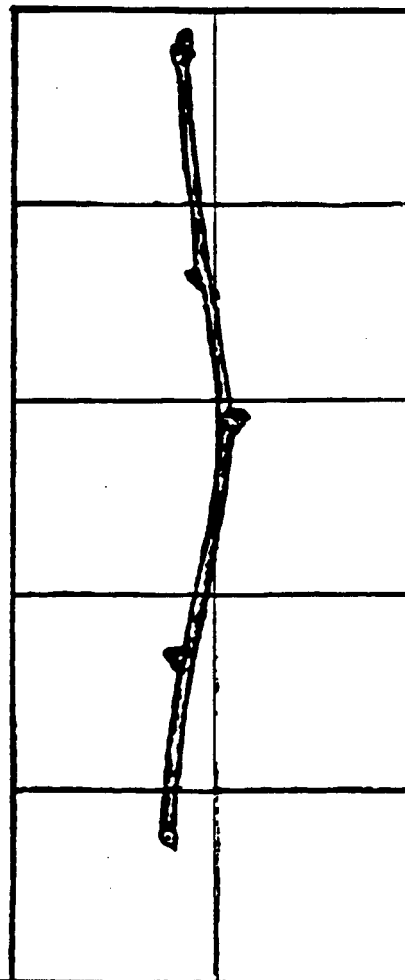
BARK: On young trunks greyish brown becoming dark grey as the tree grows older.

WOOD: Moderately light, weak, fine-textured, diffuse-porous; light yellow with paler sapwood.



◀ MOUNTAIN HOLLY LEAF

WINTER TWIG



▲
FRUIT

MOUNTAIN HOLLY

(Botanical Name)-*Nemopanthus mucronata* (L.) trel.

Another Common Name:

False Holly:

Mountain Holly is a slender shrub found in most wooded areas in the province. It varies in height from 6 feet up to 12 feet and rarely exceeds 1 inch in diameter.

It is a moisture-loving shrub growing in wet woods, edges of bogs and in low barrens..

The leaves often grow in tufts on short lateral branches and so give a leafy effect to the tree. When compared with other species of the Holly family it falls far below them in beauty and attractiveness.

The wood is of no commercial importance.

DESCRIPTION

LEAVES: Alternate, simple, entire or obscurely toothed, 1/2 to 2 inches long, rounded or acute at the base, with a short, sharp abrupt tip; shiny, light yellow green above, paler below.

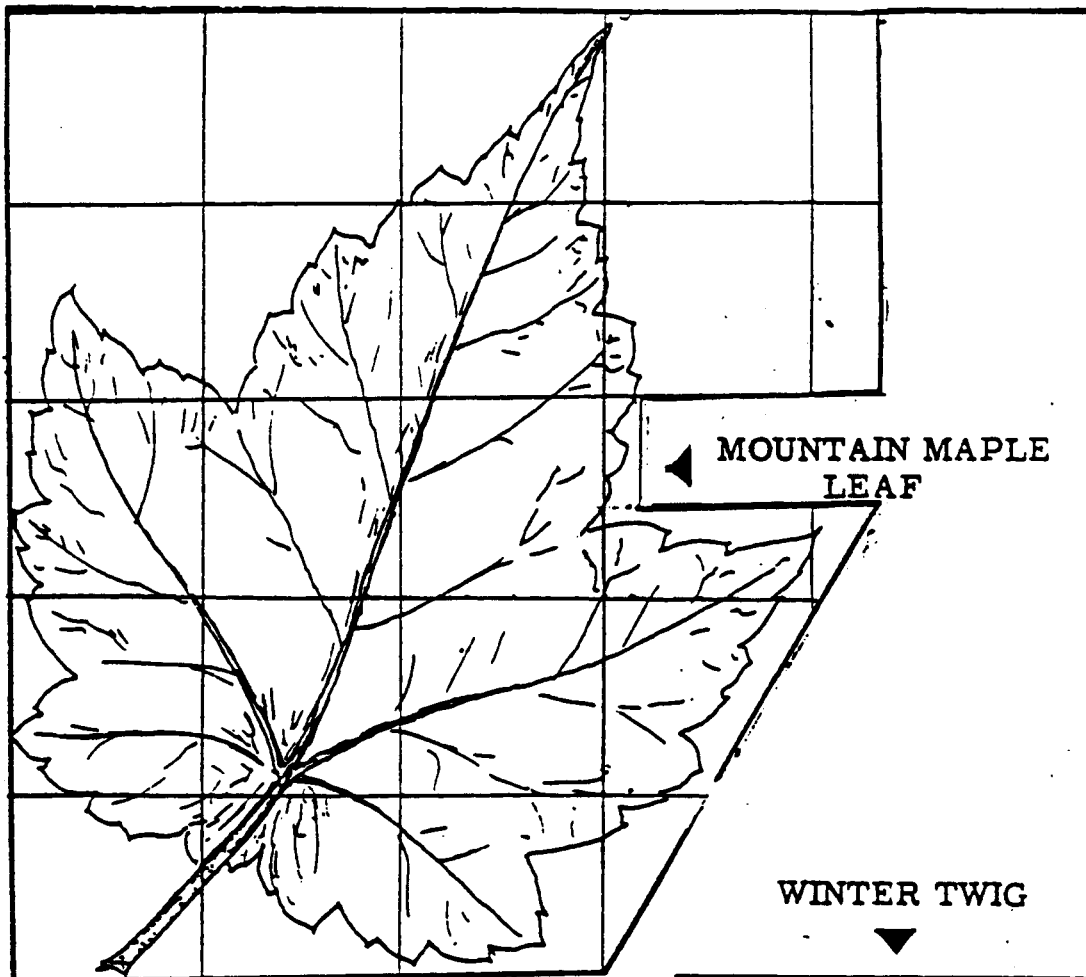
FLOWERS: May-June, bisexual, white, small, on long slender stems in the axils of the leaves.

FRUIT: September, nearly spherical, berry-like, bright red, 1/4 of an inch in diameter; nutlets 4 to 5.

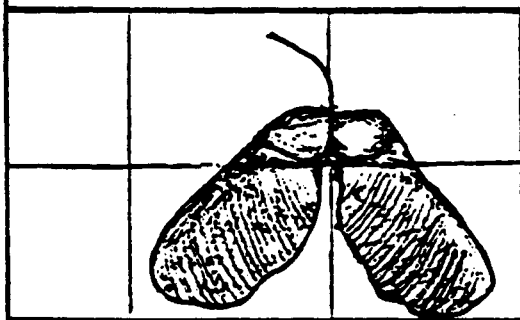
TWIGS: Slender, smooth, reddish brown. Terminal bud very small, shiny, smooth; dark brown to black, cone shaped; laterals similar.

BARK: Greenish-grey to ashen-grey, often the host of many lichens.

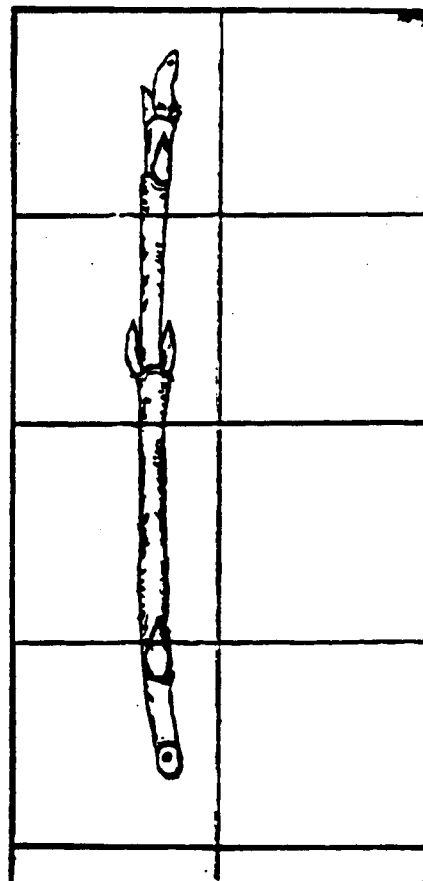
WOOD: Light, moderately hard, not strong, diffuse-porous; creamy white with lighter sapwood.



WINTER TWIG



WINGED SEEDS



MOUNTAIN MAPLE

(Botanical Name)-*Acer spicatum* (Lam.)

Other Common Names:

White Maple and Dwarf Maple.

The Mountain Maple, a small bushy tree or shrub rarely more than 25 feet in height or more than 3 inches in diameter, is found in P.E.I. mainly along small streams.

It is the smallest of our eastern maples. The trunk is usually short and irregular, composed of slender, brittle, upright branches.

It prefers rich soils along small streams. It seems to require a certain amount of shade for it is seldom found in the open except on recently cut-over woodlands.

