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ALBERTA TREE & SHRUB IDENTIFICATION GUIDE



Industrial Vegetation Management
Association of Alberta

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ALBERTA TREE AND SHRUB
IDENTIFICATION GUIDE

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ASSOCIATION OF ALBERTA

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TABLE OF CONTENTS

Page

How to Use The Key 1

Glossary of Terms 3

Key 5

Descriptions and Illustrations 16

Trees

Lodgepole Pine (*Pinus contorta* var *latifolia*)..... 16

Jack Pine (*Pinus banksiana*)..... 17

Tamarack/Larch (*Larix laricina*)..... 18

White Spruce (*Picea glauca*) 19

Black Spruce (*Picea mariana*) 20

Balsam Fir (*Abies balsamea*) 21

Alpine Fir (*Abies lasiocarpa*) 21

Aspen Poplar (*Populus tremuloides*) 22

Balsam Poplar (*Populus balsamifera*) 23

Black Cottonwood (*Populus trichocarpa*) 23

White Birch (*Betula papyrifera*) 24

Shrubs

Willow (*Salix* spp.)..... 25

Beaked Hazelnut (*Corylus cornuta*) 26

Swamp Birch (*Betula pumila*) 27

Green Alder (*Alnus crispa*) 28

River Alder (*Alnus tenuifolia*) 29

Bristly Black Currant (*Ribes lacustre*) 29

Wild Gooseberry (*Ribes oxyacanthoides*) 30

Wild Red Currant (*Ribes triste*) 31

Saskatoon (*Amelanchier alnifolia*) 32

Shrubby Cinquefoil (*Potentilla fruticosa*) 33

Pin Cherry (*Prunus pensylvanica*) 34

Choke Cherry (*Prunus virginiana* var. *melanocarpa*) 35

Prickly Rose (*Rosa acicularis*) 36
Common Wild Rose (*Rosa woodsii*)..... 36
Prairie Rose (*Rosa arkansana*) 36
Wild Red Raspberry (*Rubus strigosus*) 37
Wolf Willow (*Elaeagnus commutata*) 38
Canada Buffaloberry (*Shepherdia canadensis*) 39
Red Osier Dogwood (*Cornus stolonifera*) 40
Labrador Tea (*Ledum groenlandicum*) 41
Common Blueberry (*Vaccinium myrtilloides*) 42
Bracted Honeysuckle (*Lonicera involucrata*) 43
Twining Honeysuckle (*Lonicera dioica* var. *glaucescens*) 44
Buckbrush (*Symphoricarpos occidentalis*) 45
Snowberry (*Symphoricarpos albus*) 45
Low Bush Cranberry (*Viburnum edule*) 46
High Bush Cranberry (*Viburnum trilobum*) 47

Herbicide and Mowing Response Chart 48

PREFACE

This manual was prepared as supporting material for the tree and shrub identification lectures at the IVMAA's March 1985 seminar held at Edmonton, Alberta.

Contained in this manual are written descriptions and illustrations of 32 of the most common Alberta trees and shrubs. A key was developed to allow quick and easy access to this material. A chart describing the response of the trees and shrubs to herbicide and mechanical treatment is included.

The manual is intended for supervisors and crew members who are engaged in woody vegetation management work. It is hoped that identification of woody species encountered in the field will result in the proper vegetation management techniques being applied.

ACKNOWLEDGEMENTS

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- The Canadian Forest Service for supplying nine of the illustrations from: Annas, R.M., I.G.W. Corns, G.R. Barth and H. Habgood. 1983. Common forest plants of west-central Alberta. File Report.

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HOW TO USE THE KEY

The key is an aid to help you identify the most commonly occurring *woody* shrubs and young sapling-size trees in Alberta on the basis of *summer* leaf characteristics. In some cases, other obvious features *such as* bark colour and texture, and persistent seed-bearing catkins are *also* mentioned.

On the next page is a master key outlining the organization of the *main* identifying features using a branching network of two contrasting *features*. The following steps will show you how to get the most use *out of* the key:

STEP 1: Start at the top of the chart (Page 2) at the TYPE OF LEAF, *and* then work progressively down the page. You should work with at least three leaf samples taken from various parts of the plant.

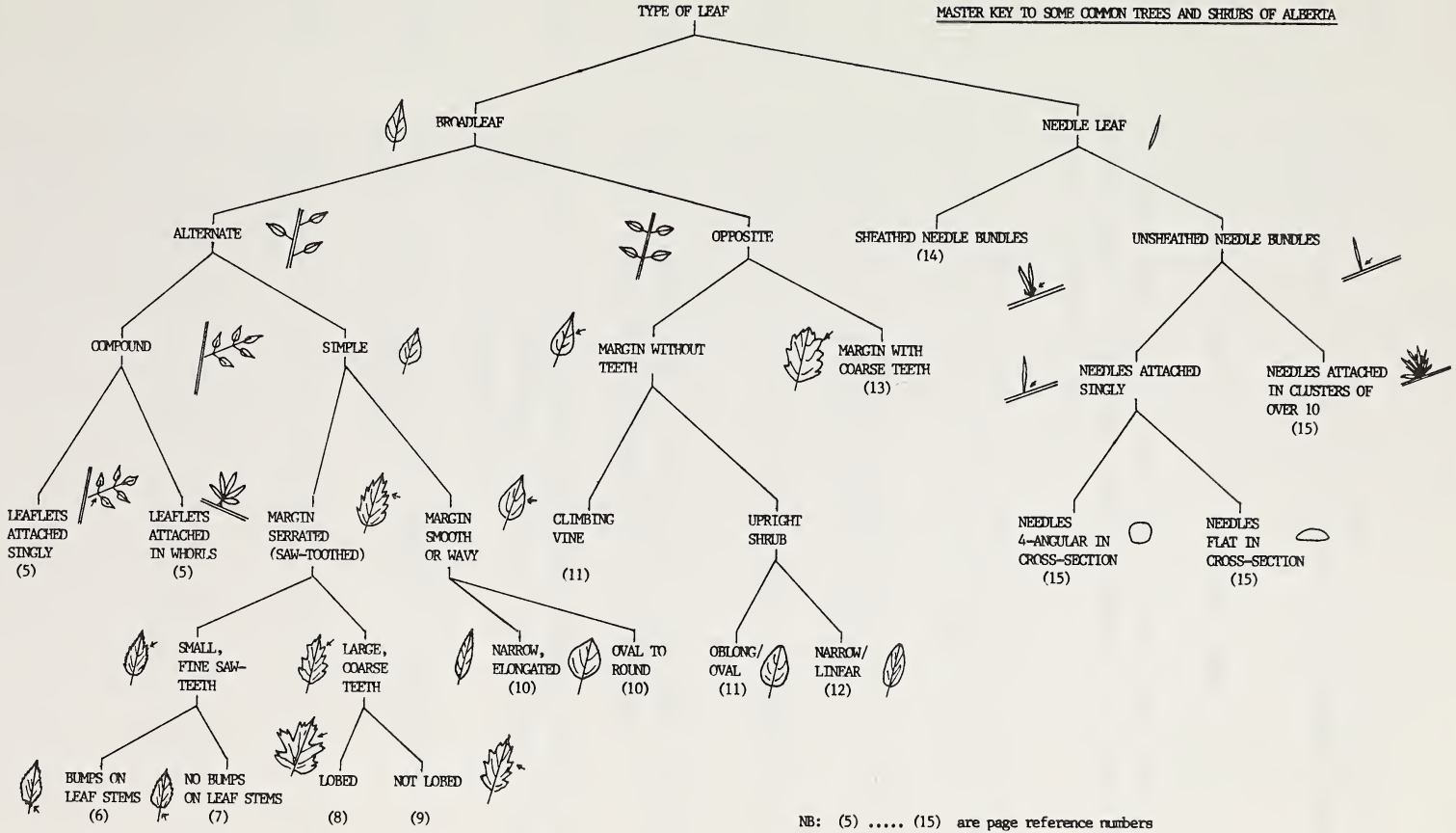
STEP 2: Since trees and woody shrubs in Alberta have either a BROA*DLEAF* character or a NEEDLE LEAF character, this step organizes all the common plants into two groups.

STEP 3: The illustrations beside each feature will guide you as *to the* meaning of the features used. If in doubt about a word meaning, see page 3, the GLOSSARY OF TERMS.

STEP 4: Once you have worked your way through the chart on page 2, *you* will have noticed a page number beneath the last feature in that particular branch of the key. Go to that page in the text and you should see several possibilities as to the identity of the plant. You will also notice that the step-by-step feature identification which you used in the chart on page 2 is reproduced for that particular branch of the key.

STEP 5: Finally you are left choosing among several possibilities *as to* the exact name of the plant you are identifying. Read over each description, and determine which one "fits" best the plant you have.
GOOD LUCK!!

MASTER KEY TO SOME COMMON TREES AND SHRUBS OF ALBERTA



NB: (5) ..... (15) are page reference numbers

GLOSSARY OF TERMS

ALTERNATE — Arrangement of leaves with each leaf stem occurring by itself along the twig and not directly opposite another leaf stem.

BRISTLY — Many fine, slender spines on twigs and stems.

CATKINS — A scaly, seed-bearing fruiting structure resembling small "pine cones"; persistent catkins stay on the twigs for at least two growing seasons.

COMPOUND — A leaf which is made up of several smaller leaflets; each leaflet is attached to a common central leaf stem.

GLANDS — One or two small, resin-producing "bumps" prominently raised on the leaf stem near the leaf base.

LEAF BASE — That portion of the leaf blade which is attached to the leaf stem.

LEAF BLADE — The flattended, broad portion of the leaf. The leaf blade and leaf stem comprise the entire leaf.

LEAF SHAPE — An overall description of the outer edge or margin of the leaf; can be described as round, oval, oblong, linear, elongated or spatula-shaped.

LEAF STEM — Often referred to as the "petiole"; attaches the leaf blade to the woody twig.

LEAF TIP — That portion of the leaf blade furthest away from the leaf base.

LEAFLET — One of several "leaves" compromising a compound leaf; each leaflet is attached to a common leaf stem.

