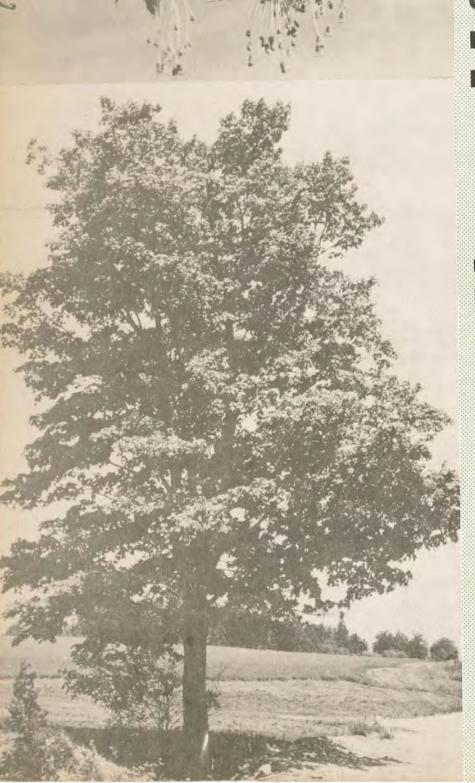


by HAROLD R. HINDS



CANADIAN FORESTRY SERVICE



## MARITIMES FOREST RESEARCH CENTRE

The Maritimes Forest Research Centre (MFRC) is one of six regional establishments of the Canadian Forestry Service, within Environment Canada. The Centre conducts a program of work directed toward the solution of major forestry problems and the development of more effective forest management techniques for use in the Maritime Provinces.

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## ANNOTATED CHECKLIST OF THE WOODY PLANTS OF NEW BRUNSWICK\*

by

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Information Report M-X-103

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#### ABSTRACT

This list is a catalogue of the scientific and common names of 214 species, subspecies, and varieties of woody plants found in the provinces of New Brunswick, Canada. Forty-four of these have been introduced from outside the Province and have become established. Maps showing the distribution of 179 species are included.

#### RESUME

Cette liste est un catalogue des noms scientifiques et communs de 214 espèces, sous-espèces et variétés de plantes ligneuses de la province du Nouveau-Brunswick, Canada. Quarante-quatre de ces dernières ont été introduites de l'extérieur de la province et sont devenues établies. Des cartes montrant l'aire de distribution de 179 espèces sont incluses.

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#### ACKNOWLEDGMENTS

I wish to acknowledge the generous financial and technical assistance of the Canadian Forestry Service (Maritimes Forest Research Centre) and the support of the Biology Department of the University of New Brunswick. Ms. Jacinta Ferrari compiled the information from the various herbaria visited and plotted herbarium citations on the maps. Also, I would like to thank Dr. Leo Dionne for his critical reading of the text and helpful suggestions.

#### INTRODUCTION

It is 85 years since the Rev. James Fowler published his Preliminary List of the Plants of New Brunswick in the Bulletin of the Natural History Society of New Brunswick. Since then much botanical exploration has taken place in the Province and herbarium sheets of New Brunswick specimens are scattered in many herbaria throughout North America and Europe.

Knowledge of the distribution of New Brunswick plants, especially the woody species, is important for several reasons:

- 1. The distribution of many plants is correlated closely with the distribution of soil types. This knowledge is important in land-use planning, especially for forest management and agriculture.
- 2. Knowledge of the distribution of rare and endangered plant species can be useful in the preparation of environmental impact statements and can assist the Department of Natural Resources in evaluating the importance of specific ecological reserves.
- 3. Information on plant distribution provides a basis for research on wildlife habitat, climatic changes, and fire ecology.

The plants included in this list are those vascular plants that retain part or all of their actively growing parts above the ground all year and add to their length and girth each growing season. All species of raspberries, blackberries, and many of the completely prostrate dwarf shrubs such as trailing arbutus (Epigaea repens) and twinflower (Linnaea borealis) have been ex-

cluded. Some species are included because of their shrubby nature rather than because of the amount of woody tissue they contain, e.g. Hudsonia tomentosa and Vaccinium cespitosum.