The distinguishing characteristics are its slightly stalked, somewhat downy buds, coarse-toothed, mostly 3-lobed leaves and the showy clusters of yellowish flowers which are borne on an erect spike-like stem.

The wood is of no commercial importance. The tree serves a useful purpose in preventing erosion on rocky slopes.

DESCRIPTION

LEAVES: Opposite, usually 3-lobed with shallow v-shaped notches, sharp-pointed, coarse-toothed, 4 to 5 inches long; yellowish-green above, paler more or less hairy below.

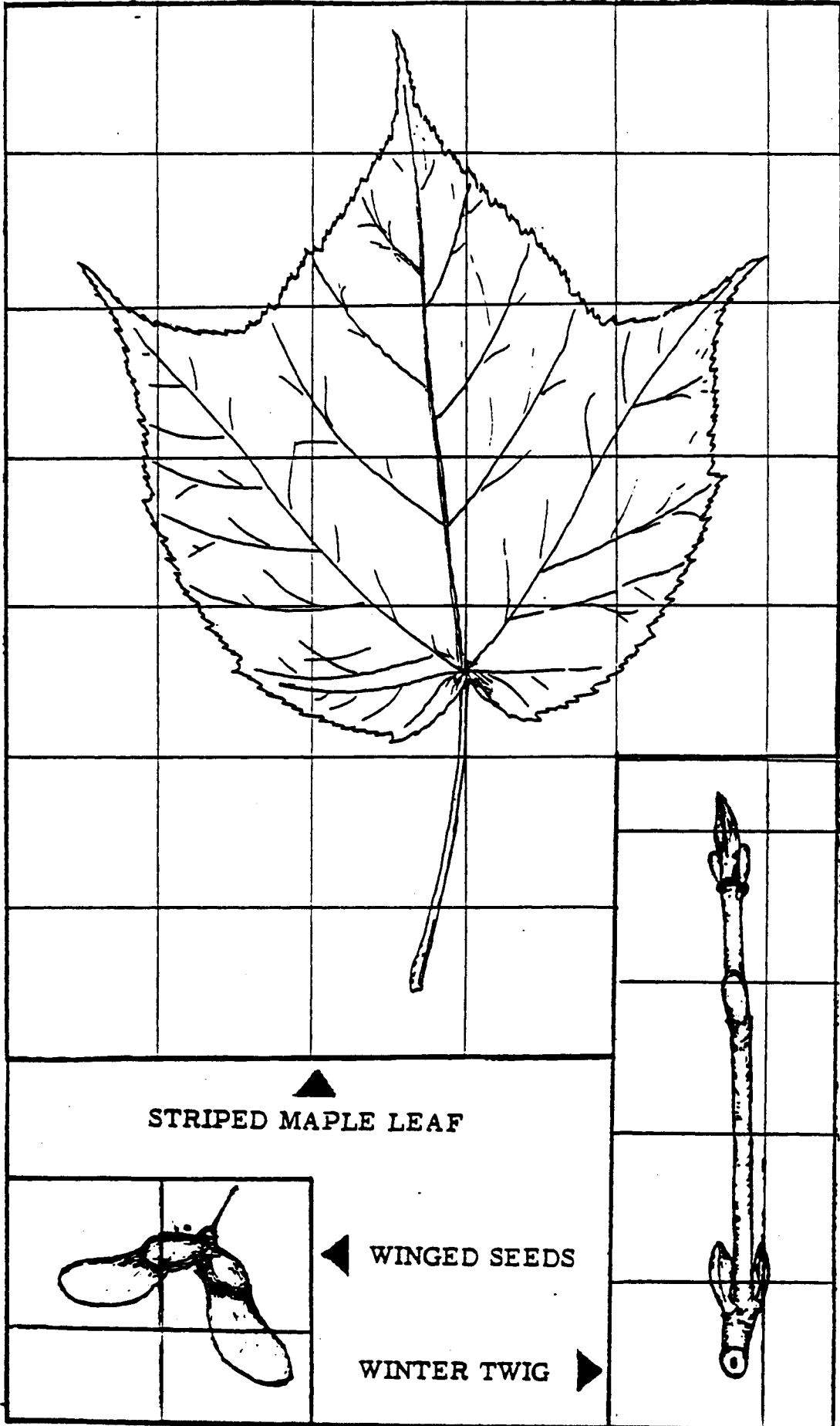
FLOWERS: June, after the leaves; unisexual; yellow; the male at the top, the female at the bottom of a long, many flowered upright stem.

FRUIT: September; a pair of brown (red or yellow during summer) terminally winged samaras, about 3/4 of an inch long with diverging wings; falling at maturity.

TWIGS: Slender, more or less downy, red. Terminal bud about 1/8 of an inch long, bright red, slightly downy, and stalked; laterals similar.

BARK: Thin, reddish to greyish-brown, smooth or slightly furrowed.

WOOD: Light, soft, weak, fine-grained, diffuse-porous; light brown with paler sapwood.



STRIPED MAPLE

(Botanical Name)-*Acer pensylvanicum* (L.)

Other Common Names:

Moosewood and Moose Maple.

Striped Maple is generally confined to the hardwood areas of the province. In general it is a tall shrub or a small tree but in one known area around Charlottetown it reaches a height of 40 to 50 feet with a diameter of around 10 inches. Generally the trunk is short, dividing a few feet from the ground into several straight, mostly upright limbs, which form a broad deep crown.

It prefers cool moist soils and where it is protected from the direct rays of the sun. Very often it forms the shrubby understory beneath mixed stands of red spruce, eastern hemlock, yellow birch, beech and sugar maple.

The distinguishing characteristic is its smooth green bark, vertically streaked with white, where the bark has split open.

Like the mountain maple, the wood has no commercial importance. Deer and moose feed upon the buds and leaves.

DESCRIPTION

LEAVES: Opposite, simple, 3-lobed with shallow notches, sharp-pointed, fine-toothed, 4 to 6 inches long, thin, pale green above, paler below.

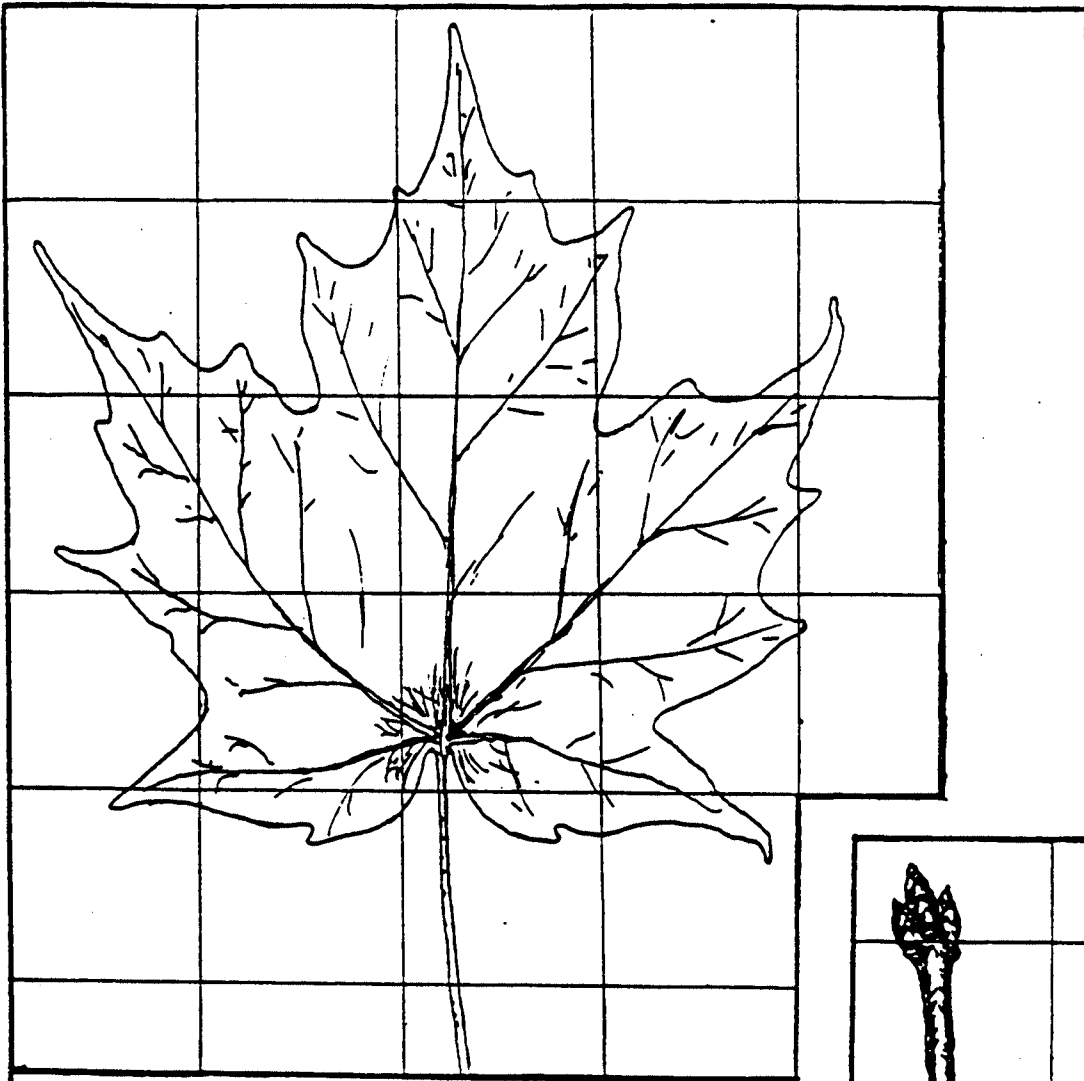
FLOWERS: May-June, after the leaves; mostly unisexual; in long drooping yellow clusters, male and female usually on separate trees.