LOBED	A particular leaf shape in which the margin is prominently indented creating major leaf divisions or lobes.
MARGIN	The edge of the leaf blade usually described as either smooth, wavy or prominently toothed ("serrated").
NEEDLE LEAF	A leaf feature common to most conifer "evergreen" trees and woody shrubs in which the leaf is needle-shaped or extremely slender and elongated.
OPPOSITE	Arrangement of leaves in which two leaf stems occur directly opposite each other along the twig.
PRICKLY	Relatively few, very sharp, thick spines having widened bases at their point of attachment on twigs and stems.
SERRATED	Margin feature of leaves in which the edge has prominent saw teeth; can be described as fine, coarse, double or irregular.
SHEATHED	Applies to needle bundles or clusters in which the base of the bundle is enclosed in a fine, clear membrane. This is characteristic of all pine trees in Alberta.
SIMPLE	Applies to a single leaf which is attached directly to a woody twig.
SPATUALA-SHAPED	Leaf shape in which the widest part of the leaf blade is closest to the leaf tip. The tip is abruptly pointed while the leaf blade gradually tapers to a round or oval base.
UNSHEATHED	Description of needle bundles whose bases are not enclosed by a fine membrane sheath.
VEIN	Prominent lines on the leaf blade which may be raised, flat or grooved.
WHORL	An arrangement of three or more leaves or leaflets around a common point on the twig or leaf stem respectively.



BROADLEAF

ALTERNATE





COMPOUND

LEAFLETS ATTACHED SINGLY, WOODY STEM PRICKLY OR BRISTLY



1. 3 TO 5 LEAFLETS, CRINKLY TEXTURE; STEM BRISTLY:

   WILD RED RASPBERRY P. 37

2. 5 TO 7 (USUALLY 7) LEAFLETS, NO CRINKLY TEXTURE; STEM PRICKLY

   PRICKLY ROSE P. 36

LEAFLETS ATTACHED IN WHORLS, WOODY STEM NOT PRICKLY



1. 5 TO 7 LEAFLETS, VELVETY TEXTURE:

   SHRUBBY CINQUEFOIL P. 33



BROADLEAF



ALTERNATE



SIMPLE



MARGIN SERRATED
(SAW-TOOTHED)



SMALL, FINE SAW-TEETH



PROMINENT BUMPS (GLANDS) ON LEAF STEM

LEAF LINEAR, NARROW SHAPE



1. LEAF STEM RED ABOVE, LEAF TIP SHARP-POINTED:

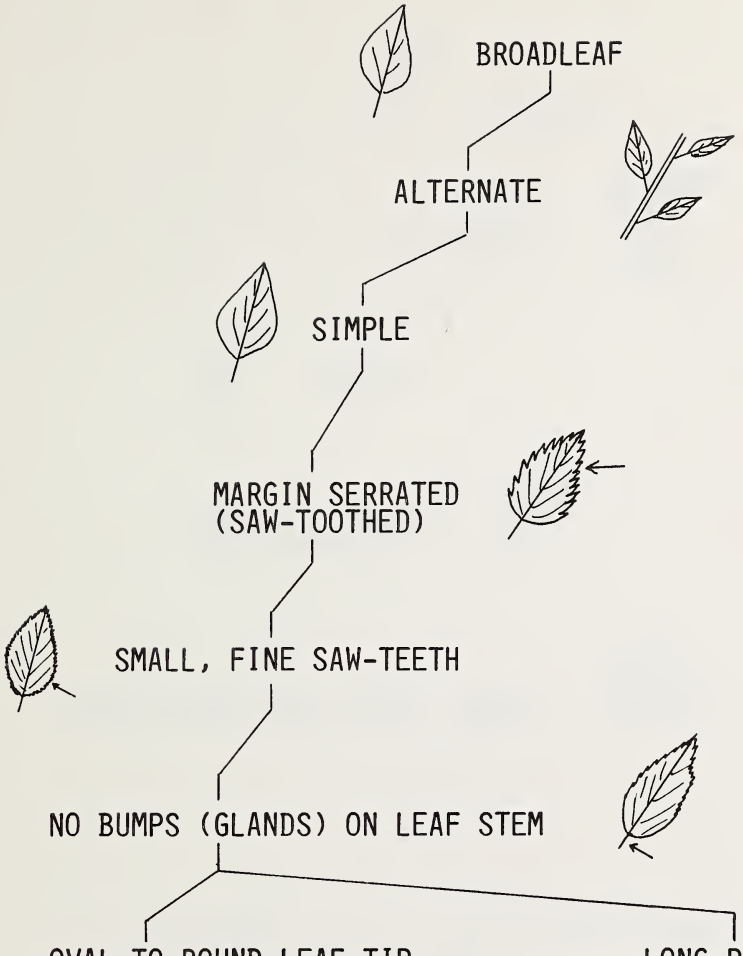
PIN CHERRY P. 34

LEAF SPATULA-SHAPED



1. LEAF STEM GREEN, ABRUPT SHARP-POINTED LEAF TIP, LEAF IS USUALLY QUITE THICK:

CHOKE CHERRY P. 35



1. IRREGULAR TEETH TOWARDS LEAF TIP, ROUND LEAF BASE, 2" LONG:

   SASKATOON P. 32

2. FINE TEETH ALONG MARGIN, OVAL LEAF 1" LONG, VERY SHORT LEAF STALKS:

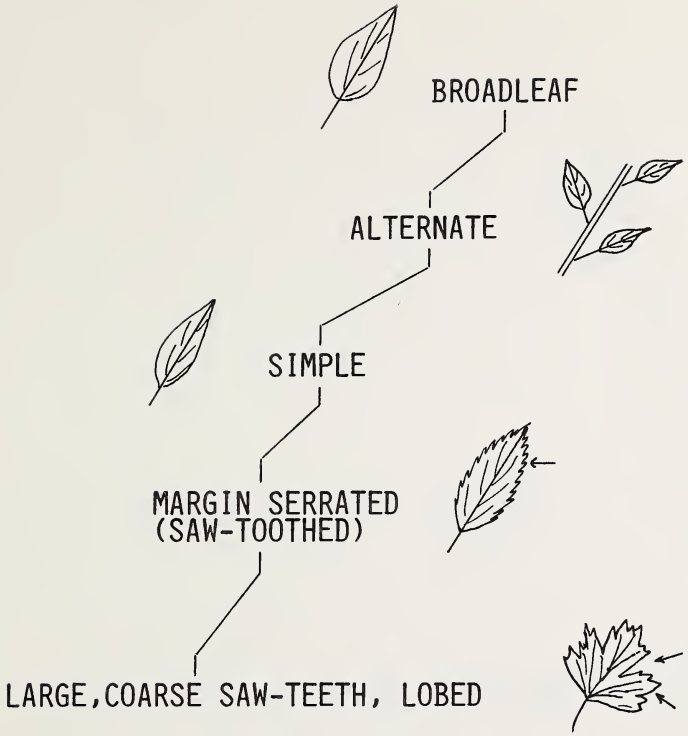
   BLUEBERRY P. 42

1. DOUBLE SAW-TEETH ON MARGIN, PROMINENT VEINS, OVAL SHAPE; CATKINS COARSE, DARK-BROWN-GREY IN COLOUR:

   GREEN ALDER P. 28

2. IRREGULAR SAW-TEETH, OVAL SHAPE; CATKINS FINE, LIGHT STRAW-BROWN IN COLOUR ATTACHED SINGLY OR IN 2'S OR 3'S:

   BEAKED HAZELNUT P. 26



1. 5 PROMINENT LOBES, 3 TO 5 COARSE TEETH PER LOBE; WOODY STEM PROMINENTLY BRISTLY:

   WILD GOOSEBERRY P. 30

2. 3 PROMINENT AND 2 LESS PROMINENT LOBES, MANY COARSE TEETH PER LOBE; WOODY STEM NOT PRICKLY:

   WILD RED CURRANT P. 31

3. 3 PROMINENT AND 2 LESS PROMINENT LOBES, FEW COARSE TEETH PER LOBE; WOODY STEM BRISTLY WITH SEVERAL LARGE PRICKLES AT LEAF AND TWIG ATTACHMENT POINTS:

   BRISTLY BLACK CURRANT P. 29



BROADLEAF



ALTERNATE



SIMPLE



MARGIN SERRATED
(SAW-TOOTHED)