A11 the herbaria containing ofsignificant collections Brunswick plants were checked for specimens of woody plants. Information was taken from the labels and was used to plot the distributions on the maps. most cases, no attempt was made to check the identification of specimens except where a record seemed especially unlikely. following herbaria were consulted listed with and are their standardized abbreviations.

- ACAD E. C. Smith Herbarium of Acadia University, Wolf-ville, N.S.
- CAN National Herbarium of Canada, National Museum of Natural Sciences Ottawa.
- DAO Vascular Plant Herbarium, Department of Agriculture, Ottawa.
- FFB Maritimes Forest Research Centre Herbarium, Fredericton, N.B.
- GH Gray Herbarium of Harvard University, Cambridge, Mass.
- NBM New Brunswick Museum, Saint John, N.B.
- NY Herbarium, The New York
  Botanical Garden, New
  York, N.Y.
- UNB Connell Memorial Herbarium, University of New Brunswick, Fredericton, N.B.

In addition to checking the information on herbarium specimens, field work was conducted especially in those areas of the Province that appeared to be previously overlooked.

Since accessibility is restricted in some areas of the Province, expecially in the north-central region, the information on the distribution maps may not always be sufficient to draw valid conclusions on the entire distribution of ecological conditions in the Province.

The list includes 214 species, subspecies, and varieties of which 44 have been introduced from outside the province and have become established, sometimes very locally, without cultivation. One

form<sup>1</sup> that had not previously been reported in the literature was discovered and the ranges for numerous species were extended as a result of our field work.

The list of families and species follows that of H.J. Scoggan's The Flora of Canada (1978) which compares closely with that of M. Fernald's Gray's Manual of Botany, 8th edition (1950).

Pyrus arbutifolia (L.) L.f. var. nigra Willd. forma rubriflora (flores ruberi a principio)

## Division SPERMATOPHYTA (Seed-plants)

## Subdivision GYMNOSPERMAE (Gymnosperms)

#### TAXACEAE

Taxus canadensis Marsh. AMERICAN YEW, GROUND HEMLOCK MAP 1
Throughout in rich woods and thickets. Scarlet fruit sweet and edible; seeds and wilted foliage poisonous.

## PINACEAE

Abies balsamea (L.) Mill. BALSAM-FIR, SAPIN MAP 2.

Common throughout at both low and high elevations. Resin collected and used by New Brunswick Indians to treat wounds (Perley 1857). Given internally for colds, coughs, asthma, consumptions (Vogel 1970). New growth brewed as rich source of ascorbic acid (Vitamin C).

Var. phanerolepis Fern. MAP 3, with the bracts conspicuously exerted beyond the cone-scales is occasionally found with the species.

Juniperus communis L. var. depressa Pursh GROUND-JUNIPER MAP 4

Mostly along the southern coast and the lower St. John River in poor, dry, rocky, or sandy soil. Used by Micmac Indians in the production of woven mats (Speck and Dexter 1951).

Var. megistocarpa Fern. & St. John Found on Belledune Point, Gloucester County. The unusually large, fleshy cone has a sweetish pulpy coat (Fernald et al. 1958).

Var. montana Ait. not yet reported from N.B. but probably occurs with var. depressa (Var. saxatilis Pallas).

Juniperus horizontalis Moench CREEPING-JUNIPER, SAVIN MAP 5
Reported only in extreme southwest, northeast, and Saint John area on rocky, shady, or boggy places. Leaves, scale-like.

(<u>Juniperus virginiana</u> L. RED CEDAR was reported from New Brunswick by C.S. Sargent, 1880, but this has never been verified.)

Larix laricina (Du Roi) Koch AMERICAN LARCH, TAMARACK MAP 6
Throughout, mostly in bogs and black spruce muskeg.