FRUIT: August-September; a pair of greenish, terminally winged samaras, about 1 inch long, the wings spreading at a very wide angle and the seed cavity pitted on one side.

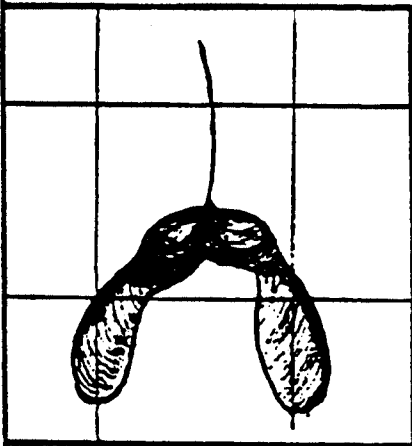
TWIGGS: Moderately stout smooth, reddish brown or greenish. Terminal bud about 1/2 inch long, covered by 2 bright red scales, appearing stalked; lateral buds similar.

BARK: Thin, smooth, green or reddish-brown, marked with conspicuous white stripes.

WOOD: Light, soft, weak, straight-grained, diffuse-porous; light brown with paler sapwood.

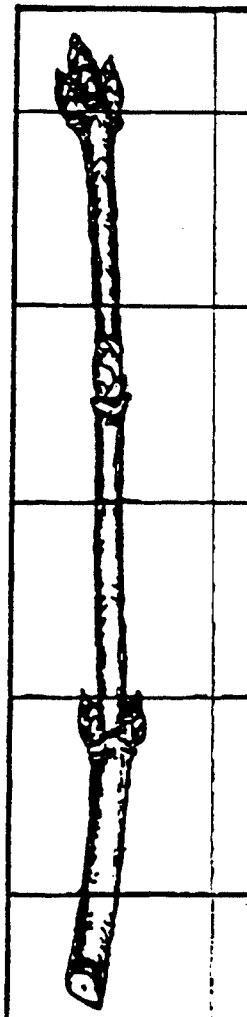


▲
SUGAR MAPLE LEAF



▲
WINGED SEEDS

WINTER TWIG ▶



SUGAR MAPLE

(Botanical Name)-*Acer saccharum* (Marsh.)

Other Common Names:

Hard Maple, Rock Maple, Black Maple, Curly Maple, Bird's Eye Maple.

Sugar Maple is found throughout Prince Edward Island in the hardwood areas. It is a tall tree averaging 70 to 80 feet in height and a diameter of up to 2 feet. The trunk is usually straight in the forest, short and branched in the open. The compact and regular crown is composed of slender, mostly ascending branches.

It requires a moist rich, well-drained soil for its best development. It occurs in pure stands also in mixtures of red spruce, white spruce, balsam fir, beech, yellow birch, oak and red maple.

It is one of our most conspicuous hardwoods in autumn, the leaves turning brilliant shades of deep red, scarlet, golden orange and bright yellow.

The wood is one of the most valuable hardwoods in Canada. It is used for furniture, veneer, plywood and vehicle stock. Maple syrup and maple sugar is made from its sap.

DESCRIPTION

LEAVES: Opposite, simple, 3 to 5 lobed with rounded notches, sharp-pointed, coarse-and-irregular-toothed or entire, 3 to 5 inches long; dark green above, paler below.

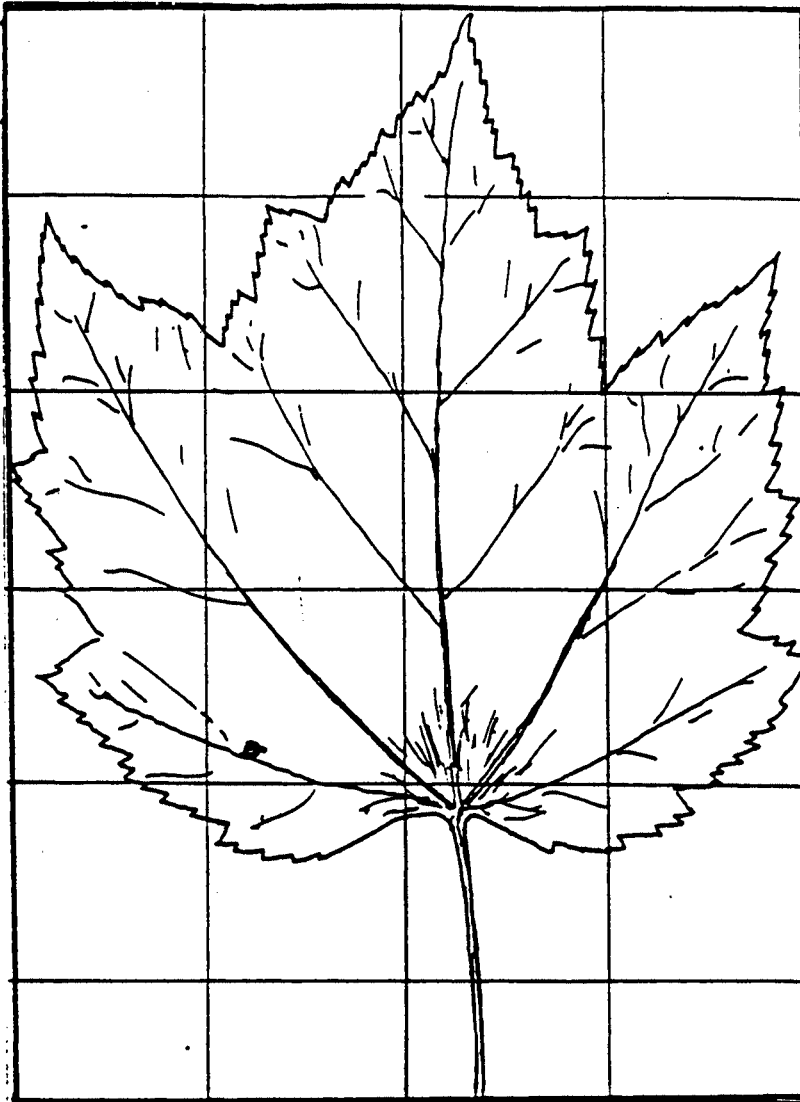
FLOWERS: May, with the leaves; unisexual and bisexual; in small, greenish-yellow clusters.

FRUIT: Autumn; a pair of reddish-brown, terminally, winged samaras, $\frac{3}{4}$ to $1\frac{1}{4}$ inches long, U-shaped, with slightly diverging wings, the seed smooth, about $\frac{1}{4}$ of an inch long; falling after maturity.

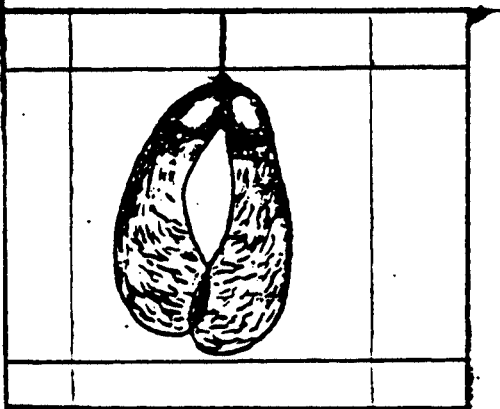
TWIGS: Slender, shiny, reddish-brown. Terminal bud sharp-pointed, $\frac{1}{4}$ to $\frac{3}{8}$ of an inch long, with brown hairy scales; lateral buds similar.

BARK: On young stems, grey, smooth, or slightly furrowed; on old trunks, fissured, somewhat scaly.