LARGE,COARSE SAW-TEETH, NOT LOBED

LEAF ALMOST ROUND SHAPE



1. IRREGULAR ROUNDED TEETH ON MARGINS, PROMINENT WHITE DOTS (RESIN-GLANDS) ON DARK STEMS:

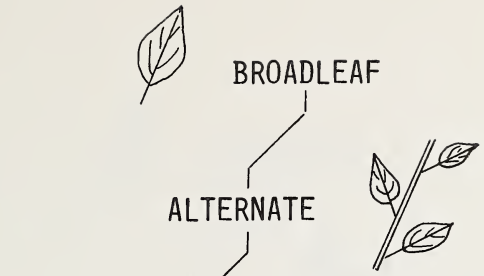
SWAMP BIRCH P. 27

LEAF OVAL SHAPE



1. TAPERED POINT AT LEAF TIP, HEART-SHAPED LEAF BASE USUALLY WITHOUT TEETH; SCALY PURPLE-RED TO WHITE THIN BARK:

WHITE BIRCH P. 24



BROADLEAF

ALTERNATE



SIMPLE

MARGIN SMOOTH OR WAVY



LEAF ELONGATED, NARROW



1. WILLOW P. 25

LEAF ROUND TO OVAL



LEAF SILVER - GREEN BOTH SIDES, OVAL SHAPE

1. WOLF WILLOW P. 38

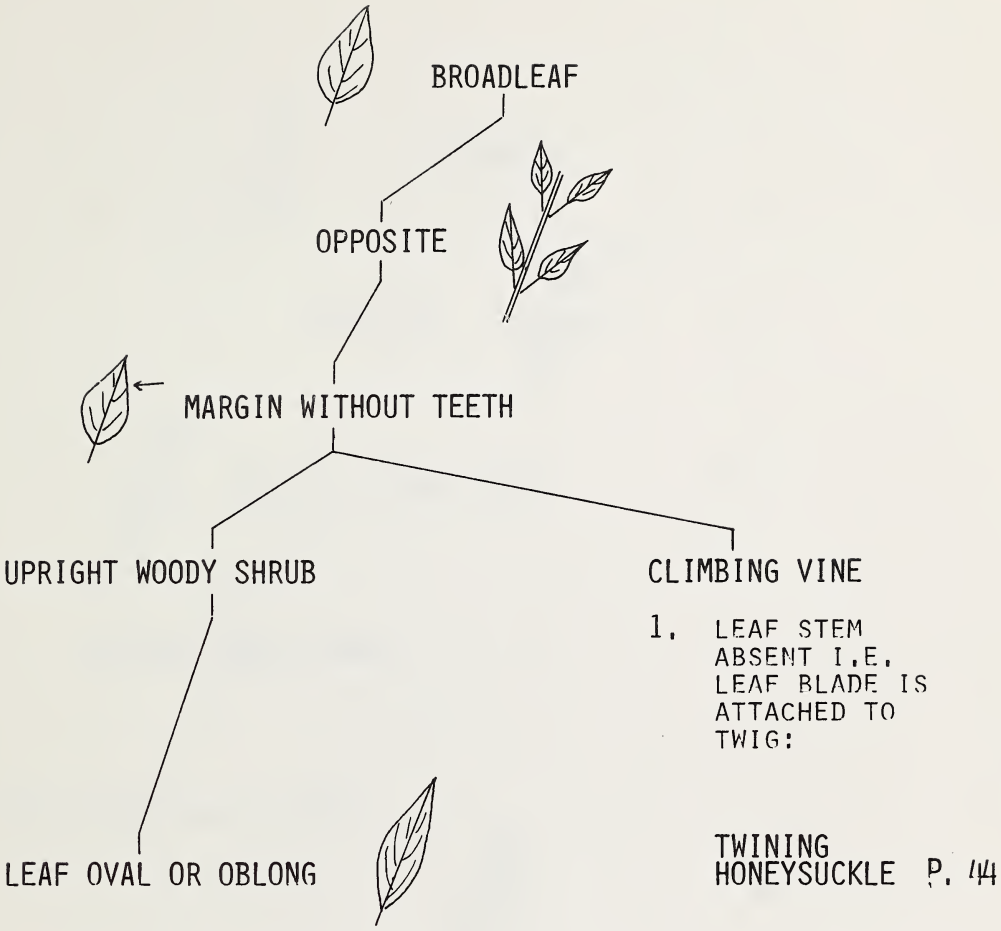
LEAF NOT SILVER COLOURED

1. LEAF ALMOST ROUND SHAPE, SHARP-POINTED TIP, LEAF STEM SENDER AND FLATTENED:

   ASPEN POPLAR P. 22

2. LEAF OVAL SHAPE, FINE CURVED "TEETH" ON MARGIN, LEAF STEM STOUT AND ROUND, DISTINCT RUST-COLOURED RESIN PATCHES UNDERNEATH:

   BALSAM POPLAR P. 23



1. LEAF LARGE, OVAL, BROADLY SHARP-POINTED, PROMINENT ARCHING VEINS CURVING TOWARDS TIP; RED-PURPLE STEMS:

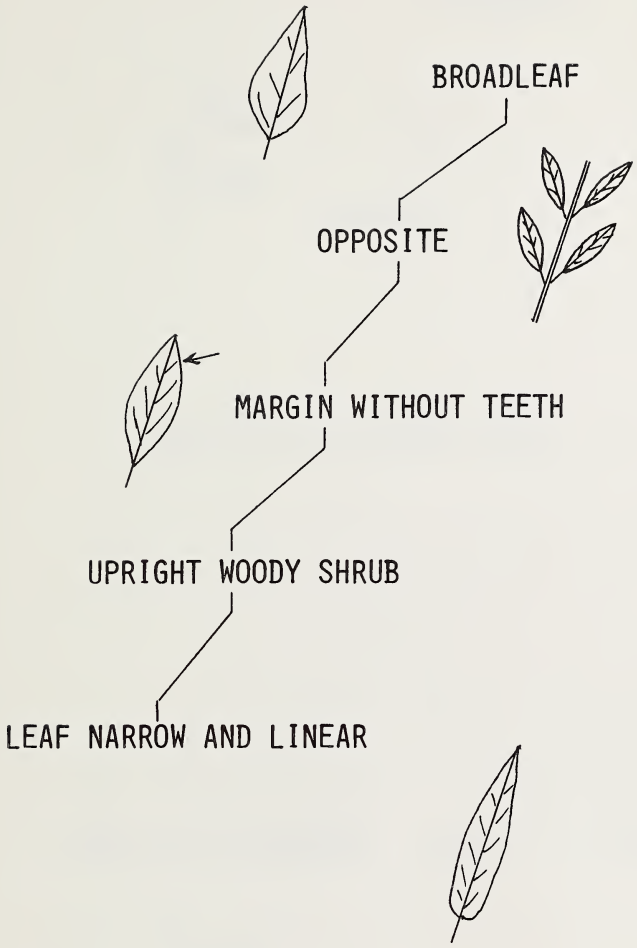
   RED OSIER DOGWOOD P. 40

2. LEAF SMALL, OVAL TO OBLONG, THICK AND LEATHERY, WOOLLY UNDERNEATH:

   BUCKBRUSH P. 45

3. LEAF LARGE, OVAL TO OBLONG, SLIGHTLY WOOLLY UNDERNEATH WITH PROMINENT MID-VEIN, VERY SHORT LEAF STEM:

   BRACTED HONEYSUCKLE P. 43

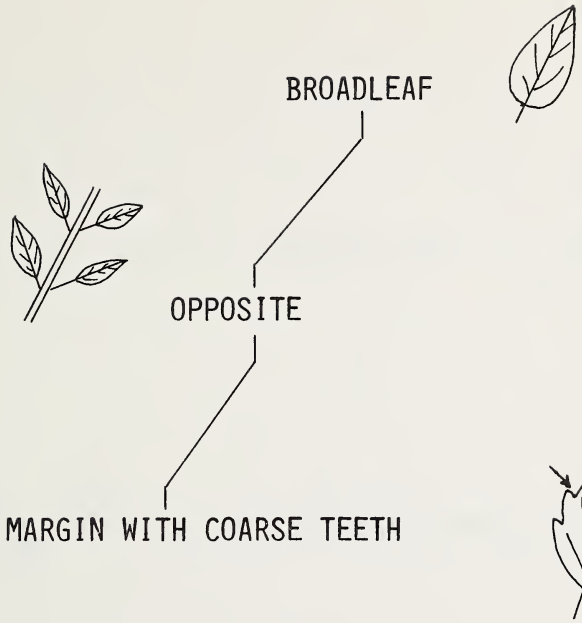


1. LEAF OLIVE TO SILVER COLOURED BOTH SIDES, FINE HAIRS UNDERNEATH:

   CANADA BUFFALOBERRY P. 39

2. LEAVES OCCUR AS WHORLS ON TWIG, LEATHERY TEXTURE, CURLED MARGINS, ORANGE-BUFF TO RUSTY-BROWN COLOURED UNDERNEATH:

   LABRADOR TEA P. 41

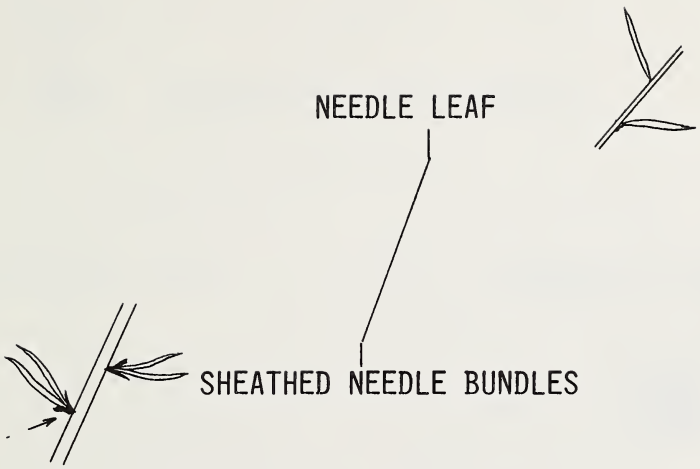


1. LEAF DEEPLY 3-LOBED:
HIGH BUSH CRANBERRY P. 47



1. LEAF SHALLOWLY 3-LOBED
LOW BUSH CRANBERRY P. 46





1. BUNDLES OF 2 NEEDLES, STRAIGHT TO SLIGHTLY TWISTED:
   JACK PINE P. 17

2. BUNDLES OF 2 NEEDLES, SPIRAL AND PROMINENTLY TWISTED:
   LODGEPOLE PINE P. 16



NEEDLE LEAF



UNSHEATHED NEEDLE BUNDLES

NEEDLES ATTACHED SINGLY

NEEDLES ATTACHED IN CLUSTERS OF OVER 10



1. SOFT, FLAT NEEDLES, 1 IN. LONG APPROX.

LARCH OR TAMARACK P. 18

NEEDLES 4-ANGULAR IN CROSS-SECTION



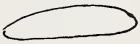
1. APPROX ½ IN. LONG NEEDLES, BLUNT TIPPED, STIFF; FINE RED HAIRS OFTEN PRESENT ON TWIG:

BLACK SPRUCE P. 20

2. APPROX 1 IN. LONG NEEDLES, SHARP-POINTED, STIFF PRODUCING STRONG AROMATIC ODOUR WHEN CRUSHED:

WHITE SPRUCE P. 19

NEEDLES FLAT IN CROSS-SECTION



1. APPROX 1 IN. LONG NEEDLES, BLUNT TIPPED, WHITE BANDS UNDERNEATH:

BALSAM FIR P. 21

Trees

Lodgepole Pine

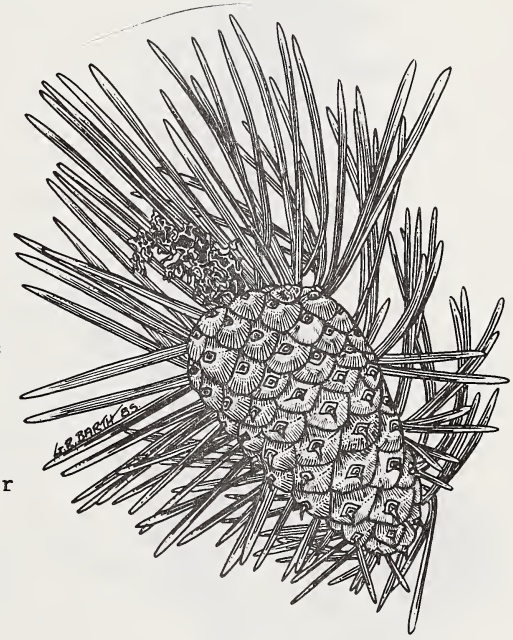
(Pinus contorta* var. *latifolia)

TREE - Tall, slender evergreen with little taper and straight trunk. **Bark** orange-brown, somewhat scaly, less than 2 cm (1/2 in.) thick. **Branches** curve upwards, self pruning in pure stands.