Picea glauca (Moench) Voss WHITE SPRUCE MAP 7

Throughout on the drier, better soils of the uplands and often taking over abandoned pastures. Roots used by Indians as stitching for birch bark canoes and utensils such as dishes, water pails, etc. (Perley 1857). New growth used in spruce beer (Monroe 1972). Important for pulp and lumber.

Picea mariana (Mill.) B.S.P. BLACK SPRUCE MAP 8

Throughout on cool, upland slopes and in bogs. Occasionally found infested with the parasitic Arceuthrobium pusillum (DWARF MISTLETOE).

Important pulpwood tree.

## Picea rubens Sarg. RED SPRUCE MAP 9

Concentrated in the southern half on soils midway between well-drained uplands and bogs. Also used to make spruce beer. Reported as hybridizing with <u>Picea mariana</u> in central N.B. (Manley 1969).

## Pinus banksiana Lamb. JACK PINE MAP 10

Growing naturally only in the eastern lowlands on sandy soil and rocky barrens, especially where forest fires have cleared the competing species. The cones release their seeds when heated by fires (Pinus divaricata (Aiton) Dumont).

## Pinus resinosa Ait. RED PINE MAP 11

Found in scattered locations in the east and south on sandy or gravelly soil, most often mixed with other conifers and hardwoods. Sometimes found in pure stands on dry rocky ridges. Uses similar to that of Pinus strobus.

## Pinus strobus L. WHITE PINE MAP 12

Common throughout, chiefly on well-drained sandy or gravelly soil. Produces the most valuable softwood lumber in eastern Canada.

## Thuja occidentalis L. EASTERN WHITE CEDAR MAP 13

Common throughout, except in the extreme southeast. Grows in swampy land where the water is not too acid and on dry limestone ledges or shallow soil underlain by limestone. Wood used by Micmac Indians for their canoes and arrow shafts and in woven mats (Speck and Dexter 1951). An important wood for fence posts, shingles, and rails because of its durability.

## Tsuga canadensis (L.) Carr. EASTERN HEMLOCK MAP 14

Throughout except extreme northwest, usually in hilly, cool, moist locations. Used for coarse lumber, pulp, and the bark as a source of tanning for tanning leather and a curative for burns. (Peattie 1958).

## Subdivision ANGIOSPERMAE (Angiosperms)

#### SALICACEAE

## Populus alba L. WHITE or SILVER-LEAVED POPLAR MAP 15

Eurasian; commonly planted and spreading by sprouts from the roots. Often found in thickets near old homesteads. Bark used as source of salicin to control high fever (Vogel 1970).

## Populus balsamifera L. BALSAM POPLAR, BALM-OF-GILEAD MAP 16

Widely distributed on moist, rich, low-lying ground. The sticky gum of the buds is gathered by honeybees to form propolis which they use to seal the crevices of their hives.

## X Populus canescens (Ait.) Sm. GRAY POPLAR

Naturalized from Eurasia; spreading from cultivation in the south. Believed to be a hybrid between Populus alba and P. tremula.

X Populus gileadensis Rouleau BALM-OF-GILEAD

Spreading by sprout growth from planted shade trees. Probably a sterile hybrid between Populus deltoides and P. balsamifera.

Populus grandidentata Michx. LARGE-TOOTHED ASPEN MAP 17

Widespread except in the extreme north in dry woods, slopes, and recent burns. Used for pulp and the manufacture of plywood.

Populus tremuloides Michx. TREMBLING ASPEN, QUAKING ASPEN MAP 18

Throughout on well-drained, moist, sandy or gravelly loams. The flattened petiole of the leaf acts like a spring to "flutter" the leaf. The inner bark was considered good for sore eyes by local Indians (Vogel 1970). An infusion of the bark was a popular vermifuge used by the Acadians.

Salix alba L. WHITE WILLOW, WEEPING WILLOW MAP 19

Eurasian; planted and naturalized infrequently.