WOOD: Heavy, hard, strong, fine-textured, diffuse-porous, pale brown with paler sapwood.

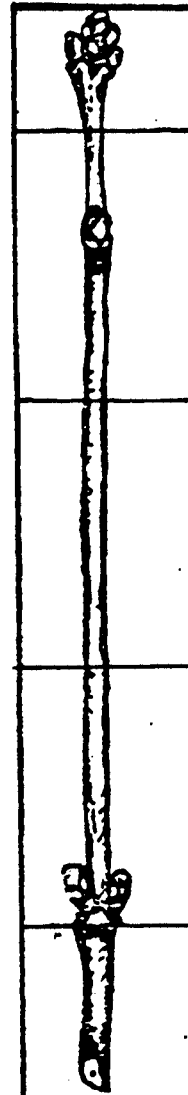


RED MAPLE LEAF



WINGED SEEDS

WINTER TWIG



RED MAPLE

(Botanical Name)-*Acer rubrum* (L.)

Other Common Names:

Soft Maple, Scarlet Maple, Swamp Maple, White Maple, Water Maple.

Red Maple is common throughout the province. It does attain a height of 70 feet and a diameter of 2 to 3 feet on deep moist soils but more rarely it is much smaller. The trunk is long and straight in the forest, short and commonly divided into secondary stems in the open. The main branches are ascending, the smaller branches and twigs spread out and tend to turn up slightly at the ends.

It is mostly found on rich moist lands and along the borders of streams and swamps. It is found in pure stands but more often in mixtures of other hardwoods and softwoods.

The red twigs, winter buds, flowers and fruits, stems of leaves, and in autumn the leaves themselves tend to give the tree its name.

The wood, although not an important commercial timber, is similar to sugar maple and is used for the same purposes, furniture, veneer, plywood and vehicle stock. The tree is often planted as an ornamental.

DESCRIPTION

LEAVES: Opposite, simple, 3- to 5 lobed with V-shaped notches, sharp-pointed, coarse double-toothed, 2 to 6 inches long; light green above, paler below.

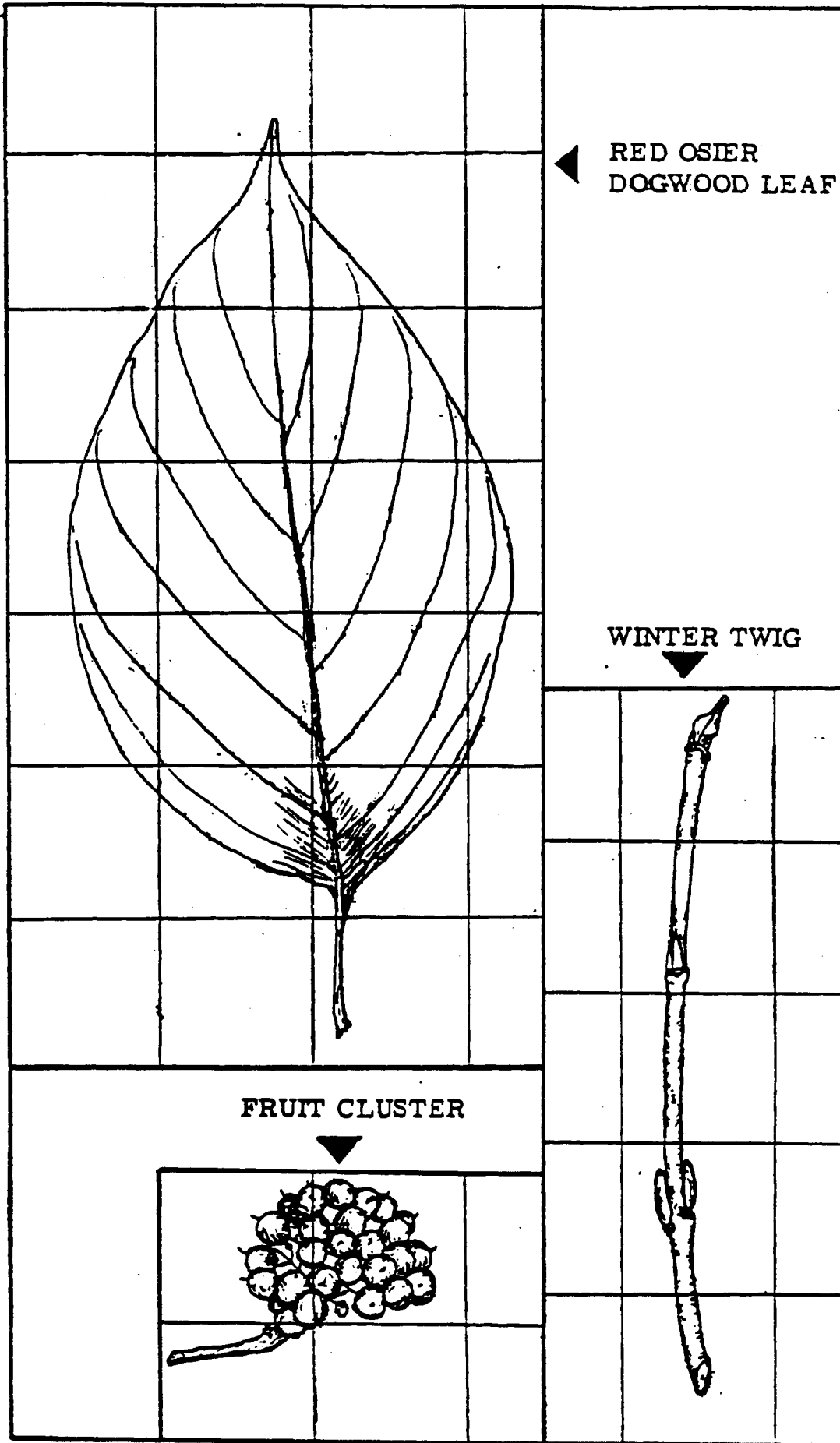
FLOWERS: April-May, before the leaves; unisexual and bisexual; in small red (rarely yellowish) clusters, with petals.

FRUIT: May-June; a pair of red to red-brown, rarely yellowish, terminally winged samaras, $3/4$ to $1\ 1/4$ inches long, the wings diverging slightly; falling at maturity.

TWIGS: Slender, smooth, shiny dark red. Terminal bud dark red, blunt; about $1/5$ of an inch long; lateral buds similar.

BARK: Smooth, light grey or reddish-brown at first; becoming dark grey and breaking into long, narrow, scaly plates.

WOOD: Heavy, relatively hard, not strong, fine textured, diffuse-porous, light brown with white sapwood.



RED-OSIER DOGWOOD

(Botanical Name)-*Cornus stolonifera* (Michx.)

Another Common Name:

Dogwood.

Red-Osier Dogwood is found in damp sites throughout the province. It is a small shrub from three to six feet in height.

The whip-like branches often divide into ascending branches topped with a rounded crown. It spreads by means of underground shoots so that a single plant quickly makes itself into a thicket.

It is found in damp sites along the borders of swamps, streams and brooks, in pure thickets or with speckled alder. It is also found along hedges and fences.

Its deep red twigs, pale green leaves tinged with red and white flowers makes it an ideal shrub for ornamental planting.

The wood is of no commercial importance.

DESCRIPTION

LEAVES: Opposite, simple, ovate, entire, rounded or wedge-shaped at the base, acute at tip, 4 to 6 inches long, dark green, somewhat downy above, paler green or white and somewhat downy below.

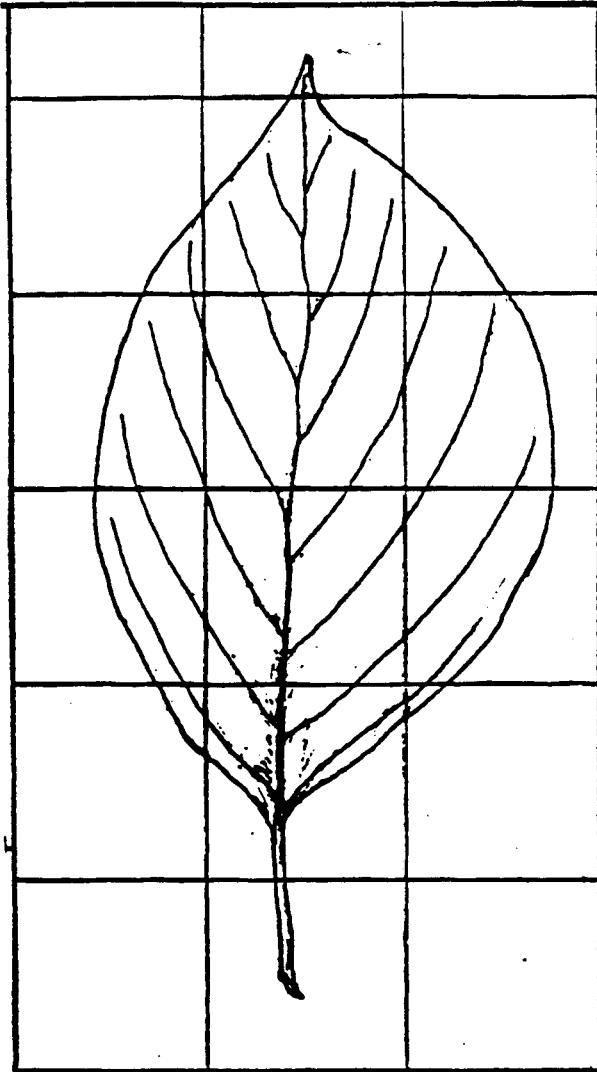
FLOWERS: June-July; perfect, cream-white, borne in flat clusters, one to two inches in diameter; petals four in number; bisexual.