SIZE - 20-30 m (65-100 ft.) high. 30-45 cm (12-18 in.) in diameter.

LEAVES - Needle-shaped in bundles of 2, 2.5-8 cm (1-3 in.) long, spirally twisted, stiff, very sharp pointed, yellowish-green, forms dense cluster towards the ends of twigs.

CONES - Short-cylindrical to egg-shaped, curved away from branch, 2-5 cm (1-2 in.) long, remain on trees for many years. **Scales** armed with a small prickle.



DISTRIBUTION - Grows on a wide variety of sites. It is abundant in the Rocky Mountains and foothill regions. Prefers to grow in well drained sandy soils in the western parts of the province.

Jack pine and lodgepole pine hybridize freely where the ranges of these 2 species overlap in central Alberta.

Trees

Jack Pine

(Pinus banksiana)

TREE - Small shrubby evergreen on open sites, somewhat taller in dense stands. **Bark** reddish-brown with irregular scaly ridges. Lower **branches** wide spreading.

SIZE: - 5-20 m (16-65 ft.) high.

LEAVES - Needle-shaped in bundles of 2, generally divergent, 2-5 cm (3/4 - 2 in.), yellowish-brown.

CONES - Conical, 3-5 cm (1-2 in.), long, strongly incurved, generally in pairs, directed towards the tip of the branch, without prickles.

DISTRIBUTION - Common on sandy and gravelly sites in central and northern Alberta.

NOTES - Lodgepole pine and jack pine hybridize freely where the ranges of these 2 species overlap in central Alberta.



Trees

Tamarack/Larch

(Larix laricina)

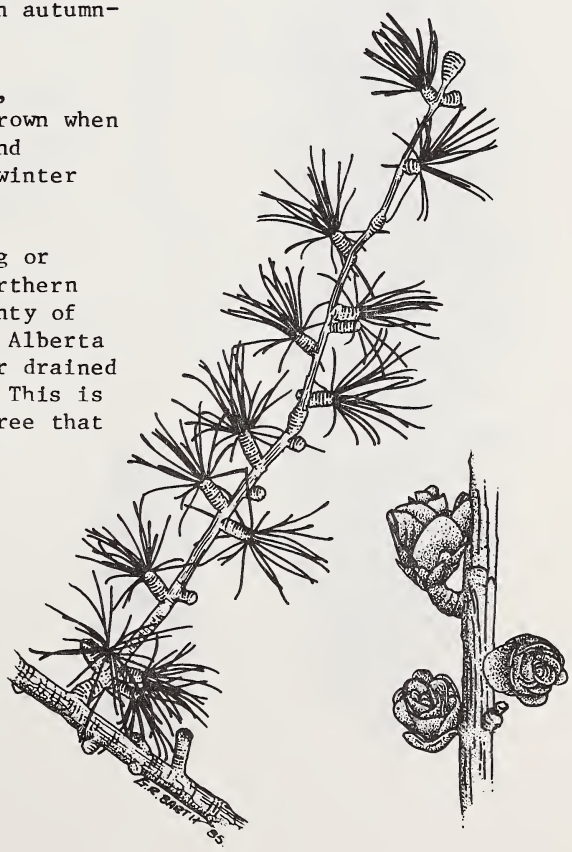
TREE - Slender with a straight trunk having little taper. **Bark** thin, smooth, grey when young becoming dark reddish-brown and scaly when older. **Branches** curved slightly downwards.

SIZE - 20 m (65 ft.) high. 30-60 cm (1-2 ft.) in diameter.

LEAVES - Needle-shaped in feather-like clusters of 10-20, 2-4 cm (3/4 - 1 1/2 in.) long, soft, flexible, pale green turning bright yellow in autumn- Sheds **leaves** in autumn.

CONES - 1.5 cm (1/2 in.) long, reddish when young becoming brown when mature. Open in the autumn and persists on tree through the winter and following summer.

DISTRIBUTION - Found in muskeg or swamp areas in central and northern Alberta where it receives plenty of needed sunlight. In northern Alberta it can also be found on better drained sites such as valley slopes. This is the only coniferous Alberta tree that sheds its leaves each fall.



Trees

White Spruce

(Picea glauca)

TREE - Dense evergreen with straight tapered trunk. **Bark** scaly, thin, grey to ashy brown. **Branches** horizontal.

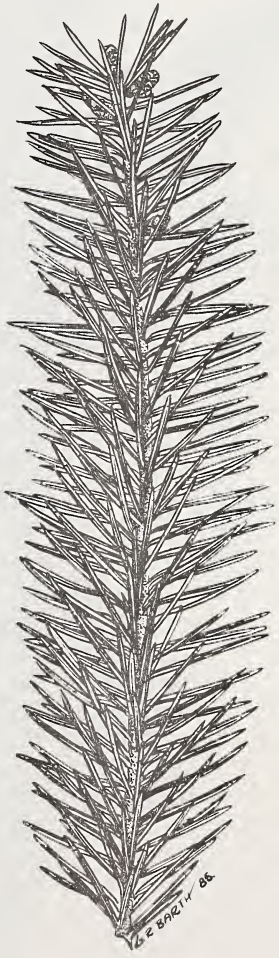
SIZE - Averages 25 m (80 ft.) high, 65 cm (2 ft.) in diameter. Under favorable conditions 40 m (130 ft.) high, 130 cm (4 ft.) in diameter.

LEAVES - Needle-shaped. 4-sided, 2-3 cm (1-1 1/4 in.) long, straight, stiff, sharp pointed, bluish-green, aromatic when crushed.

CONES - Cylindrical shaped, 4-5 cm (1 1/2-2 in.) in length, at the ends of twigs, yellow when young turning brown when mature, smooth margins. **Cones** open in the autumn and drop during the winter or spring.

DISTRIBUTION - Found in a variety of soil types and climatic regions and is common throughout south-central, central, and northern Alberta.





Trees

Black Spruce

(Picea mariana)

TREE - Dense evergreen with a straight trunk. **Bark** thin, greyish-brown and scaly. **Branches** upturned at ends forming a distinctive club-like shape at the crown.

SIZE - Usually slow growing, 10 m (35 ft.) high, 25 cm (10 in.) in diameter. Under favourable conditions 30 m (100 ft.) high, 92 cm (36 in.) in diameter.

LEAVES - Needle-shaped, 4-sided, 1-2 cm (1/2-3/4 in.) long, straight, thick, stiff, blunt, blueish green in colour.

CONES - Spherical, 2-3 cm (1/2-1 1/2 in.) in length, purplish to dark brown. **Cones** usually several in a cluster and retained for one or more years.

DISTRIBUTION - Most common in swamp areas or muskegs throughout central and northern Alberta.



Trees

Balsam Fir

(Abies balsamea)



TREE - Symmetrical with narrow conical crown. **Bark** smooth, pale grey and blistered on young trees, rough scaly and brown on older trees. **Branches** horizontal in two rows.

SIZE - 18 m (60 ft.) high. 45 cm (1 1/2 ft.) in diameter.

LEAVES - Needle-shaped, flattened, 2-3 cm (3/4-1 1/4 in.) long, bent upward, rounded or blunt tipped, dark shiny green surface and whitish underside.

CONES - Oval or oblong, 5 to 10 cm (2-4 in.) long, dark purple.

DISTRIBUTION - Common tree in north-eastern Alberta which has adapted to a variety of soils and climates.

NOTES - Alpine fir ***(A. lasiocarpa)***, a mountain species, is a similar in apperance to balsam fir. It is larger, 25 m (76 ft.) high, and its leaves are greyish-green to pale blue-green. Alpine fir is mainly distinguishable from balsam fir by slight differences in their cones.

Trees

Aspen Poplar

(Populus tremuloides)

OTHER NAMES - Trembling Aspen

TREE - Slender with a long straight cylindrical trunk, and rounded crown. **Bark** smooth, greenish-white on young trees becoming blackened and furrowed near base on older trees. **Branches** restricted to tops on mature trees.

SIZE - Averages 20 m (65 ft.) high, 25 cm (10 in.) in diameter.

LEAVES - Alternate simple, rounded, abruptly pointed at tip, 4-6 cm (1 1/2-2 1/2 in.) wide. **Teeth** on margin fine, irregular, rounded. **Leaf stem** slender flattened, usually longer than the leaf-blade, shiny deep green on top, paler under.

FLOWERS - Small hairy droping catkins appear before the leaves.

FRUIT - Small green capsules in catkins, which split when ripe to form a cotton mass.



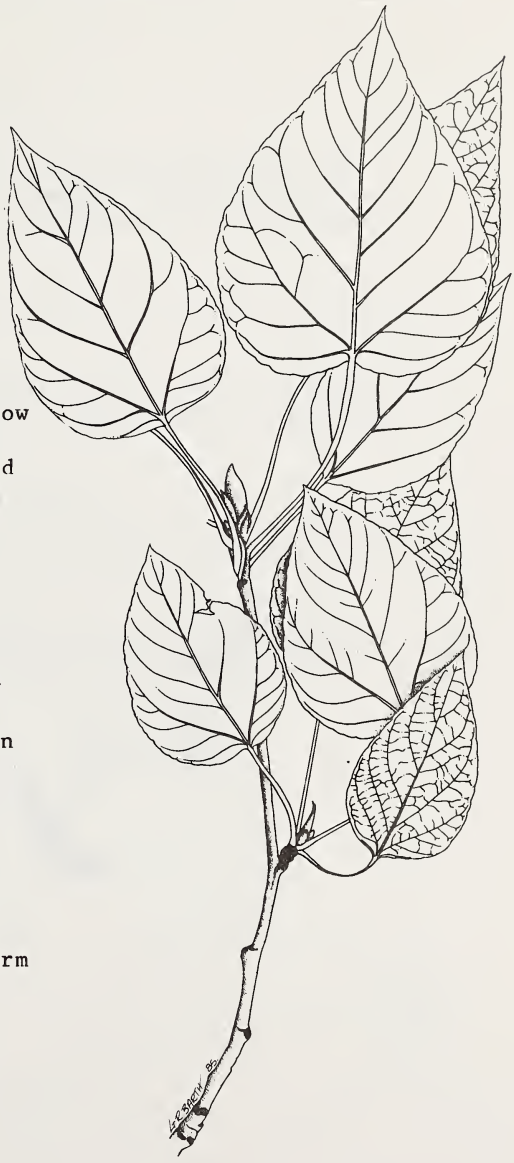
DISTRIBUTION - Very common and widespread throughout forested regions, but grows best in well drained soils.