FRUIT: September-October, a white or whitish drupe, about 1/4 of an inch in diameter; stone variable in shape.

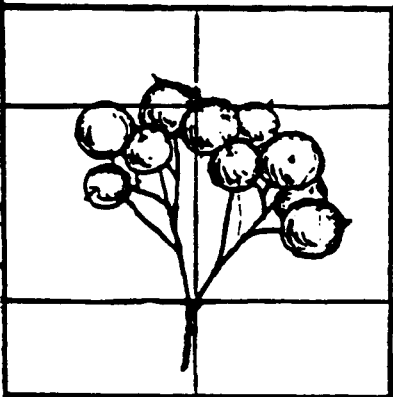
TWIGS: Slender, at first reddish, downy, later dark red. Terminal bud rolled inward slightly, reddish, covered with white hairs above and below; lateral buds similar.

BARK: Smooth, reddish, downy at first; later darker red; in the winter stems become a bright purplish red, smooth and shiny.

WOOD: Light, soft, not strong, fine-textured, diffuse-porous; creamy-white with lighter sapwood.

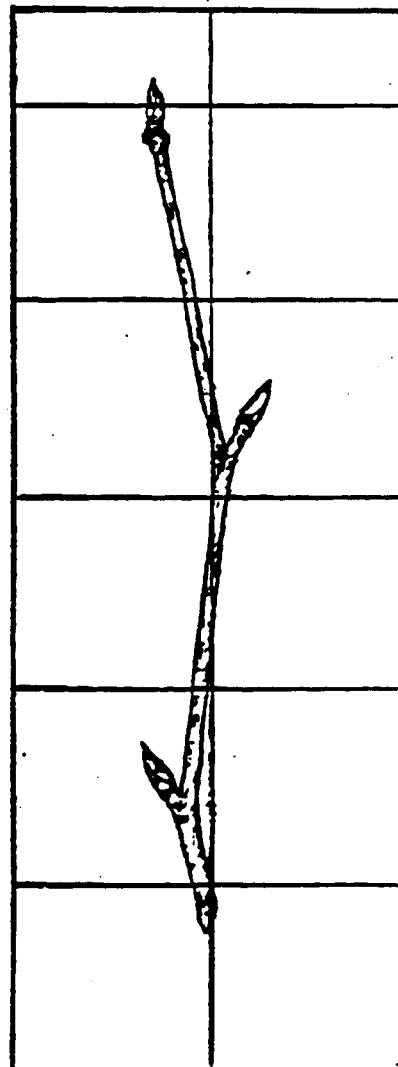


▲
ALTERNATE-LEAVED
DOGWOOD LEAF



▲
FRUIT CLUSTER

WINTER TWIG



ALTERNATE-LEAVED DOGWOOD

(Botanical Name)-*Cornus alternifolia* (L.f.)

Another Common Name:

Dogwood.

Alternate-leaved Dogwood is found scattered throughout the province. It is a shrub or small tree rarely exceeding 30 feet in height with a diameter of 4 inches.

It has a low spreading crown made up of nearly horizontal branches and numerous short smooth upright twigs and branchlets.

It is easily distinguished from the red-osier dogwood by its alternate leaves and its dark green or purplish twigs often streaked with white.

It prefers rich soils and is commonly found on ravine slopes and intervalles.

The wood is of no commercial importance because of its size.

DESCRIPTION

LEAVES: Alternate, simple, ovate, entire, rounded or wedge-shaped at the base, acute at the tip, 4 to 6 inches long, dark green above, paler green and slightly hairy below.

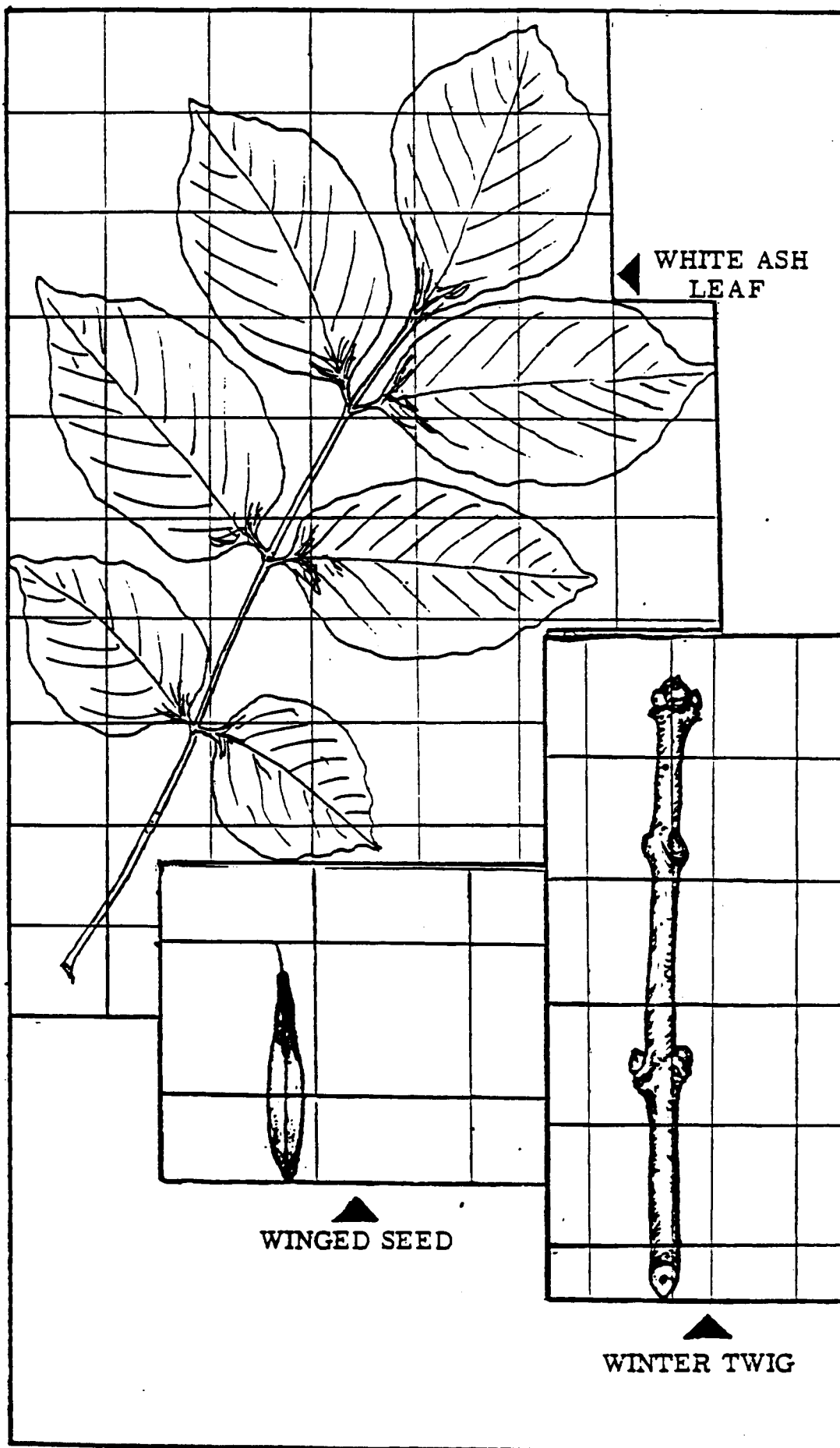
FLOWERS: June-July, cream-colored, borne in flat clusters, 1 1/2 to 2 inches in diameter; petals 4 in number, shaped like a lance.

FRUIT: Autumn, a blue drupe, round about 1/4 of an inch in diameter; stone variable in shape.