NOTES - Leaves tremble with slight breezes because of flattened leaf stems. This tree suckers freely when the trunk is cut or damaged. Root suckering is the primary method of propagation.

Trees

Balsam Poplar

(Populus balsamifera)



OTHER NAMES - Black poplar,

TREE - slender with a long straight cylindrical trunk and narrow crown. **Bark** light grey and smooth on young trees, dark grey and furrowed on mature trees. **Branches** stout, up-pointing.

SIZE - Averages 20 m (65 ft.) high. 40 cm (16 in.) in diameter.
LEAVES - Alternate, simple, egg-shaped, tapering to a sharp-pointed tip. 8-15 cm (3-6 in.) long, shiny deep green surface, whitish-green underside sometimes with rusty brown resin stains. **Teeth** on margin fine, irregular rounded.

FLOWERS - Small drooping catkins appear before the leaves.

FRUIT - Small, green capsules in catkins which split when ripe to form cotton mass.

DISTRIBUTION - Common. Grows best on rich, moist soils and low lying terrain.

NOTES - A similar species called Black Cottonwood ***(P. trichocarpa)*** is found in the western parts of the province. Balsam Poplar suckers freely, especially when the main trunk is cut or damaged.

White Birch

(Betula papyrifera)

OTHER NAMES - Paper birch, canoe birch.

TREE - Small to medium sized. **Crown** oval when associated with other trees, pyramidal in the open. **Branches** slender, twisted, pebbled, reddish-brown. **Bark** smooth, reddish-brown turning white with age, peels easily.

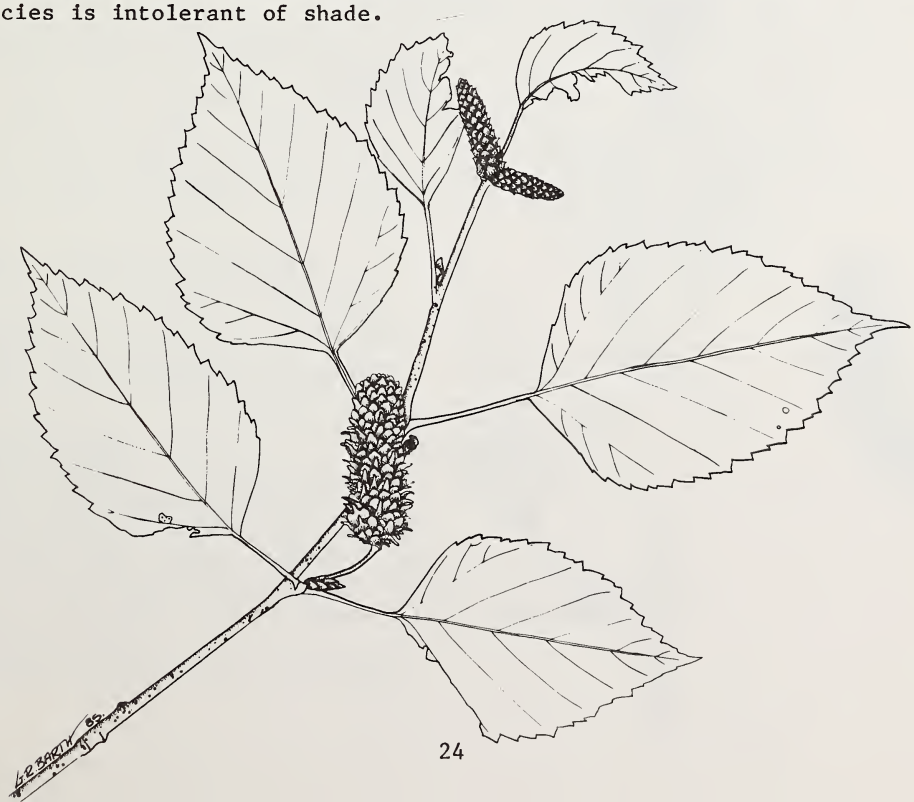
SIZE - Averages 6.5-15 m (20-50 ft.) high, 20-30 cm (8-13 in.) in diameter.

LEAVES - Alternate, simple, egg-shaped, 2-9 cm (3/4- 3 1/2 in.) long, dull green upper surface, paler, slightly hairy underside. **Margins** toothed except near the base.

FLOWER - Drooping, greenish-brown catkins.

FRUIT - Conelike catkins, 2-4 cm (1/2-1 1/2 in.) long, 1 cm (1/2 in.) in diameter.

DISTRIBUTION - Common along riverbanks and moist wooded areas throughout the forested regions in central and northern Alberta. This species is intolerant of shade.



Shrubs

Willow

(Salix spp.)

SHRUB/SMALL TREE - Variable in size and form. **Branches** many. **Bark** reddish-brown to grey, smooth or scaly.

SIZE - 1-9 m (3-30 ft.) high.

LEAVES - Alternate simple long, narrow, pointed at both ends. **Teeth** on margins.

FLOWERS - Greenish catkins.

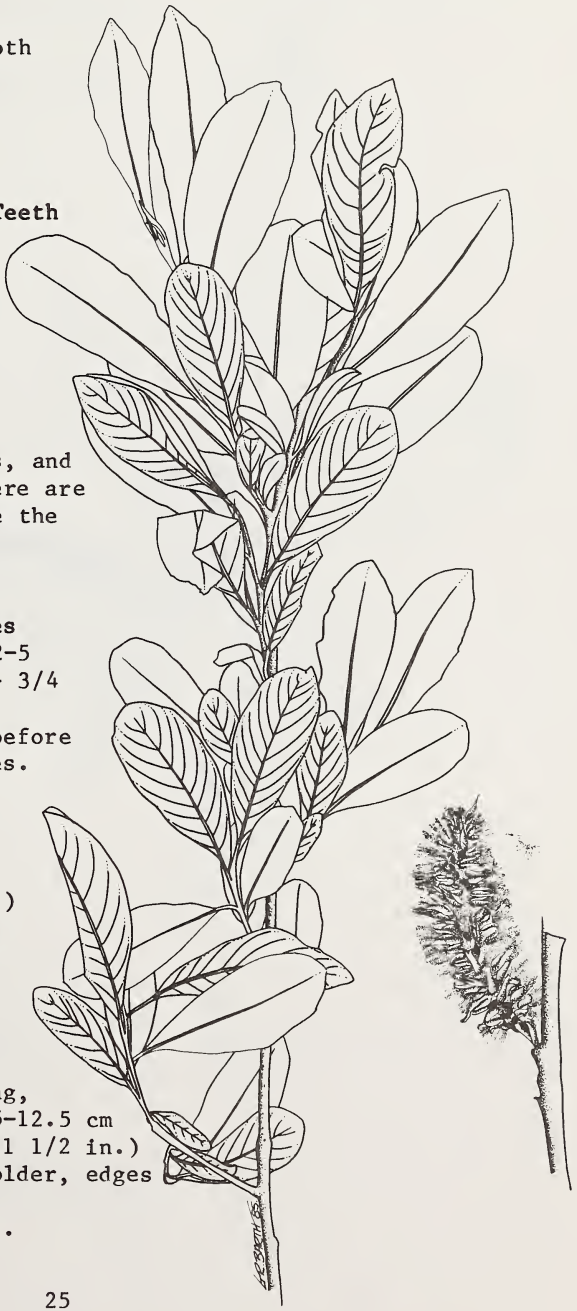
FRUIT - Capsules in catkins.

DISTRIBUTION - Willows are sun loving and are found throughout Alberta along the edges of lakes, and rivers and in wetter areas. There are many species. The following are the more common ones.

BEAKED WILLOW ***(S. bebbiana)*** - 1-4 m (3-12 ft.) high. **Branches** slender reddish-brown. **Leaves** 2-5 cm (1-2 in.) long, 1-2 cm (1/2 - 3/4 in.) wide. **Catkins** 6 cm (2 1/2 in.) long which appear shortly before or at the same time as the leaves.

HOARY WILLIOW ***(S. candida)*** - 1-2 m (3-6 ft) high. **Branches** slender with white wooly twigs. **Leaves** 4-7 cm (1 3/4 - 2 3/4 in.) long, hairy underside. **Catkins** appear same time as leaves.

SOULER WILLOW - ***(S. scouleriana)*** 2-7 m (6-23 ft.) high. **Branches** dark brown to yellowish brown, hairy when young, hairless when older. **LEAVES** - 5-12.5 cm (2-5 in.) long, 1.2-4 cm (1/2 - 1 1/2 in.) wide, rusty hairs beneath when older, edges without teeth.
Catkins appear before the leaves.



Beaked Hazelnut

(Corylus cornuta)

OTHER NAMES - Beaked hazel, beaked filbert.

SHRUB - Rounded, comprised of many slender erect stems with numerous branches. **Bark** rough, light brown.

SIZE - 1-3 m (3-10 ft.) high.

LEAVES - Alternate, simple, broadly oval, with a pointed tip, 5-10 cm (2-4 in) long, dull green surface, paler underside. **Margins** jagged-toothed.



FLOWERS - Small yellow catkins appear in spring before the leaves.

FRUIT - A nut enclosed in 2 hairy green bracts which extend beyond the nut to form a beak.

DISTRIBUTION - Found throughout the province in woodlands, moist hillsides, and river banks. It grows equally well in open areas or in the shade.

Swamp Birch

(Betula pumila)

OTHER NAMES - Bog Birch

SHRUB - Bushy with many branches, erect or low spreading, densely covered with leaves and wort-like resinous-glands.

SIZE - 1-2 m (3-7 ft.) high.

LEAVES - Alternate, simple, rounded, 2-3 cm (3/4-1 1/4 in.) long, rounded teeth on margins, dark green and shiny upper surface, pale light green underside. Young leaves have fine hairs underneath.

FLOWERS - Slightly hairy catkins appear in spring, 2-3 cm (3/4-1/ 1/4 in) long.

FRUIT - Brown cone-shaped catkins containing small winged nutlets.

DISTRIBUTION - Common around bogs and swampy areas in forested regions of the province.



Shrubs

Green Alder

(Alnus crispa)

SHRUB *- Bushy with upward curving branches.* ***Bark*** *smooth, reddish-brown or grey.* ***Stems*** *and* ***twigs*** *covered with white dots.*

SIZE *- 1-3 m (3-10 ft.) high.*

LEAVES *- Alternate, simple, ovate, 2-8 cm (1-3 in.) long, fine, sharp teeth on margins, prominent veins, shiny gree upper surface, paler underside, sticky when young.*

FLOWERS *- Light green catkins which develop before the leaf buds open. Female catkins 1-1.5 cm (1/2-3/4 in.) long. Male catkins 7-13 cm (3-5 in.) long.*

FRUIT *- Small conelike catkins on long stalks, several in a cluster, green turning brown at maturity.* ***Nutlets*** *with wings.*

NOTE *- The river alder* ***(Alnus tenuifolia)*** which is sometimes called mountain alder and speckled alder ***(Alnus rugosa)*** are closely related to the green alder and are also found in Alberta. a noteworthy difference between these species is that the mountain and speckled alders can grow up to 6 m (20 ft.) high. Otherwise these species are similar in appearance.



Shrubs

Bristly Black Currant

(Ribes lacustre)

SHRUB - Stem erect, very prickly with long spines at the nodes.

SIZE - 0.5 - 1 m (1 1/2-3 ft.) high.

LEAVES - Alternate, deeply 3 - 5 lobed with the lobes toothed, surface smooth or slightly hairy.

FLOWERS - Light green to purplish, 6 m (1/4 in.) in diameter, bristly bases in drooping clusters.

FRUIT - Green ripening to dark purple or black, covered with bristles.

DISTRIBUTION - Usually found on imperfectly drained sites in association with white spruce.



Wild Gooseberry

(Ribes oxyacanthoides)



SHRUB - Low and erect with several stems originating from the **root collar.** New growth bright green, covered with numerous **bristles.** Old growth yellowish-grey. Sharp **spines** at base of leaves.

SIZE - 0.75-1.25 m (2-4 ft.) high.

LEAVES - Alternate, simple, 3-5 lobes, 3-5 cm (1 1/4-2 in.)long, rounded toothed margins, light green upper surface, lighter hairy underside.

FLOWER - Greenish-white, small, bell-shaped, single or in clusters.

FRUIT - Round berry, with white stripes, light green turning reddish purple with age.

DISTRIBUTION - This plant is found in the wooded areas of central and northern Alberta. It prefers to grow in openings on moist rich soil.

Shrubs

Wild Red Currant

(Ribes triste)



SHRUB - Small and erect with several smooth stems originating from the root crown.

SIZE - 0.5-1 m (1 1/2-3 ft.) high.

LEAVES - Alternate, simple, 3 lobes sometimes 5, coarsly toothed margin, 5-10 cm (2-4 in.) across, medium green upper surface, paler and hairy underside.

FLOWERS - Purplish, saucer shaped, 6 mm (1/4 in.) in diameter, born on drooping stalks.

FRUIT - Red smooth round berries, in drooping clusters.

DISTRIBUTION - This plant is found in the wooded areas of the province. It grows on the forest edge and prefers moderate to poorly drained sites.

Saskatoon

(Amelanchier alnifolia)

OTHER NAMES: June berry, service berry, saskatoon berry, shedbush.

SHRUB - Tall, somewhat slender, may be dwarfed or misshaped. **Bark,** rough greyish-brown.

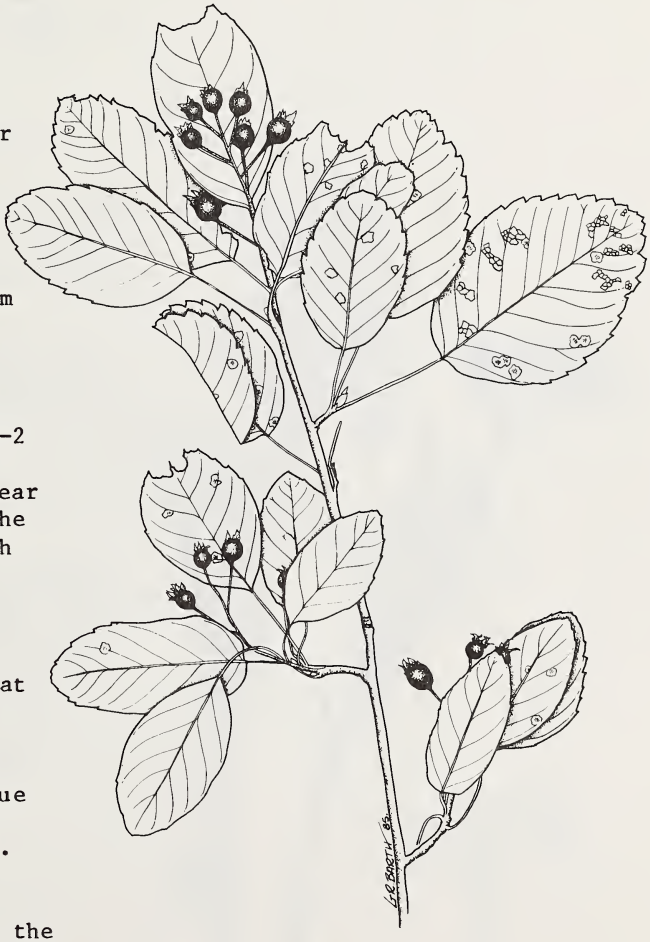
SIZE - Averages 1-3 m (3-10 ft.) high. Under favorable conditions 4-6 m (13-20 ft.) high.

LEAVES - Alternate, simple, small, oval, with rounded tips, 1-5 cm (1/2-2 in.) long, finely toothed along margin especially near tip, many fine hairs on the underside, becoming smooth and hairless with age.

FLOWER - White, with 5 petals, 1 cm (1/2 in.) in diameter, dense clusters at end of branch.

FRUIT - Berry-like, 1 cm (1/2 in.) in diameter, blue to dark purple when ripe, clusters at end of branch.

DISTRIBUTION - Found in open woods, bluffs, along the edge of forests, stream banks and along roadsides. This plant prefers moist soils and good exposure to the sun. It is commonly found throughout Alberta. Colonies are sometimes formed because of suckering.



Shrubs

Shrubby Cinquefoil

(Potentilla fruticosa)

SHRUB - Low growing with many bushy branches. **Bark** is rough and shredded, particularly on older branches.

SIZE: 1.5 m (1-3 ft.) high.

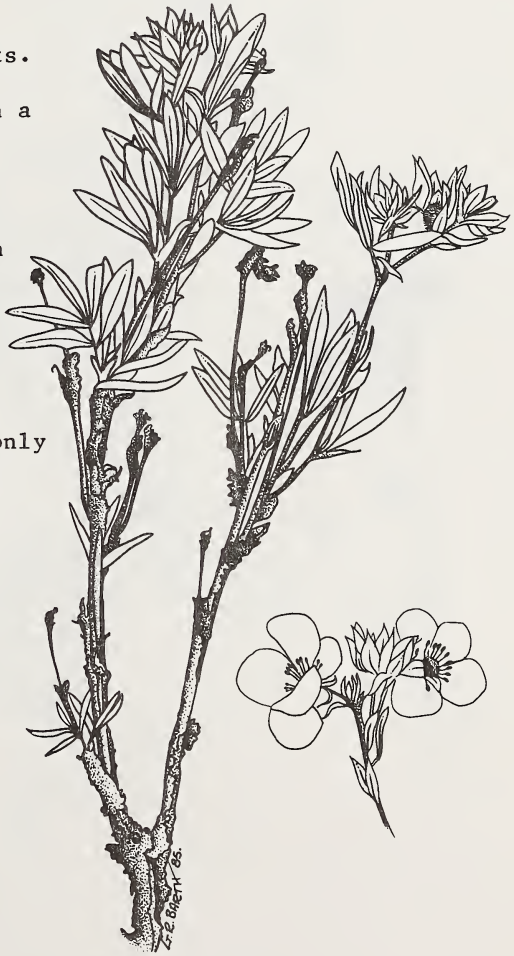
LEAVES - Alternate compound, composed of 5-7 grey-green leaflets. **Leaflets** approximately 2 cm (3/4 in.) long, toothless, tapered with a velvet-like texture.

FLOWERS - Yellow, 5 petals, 1.5-2.5 cm (3/4 - 1 in.) in diameter. Usually in clusters at each branch tip.

FRUIT - Seeds covered by fine straight white hairs.

DISTRIBUTION - This plant prefers low moist soils. It is most commonly found in Alberta's grassland and foothill regions; however, can be found throughout the province.

NOTES - This shrub is commonly used in ornamental gardens.



Shrubs

Pin Cherry

(Prunus pensylvanica)

SHRUB/SMALL TREE - Fairly straight with narrow rounded crown. **Branches** point upwards. **Bark** reddish-brown smooth on young trees. **Bark** marked by orange, horizontal, dots on older trees.

SIZE - 3-8 m (10-25 ft.) high.

LEAVES - Alternate, simple, ovate, with sharp-pointed tips, 5-12 cm (2-5 in) long, fine uneven teeth on margins, shiny dark green upper surface, pale green underside.

FLOWERS - White, small, 0.5-1 cm (1/4-3/8 in.) in diameter, in long stem clusters, appear the same time as the leaves.

FRUIT - Small round bright red berries on a single pin-like stem.

DISTRIBUTION - Found in open woods, bluffs, and along river banks throughout Alberta. It is intolerant of shade.