TWIGS: Slender, dark green or purplish often streaked with white. Terminal bud 1/8 to 1/4 of an inch long, greenish, slightly pubescent; laterals similar.

BARK: Smooth, green to dark green at first, becoming darker and rougher as it grows old.

WOOD: Light, soft, not strong, fine-textured, diffuse-porous; creamy-white with lighter sapwood.



WHITE ASH

(Botanical Name)-*Fraxinus americana* (L.)

Other Common Names:

Canadian white ash and American ash.

A few scattered white ash still exist throughout P.E.I. They are medium-sized trees around 50 feet in height and rarely exceeding one foot in diameter in this province. The trunk is tall and straight even when grown in the open. The crown is broadly rounded to pyramidal in outline, made up of moderately stout ascending branches.

It grows best on a deep, well-drained soil along streams and on lower slopes, in protected situations. It is found scattered in small groups among other hardwoods.

The wood is valued chiefly for its toughness and resilience, hence, it is used for the framework of light vehicles, in aircraft construction, skis, long handled tools and bentwood construction. The tree is often planted for ornamental purposes.

DESCRIPTION

LEAVES: Opposite, compound, 8 to 12 inches long, composed of 5 to 9 long stalked leaflets borne in pairs on a stout, smooth stem. Leaflets oval to lance-shaped, sharp-pointed, entire or sparsely toothed, 3 to 5 inches long; dark green, smooth above, paler and smooth or slightly hairy below.

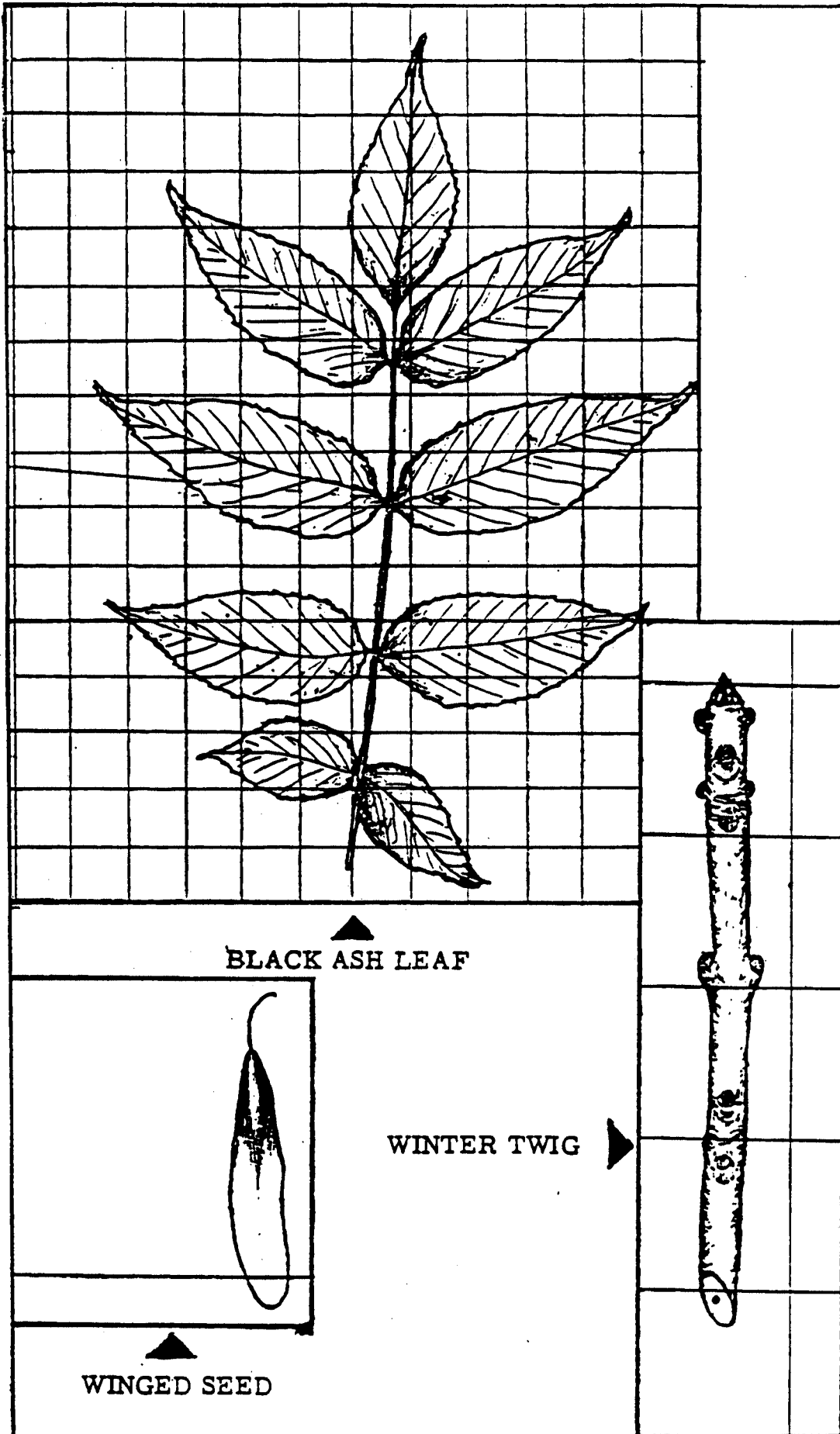
FLOWERS: May-June, before or with the leaves; unisexual; male and female on different trees; borne in stout clusters.

FRUIT: Late summer; an elongated samara, 1 to 2 1/2 inches long, thin wing rarely extending below the top of the seed cavity; often persisting on the tree until well in the winter.

TWIGS: Stout, smooth, shiny, dark green to purplish green. Terminal bud dark brown, slightly downy; lateral buds smaller, the first pair set on the same level as the terminal bud.

BARK: Grey or brownish; on old trunks furrowed into flattened interlacing ridges.

WOOD: Heavy, hard, strong, close-grained, ring-porous; light-brown with paler sapwood.



BLACK ASH

(Botanical Name)-*Fraxinus nigra* (Marsh.)

Other Common Names:

Swamp Ash, Water Ash, Brown Ash and Hoop Ash.

Black Ash is confined to the wet areas of P.E.I. Here it seldom reaches a height of over 50 feet with a diameter of one foot. The trunk is slender and usually extends to the top of the tree. The crown, of slender, mostly upright branches, is narrow and fairly open.

It will not grow in the shade of other trees and is mainly confined to wet sites along rivers and brooks, and the margin of swamps. It grows singly in open stands of eastern white cedar and balsam fir or with red maple and other swamp hardwoods.

It is distinguished from the white ash by its stemless leaflets, dark brown to almost black winter buds and its light grey bark on the twigs.

The wood is not as strong or as hard as that of white ash and is therefore used mainly for decorative purposes, such as interior finish, fixtures and cabinet-work. The wood is valued by the Indians who separate it into long strips and weave these into baskets.

DESCRIPTION

LEAVES: Opposite, compound, 10 to 16 inches long, composed of 7 to 11 stemless leaflets borne in pairs on a stout stem. Leaflets lance-shaped, fine-toothed, 3 to 5 inches long; dark green above, paler, smooth except for tufts of hair along the midvein below.