Shrubs

Choke Cherry

(Prunus virginiana* var *melanocarpa)



SHRUB/SMALL TREE - Irregular shaped with a slender twisted trunk. Crown narrow and irregular composed of crooked, spreading branches. Bark smooth, reddish-brown turning black on older growth.

SIZE - 2-8 m (6-25 ft.) high.

LEAVES - Alternate, simple, broadly oval with a sharp point, 2-8 cm (1-3 in.) long, finely toothed along margins, dark green upper surface, paler green underside, fairly thick and leathery.

FLOWERS - White, small 1-1.5 cm (1/2-3/4 in.) in diameter. Form dense cylindrical clusters which appear at ends of twigs.

FRUIT - Small, round, deep red to dark purple, 6-8 mm (1/4-1/3 in) in diameter. Form clusters with common stem.

DISTRIBUTION - Common in bluffs, ravines, open areas, and along river banks and roadsides throughout Alberta.

NOTE - The underground root systems suckers freely.

Shrubs

Prickly Rose

(Rosa acicularis)

SHRUB - Low, bushy, with straight weak prickles densely covering the branches.

SIZE - 0.25-1 m (1-3 1/2 ft.) high.

LEAVES - Alternate, compound, oval with 5 to 7 leaflets per stem. **Leaflets** 5 cm (1/2-2 in.) long, course teeth along margins, dark green upper surface, paler, hairy underside.

FLOWERS - Pink to light pink with 5 petals, 5-7 cm (2-3 in.) in diameter.

FRUIT - **Rose hips** oval, bright red to orange, 2 cm (3/4 in.) long.

DISTRIBUTION - Common in open forest areas, along the roadways and waterways throughout the province.

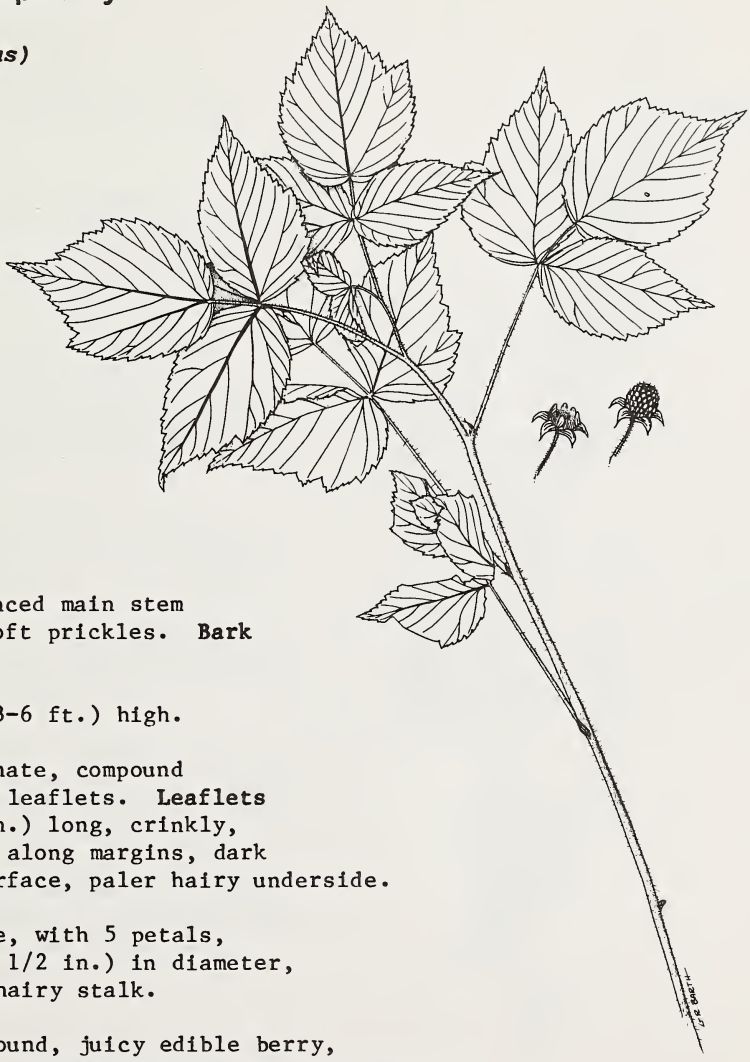
NOTE - There are two other varieties of roses which are commonly found in Alberta: Common wild rose ***(Rosa woodsii)*** and prairie rose ***(Rosa arkansana)***. The prickly rose is the floral emblem of Alberta.



Shrubs

Wild Red Raspberry

(Rubus strigosus)



SHRUB - Pronounced main stem covered with soft prickles. **Bark** reddish-brown.

SIZE - 1-2 m (3-6 ft.) high.

LEAVES - Alternate, compound with 3-5 ovate leaflets. **Leaflets** 5-10 cm (2-4 in.) long, crinkly, deeply toothed along margins, dark green upper surface, paler hairy underside.

FLOWERS - White, with 5 petals, 8-12 mm (1/3 - 1/2 in.) in diameter, attached to a hairy stalk.

FRUIT - Red, round, juicy edible berry, composed of many small sections, lumpy appearance.

DISTRIBUTION - This plant grows well in cleared areas bordering wooded areas and along riverbanks and roadways throughout Alberta. It is tolerant of some shade.

NOTE - There are other less common raspberry species in the province with some similar characteristics. If the stem tips become buried, roots will develop and another shrub will grow.

Shrubs

Wolf Willow

(Elaeagnus commutata)

OTHER NAMES - Silverberry, silver buffaloberry.

SHRUB - Erect, low growing, usually in groves. **Bark** rusty brown.

SIZE - 1-3 m (3-12 ft.) high.

LEAVES - Alternate, simple, oblong, 2.5-8 cm (1-3 in.) long, smooth margins, silvery-grey surface, lighter underside with brownish scales.

FLOWERS - Silver-yellow, without petals, 3 mm (1/8 in.) in diameter, clusters of 2 or 3.

FRUIT - Light, silver-green, round to oval, dry mealy berry containing a large stoney seed.

DISTRIBUTION - This plant prefers sand or gravelly soils and is common on valley slopes, hillsides, and in open fields throughout Alberta. In heavily grazed areas this plant spreads quickly; however, it remains sparse in the wild. Root suckering is a means by which this plant can propagate itself.



Shrubs

Canada Buffaloberry

(Shepherdia canadensis)



OTHER NAMES - Soapberry

SHRUB - Sprawling bushy appearance with several stems originating from root collar. **Bark** grey to black, covered with pebbly rusty-brown scales.

SIZE - 0.5-3 m (2-10 ft.) high.

LEAVES - Opposite, simple, oblong, 2-5 cm (3/4-2 in.) long, upper surface smooth, olive green upper surface, underside silvery, with fine star-shaped hairs and rusty-brown spots.

FLOWERS - Small, inconspicuous, yellowish-green, 4 mm (1/4 in.) in diameter, situated at leaf nodes, appear before leaves develop.

FRUIT - Yellow to orange-red berries, 4-6 mm (1/4 in.) in diameter in clusters along stem.

DISTRIBUTION - This plant is fairly common throughout the forested regions of the province and along the river banks. It prefers rapidly drained sites.

Shrubs

Red Osier Dogwood

(Cornus stolonifera)

SHRUB - Straggling appearance with several stems orignating from the root collar. **Bark** red, with white dots on older growth.

SIZE - 1-2 m (3-6 ft.) high.

LEAVES - Opposite, simple, ovate, 2-8 cm (1-3 in.) long, smooth margins, prominent veins, shiny dark green upper surface, underside paler with short hairs.

FLOWERS - Greenish-white, small, several in a flat terminal cluster. Clusters 2.5-5 cm (1-2 in.) in diameter.

FRUIT - Round, greyish-white berry about 5 mm (1/4 in.) in diameter with several berries in a terminal cluster.

DISTRIBUTION - This shrub is found throughout Alberta and prefers low marshy ground, moist areas (wooded and open), and along stream banks. It can spread by root suckering.



Shrubs

Labrador Tea

(Ledum groenlandicum)



SHRUB - Low growing, many branches. **Branches** covered with brown, velvety hairs.

SIZE - 0.25-1 m (1-3 in.) high.

LEAVES - Opposite, simple, leathery, oblong, 1-5 cm (1/2-2 in.) long, no teeth on margins. Margins rolled inwards towards undeside of leaf, dark green upper surface, underside rusty-wolly, arranged in whorls around branches.

FLOWERS - White, small, with 5 petals, 6 mm (1/3 in.) in diameter, in dense round-topped clusters.

FRUIT - Dry oblong capsule in clusters at the ends of the branches.

DISTRIBUTION - This plant is generally found in muskegs and moist coniferous woodlands throughout Alberta.

Shrubs

Common Blueberry

(Vaccinium myrtilloides)

OTHER NAMES -
Bilberry.

SHRUB - Low growing with many basal hairy branches thickly covered with leaves.

SIZE - 10-40 cm (4-15 in.) in length.

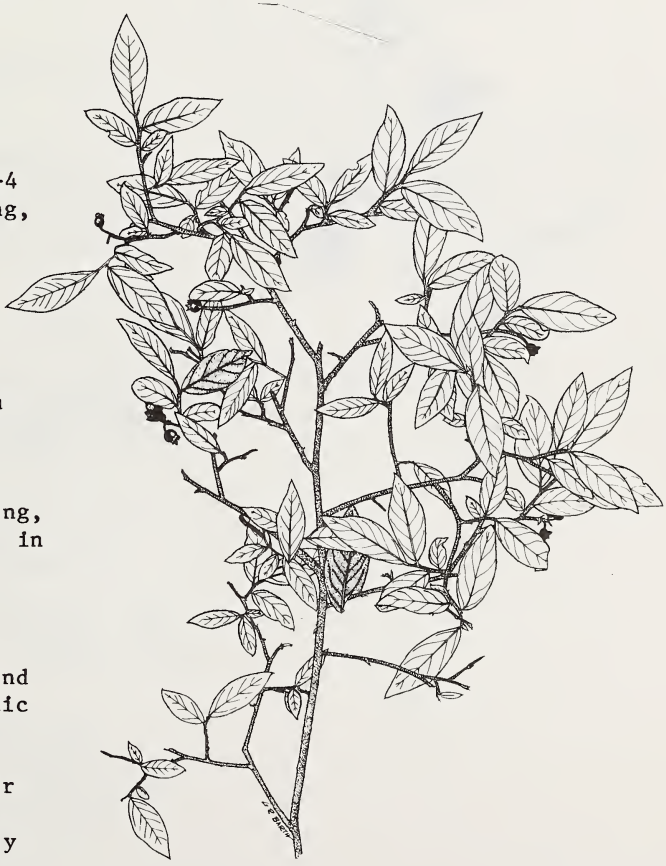
LEAVES - Alternate, simple, thin, oval, 1-4 cm (1/2-1 1/2 in.) long, slftly hairy and dark gren on both sides. **Margins** smooth.

FLOWERS - Greenish white or tinged with pink, bell shaped, 4mm (1/8 in.) long.

FRUIT - Blue with a whitish powdery covering, 4-7 mm (1/8 - 1/4 in.) in diameter, edible.

NOTE - Grows well in dry woods with sandy soils. It is also found on poorly drained acidic sites.

There are several other ***Vaccimium*** species found in Alberta. They are all low growing shrubs with juicy, tasty, edible berries.



Shrubs

Bracted Honeysuckle

(Lonicera involucrata)



OTHER NAMES: Black twinberry, swamp honeysuckle.

SHRUB - Bushy with several, upward pointing hairy branches originating from the root collar. Bark light brown turning grey with age.

SIZE - 1-3 m (3-10 ft.) high.

LEAVES - Opposite, simple, oval, 5-15 cm (2-6 in.) long, prominent mid-vein shiny, green upper surface with a lighter, hairy underside.

FLOWERS - Yellow, 1 cm (1/2 in.) long, paired, flanked by 2 or 4 leaf-like, green or red bracts.

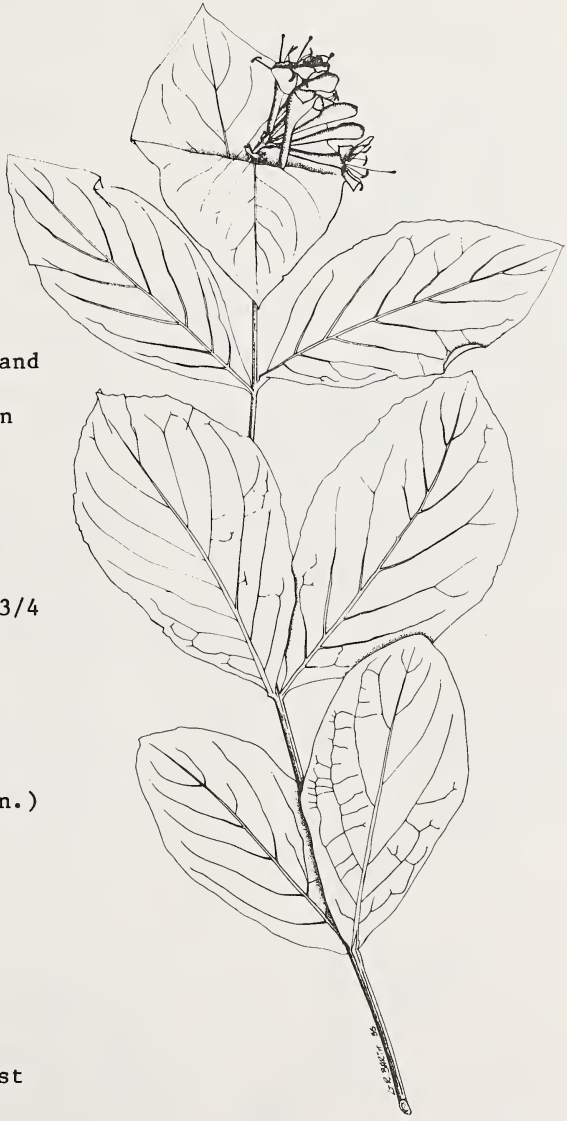
FRUIT - Purple or black berry, 7mm (1/3 in.) in diameter, paired, flanked by deep red bracts.

DISTRIBUTION - This plant is generally found in most sites along stream banks or moist woods. It is commonly found under the shade of spruce or poplar trees.

Shrubs

Twining Honeysuckle

(Lonicera dioica* var. *glaucescens)



SHRUB - Vine like and twines around other trees and shrubs. **Bark** smoothe and green turning greyish-brown with age.

SIZE - 1-2 m (3-6 1/2 ft.) long.

LEAVES - Opposite, simple, oval, 5-9 cm (2-3 3/4 in.) long, short petioled, often joined at base, dark green surface, paler hairy underside.

FLOWERS - Yellow-orange, tubular, 2-2.5 cm (3/4-1 in.) long, in clusters at the branch tips.

FRUIT - Round red berry in clusters at the branch tips.

DISTRIBUTION - This plant grows in wooded areas. It prefers shade and rich moist soil.

Shrubs

Buckbrush

(Symphoricarpos occidentalis)

OTHER NAMES - Western snowberry.

SHRUB - Short, grows in clumps. Stems hollow, light grey-brown covered with fine downy hair.

SIZE - 30-100 cm (1-3 ft.) high.

LEAVES - Opposite, simple, broadly oval to round, 2-6 cm (1-2 1/2 in.) long, thick and leathery, no teeth on margins, light-green upper surface, paler hairy underside.

FLOWERS - Small, bell-shaped, 6 mm (1/4 in.) long, pinkish-white. Forms clusters at the end of the stems.

FRUIT - Snow-white, waxy berries, 8-10 mm (1/4-1/3 in.) in diameter, produced in clusters.

DISTRIBUTION - This is one of the commonest and most widespread shrubs in Alberta. It is found throughout the province in many habitats but prefers open areas. It can spread by root suckering.

NOTE - Snowberry ***(Symphoricarpos albus* var *pauciclorus)*** is similar to buckbrush. The leaves are simple, 1.5-3 cm (3/4 - 1 1/4 in.) long, thin, slightly toothed on the margins. The surface of the leaf is dark green and the underside since it is covered with white hairs is light green. Snowberry is more common in wooded areas than buckbrush.



Low Bush Cranberry

(Viburnum edule)



OTHER NAMES - Squashberry.

SHRUB - Medium sized with several slender smooth reddish-grey branches.

SIZE - 0.5 - 1.75 m (1 1/2 - 6 ft.) high.

LEAVES - Opposite, simple, 3-loped at apex, 4-10 cm (1 1/2-4 in.) wide, coarsely toothed along margin, deeply veined, dark green surface, lighter hairy underside.

FLOWERS - Small, white, 5 petaled, 7 mm (1/4 in.) in diameter, **Flower clusters** flat-topped 1-3 cm (1/2-1 1/4 in.) in diameter.

FRUIT - Light red berries, 1 cm (3/8 in.) in diameter in clusters.

DISTRIBUTION - This plant prefers to grow in rich moist woodland soils. It is common and widespread in Alberta.

Shrubs

High Bush Cranberry

(Viburnum trilobum)

SHRUB - Tall with several slender stems originating from its base. **Bark** reddish-grey.

SIZE - 1-4 m (3-13 ft. high.

LEAVES - Opposite, simple, 5-10 cm (2-4 in.) wide, 6-12 cm (2 1/4-5 in.) long, 3 distinct long lobes, coursely toothed margins, deeply veined, dark green upper surface, paler hairy underside.

FLOWERS - White with 5 petals in terminal clusters, outer flowers 1-2 cm (3/8-3/4 in.) in diameter, inner flowers smaller.

FRUIT - Oragne-red berry, 1 cm (3/8 in.) in diameter. Forms clusters at branch tips.

DISTRIBUTION - This plant prefers to grow in rich moist woodland soils. It is not common as low-bush cranberry.



RESPONSE TO MECHANICAL CLEARING AND
SUSCEPTIBILITY TO HERBICIDES

Tree and Shrub Species	Resprouting	2,4-D	2,4-D & 2,4-DP	Picloram & 2,4-D	Dicamba & 2,4-D
Lodgepole Pine	No	No*	Int**	Yes***	Yes
Jack Pine	No	No	Int	Yes	Yes
Tamarack	No	Int	Int	Yes	Yes
White Spruce	No	No	Int	Yes	Yes
Black Spruce	No	No	Int	Yes	Yes
Balsam Fir	Yes	No	Int	Yes	Yes
Aspen Poplar	Yes	Yes	Yes	Yes	Yes
Balsam Poplar	Yes	No	Int	Yes	Yes
White Birch	Yes	Yes	Yes	Yes	Yes
Willow	Yes	Yes	Yes	Yes	Yes
Beaked Hazelnut	Yes	Yes	Yes	Yes	Yes
Swamp Birch	Sometimes	Int	Int	Yes	Yes
Green Alder	Yes	Yes	Yes	Yes	Yes
Bristly Black Currant	No	No	Int	Yes	Yes
Wild Red Currant	No	No	Int	Yes	Yes
Wild Gooseberry	No	No	Int	Yes	Yes
Saskatoon	Yes	Yes	Yes	Yes	Yes
Shrubby Cinquefoil	No	No	Int	Yes	Yes
Pin Cherry	Yes	Yes	Yes	Yes	Yes
Choke Cherry	Yes	Yes	Yes	Yes	Yes
Prickly Rose	Yes	No	Int	Yes	Yes
Wild Red Raspberry	Yes	No	Int	Yes	Yes
Wolf Willow	Yes	Int	Int	Yes	Yes
Canada Buffaloberry	Yes	Int	Yes	Yes	Yes
Red Osier Dogwood	Yes	Yes	Yes	Yes	Yes
Labrador Tea	Yes	Yes	Yes	Yes	Yes
Common Blueberry	Yes	Yes	Yes	Yes	Yes
Bracted Honeysuckle	Yes	Yes	Yes	Yes	Yes

Twining Honeysuckle	No	Yes	Yes	Yes	Yes
Buckbrush	Yes	Int	Int	Yes	Yes
Low Bush Cranberry	Yes	Yes	Yes	Yes	Yes
High Bush Cranberry	Yes	Yes	Yes	Yes	Yes

* No - Not killed by repeated applications at the recommended rate.

** Int - Intermediate: Injuryed by a simple application at the recommemded rate. Final kill will require repeated applications at the recommended rate.

*** Yes - Killed by a single application at the recommended rate.

N.L.C. - B.N.C.
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