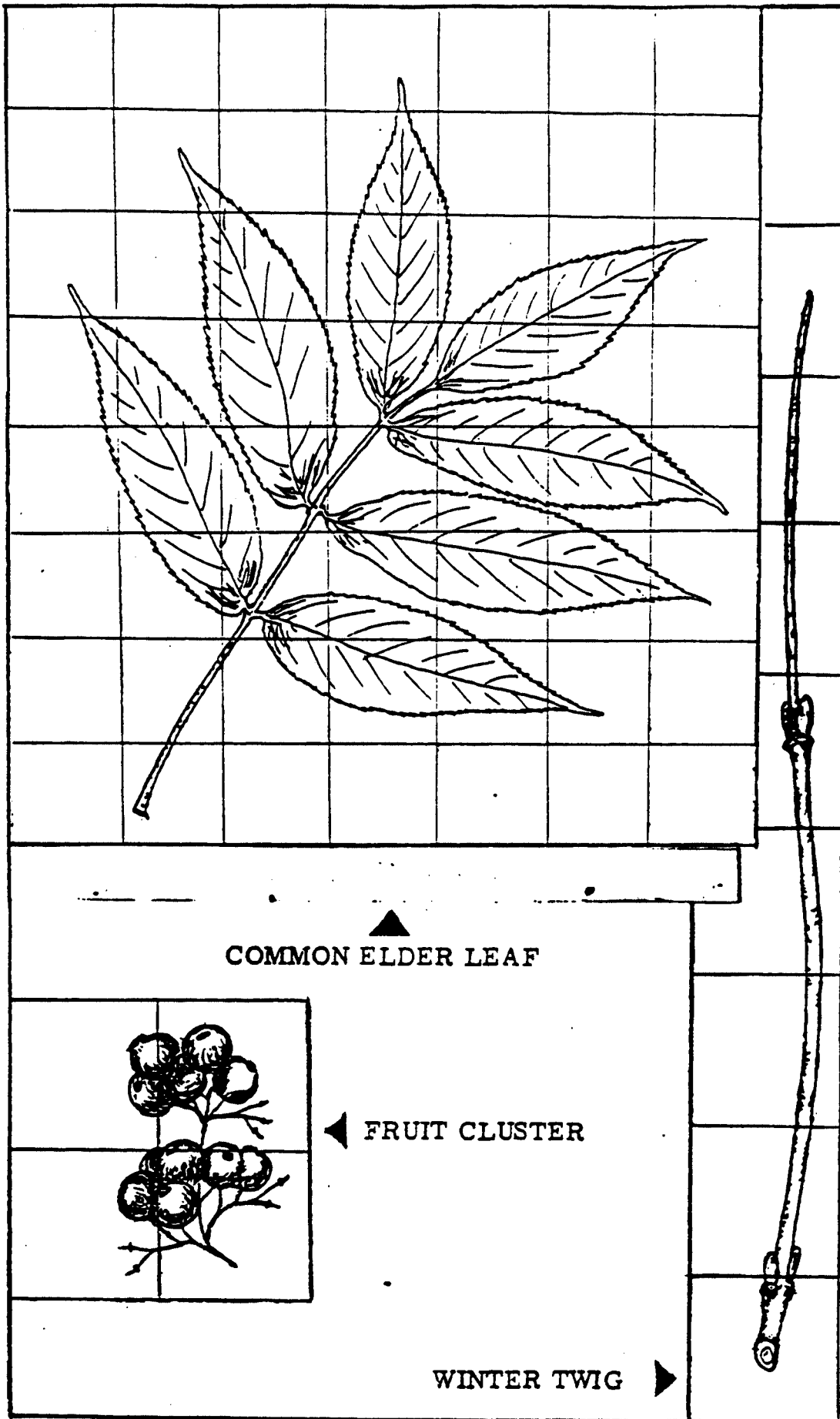
FLOWERS: May-June, before the leaves; unisexual and bisexual, male and bisexual flowers on the same or on different trees.

FRUIT: Early autumn; an oblong samara, 1 to 1 1/2 inches long, the thin wing extending to the base of the seed cavity; shed during the autumn and early winter.

TWIGS: Stout, smooth, light grey. Terminal bud dark brown to almost black; lateral buds smaller.

BARK: On young stems, grey, slightly roughened; on older trunks greyish, scaly, shallow-furrowed into soft ridges.

WOOD: Moderately heavy and hard, not strong, ring porous; dark brown with paler or almost white sapwood.



COMMON ELDER

(Botanical Name)-*Sambucus canadensis* (L.)

Other Common Names:

American Elder, Sweet Elder, Elderberry, White Elder and Blueberried Elder.

The Common Elder is found throughout the province. It is a shrub 5 to 15 feet in height. The stems rise from the ground usually in clumps and extend to the tip of the shrub. The branches are ascending and the crown is generally round-topped.

It prefers moist soils where it reaches its best growth. It is common on the borders of streams and along fences.

The wood is of no commercial importance but the fruit makes very good wine and is also used in pies and puddings.

The shrub is planted as an ornamental. Its showy, sweet-smelling, white flowers and later the multitude of purple berries add measurable to the beauty of the landscape.

DESCRIPTION

LEAVES: Opposite, compound, 5 to 11 inches long, almost stemless leaflets except the terminal. Leaflets are narrow and oblong in shape, wedge-shaped or rounded at base, toothed, often entire towards the base; 1 1/2 to 3 inches long, smooth, dark green above, paler somewhat downy below.

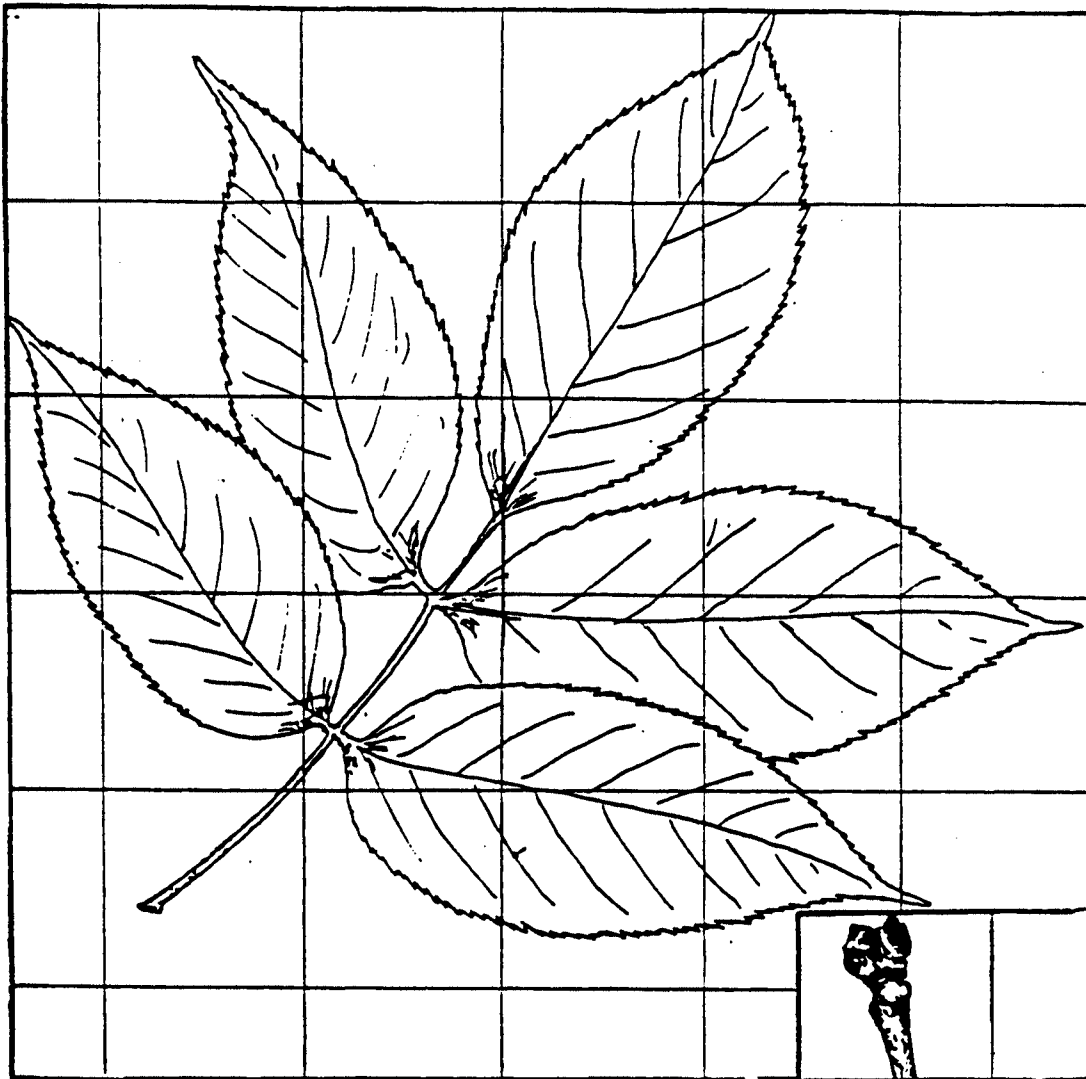
FRUIT: Early autumn, rounded, berry-like about 1/4 of an inch in diameter, dark purple. Flesh crimson with crimson juice; pleasant taste.

FLOWERS: June-August; perfect, cream-white, star-like, 3/8 of an inch across, borne in broad, much-branched, flat-topped clusters.

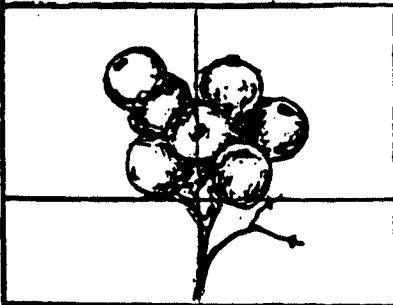
TWIGS: Stout, somewhat angled, shiny, green to yellowish-grey with large whitish pith. No terminal bud; laterals oblong, 1/4 of an inch long, flattened, light green to yellowish-green; one single cap-like scale.

BARK: Pale yellowish at first with more or less bloom, later darker grey with yellow lines, finally dark or yellow-brown. Lenticels prominent.

WOOD: Light, soft, not strong, coarse-grained, diffuse-porous; brownish-yellow with paler sapwood.

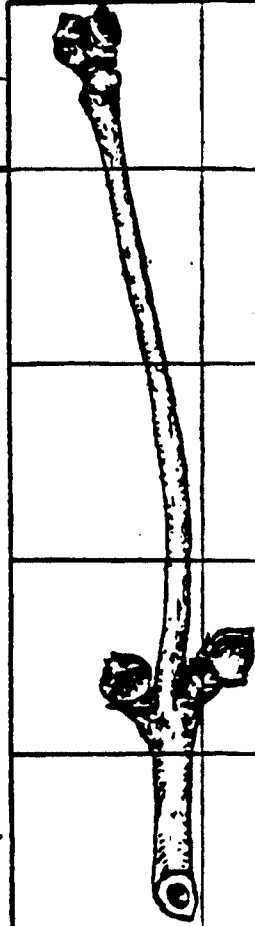


▲
RED-BERRIED ELDER LEAF



◀ FRUIT CLUSTER

WINTER TWIG ▶



RED-BERRIED ELDER

(Botanical Name)-*Sambucus pubens* (Michx.)

Other Common Names:

Elderberry, Elder, Mountain Elder.

The red-berried elder is also common throughout this province. It is a shrub from 2 to 12 feet high. The stems rise from the ground usually in clumps and extend to the top of the shrub.

The branches are ascending and the crown is generally rounded in appearance.

It is common in wet places, rocky hillsides, or along streams or brooks. It also occurs scattered among stands of sugar maple, yellow birch, beech and hemlock.

The wood is of no commercial importance but the cream-white profusion of flowers and later the mass of brilliant scarlet berries makes it an excellent shrub in ornamental planting.

It is easily distinguished from the common elder by its scarlet berries and by its brownish pith.

DESCRIPTION

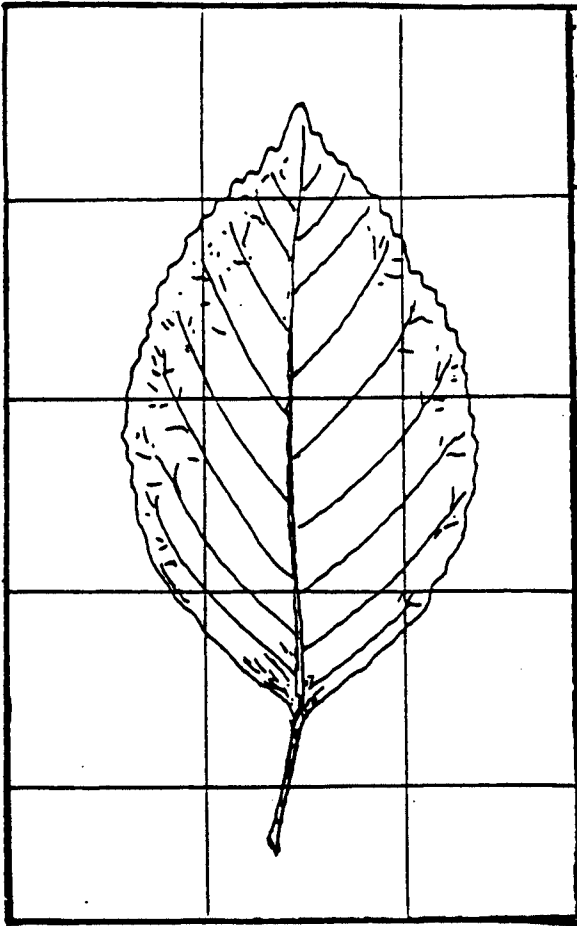
LEAVES: Opposite, compound 5 to 12 inches long; almost stemless leaflets except the terminal. Leaflets 3 to 5 inches long, narrow and often bilateral at base, sharply toothed, acuminate at tip, dark green, nearly smooth above, paler green and downy below.

FLOWERS: April-May; perfect, small, cream-white, borne in pyramidal compound clusters; bisexual.

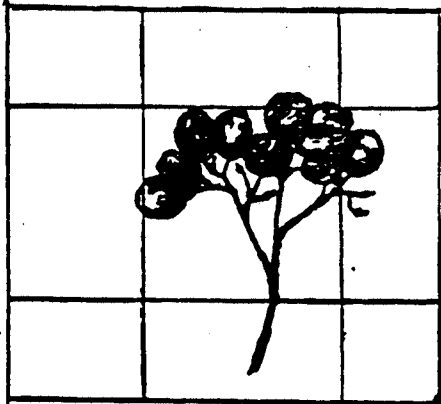
FRUIT: Early summer, rounded, juicy, berry-like about 1/8 of an inch in diameter, brilliant scarlet, containing 3 to 5 nutlets. Flesh yellow and unpleasant to taste.

TWIGS: Stout, somewhat angled, grey to pale brown, pith large, orange to brownish. Buds oval 1/4 to 1/2 inch long, scales pale grey to brownish-purple. No terminal bud, 4 or more scales visible.

BARK: Pale grey, dotted with many brownish lenticels; older stems brown, having a rough and warty appearance.

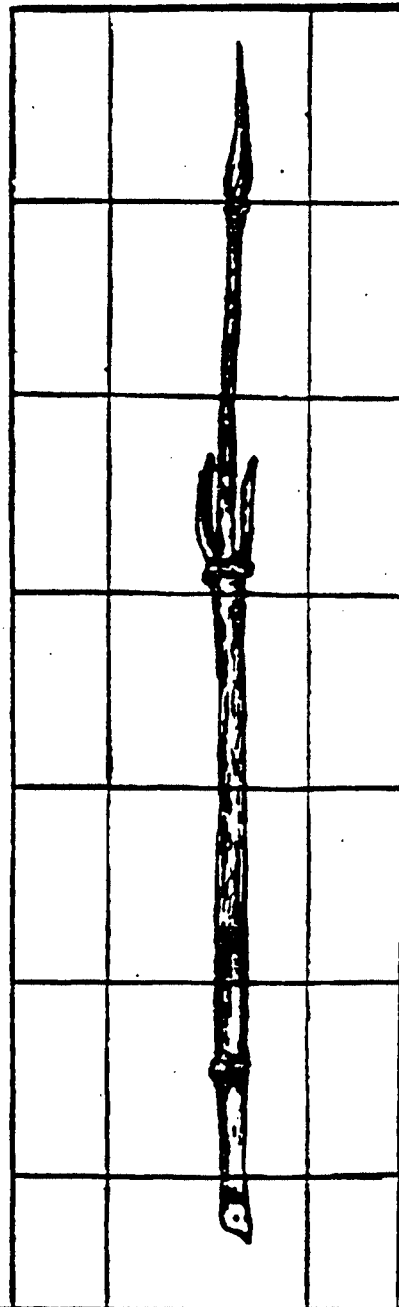


▲
WHITE-ROD LEAF



▲
FRUIT CLUSTER

WINTER TWIG



WITHE-ROD

(Botanical Name)-*Viburnum cassinoides* (L)

Other Common Names:

Wild Raisin, *Viburnum*.

Withe-rod is very common in wooded areas throughout the province. It is a somewhat straggling bush, 2 to 12 feet high and seldom exceeding 1 inch in diameter. Its slender, whip-like branches, are ascending, forming a rounded bushy crown.

It is abundant in swamps, wet barrens open low lands, and in all types of locations from peaty barrens to dry open areas and pastures.

The leaves are thick, leathery and rather dull green; the flowers, cream-white in color, are borne in broad-five rayed clusters 4 to 5 inches across.

They are succeeded by abundant fruit turning from pale green into bright rose and then darkening into blue-black.

The wood is of no commercial importance.

DESCRIPTION

LEAVES: Opposite, simple, oval in outline, narrow or rounded at the base, acute at the tip, thick in texture, dull green, devoid of hairs, 1 1/2 to 2 1/2 inches long.

FLOWERS: June-July, perfect, white, borne in broad flat clusters 2 to 4 inches across.

FRUIT: A drupe, spherical to oval, dark-blue, 1/4 of an inch in diameter, stone round or oval, flattened. Ripens in September.

TWIGS: Slender, smooth to rough, greyish, terminal bud light brown, lance-shaped, 1/3 to 1/2 an inch long, lateral buds similar.

BARK: Light grey, becoming dark grey, with darker patches.

WOOD: Moderately light, weak even-grained, diffuse-porous, creamy-white with lighter sapwood.



Upland Acadian Forest hardwoods - Valleyfield Demonstration Woodlot

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