Salix babylonica L. WEEPING WILLOW

Reported from New Brunswick by Fowler, (1885) but according to Boivin (1967), most of our material is based on Salix alba.

Salix bebbiana Sarg. LONG-BEAKED WILLOW MAP 20

Common throughout in moist to wet thickets and streambanks. The leaves of willows served as tobacco and pipestems were made from their twigs by Micmacs. Branches were often used in the construction of their temporary dwellings (Speck and Dexter 1951).

Salix candida Flugge HOARY WILLOW MAP 21

Found only in Gloucester County along the north shore mostly in alkaline or calcareous bogs.

Salix cordata Michx. HEARTLEAF WILLOW MAP 22

Gravelly or sandy shores and low thickets in the western counties except Madawaska and Charlotte counties.

Salix cordata Michx. var. rigida (Muhl.) Carey RED-TIPPED WILLOW MAP 23

Common throughout on riverbanks and in moist thickets (S. rigida Muhl.).

Salix cordata Michx. var. rigida (Muhl.) Carey f. mollis (Palm. & Stev.)

Fern. Found occasionally with the variety.

Salix discolor Muhl. PUSSY-WILLOW MAP 24

Common throughout in swampy thickets and shores.

Salix discolor Muhl. var. latifolia Anderss.

Found rarely with the species. Variety overi Ball is reported by Fernald from N.B. No specimens have been seen.

Salix exigua Nutt. ssp. interior (Rowlee) Cronq. SANDBAR WILLOW MAP 25
Found on most of the main river systems on streambanks and alluvial soils (bars and beaches). Forma wheeleri (Rowlee) Rouleau occasionally found with the subspecies (S. fluviatilis var. sericans (Nees) Boivin).

Salix fragilis L. CRACK WILLOW MAP 26

Eurasian; occasionally spreading from cultivation in the eastern counties.

Salix humilis Marsh. PRAIRIE WILLOW MAP 27

Throughout except Saint John and Kings counties in open woodlands, thickets and dry heath (including var. keweenawensis Farw.).

Salix laurentiana Fern. f. glaucophylla (Bebb) Boivin BLUELEAF WILLOW MAP 28 Rare along the upper St. John River Valley on gravelly shores and rich thickets, chiefly in calcareous soils (S. glaucophylloides Fern.).

Salix lucida Muhl. SHINING WILLOW MAP 29

Common throughout on shores and swampy places. An infusion of the bark was used to cure vomiting (Vogel 1970).

Salix <u>lucida</u> Muhl. var. <u>angustifolia</u> Anderss. Rarely found with the species.

Salix <u>lucida</u> Muhl. var. <u>intonsa</u> Fern. MAP 30 Occasionally found with the species.

Salix myrtillifolia Anderss.

Found only in the Albert Mines area of Albert County in damp woods and gypsum cliffs. One of our rarest woody plants.

Salix nigra Marsh. BLACK WILLOW MAP 31

Found native only in the lower St. John River and Southeast Miramichi drainage systems, but often planted elsewhere and spreading.

Salix pedicellaris Pursh BOG WILLOW MAP 32

In acid bogs and sedge heaths mostly near the coast.

Salix pedicellaris Pursh var. hypoglauca Fern. MAP 33
The common form in similar habitats.

Salix pellita Anderss. MAP 34

On streambanks and rich thickets along the Fundy Coast and inland northwards.

Salix petiolaris Sm. MAP 35

Meadows and wet ground; common in the south, occasional in the north.

Salix petiolaris Sm. var. gracilis Anderss. MAP 36

Mostly confined to the south in similar habitats as the species.

Salix purpurea L. PURPLE OSIER, BASKET WILLOW

Eurasian; occasionally planted for ornament and spreading in the Saint John area. Once important for basketmaking.

Salix pyrifolia Anderss. BALSAM WILLOW MAP 37

Common throughout except in the central highlands, in lowland thickets and borders of woods. Leaves have the strong fragrance of the balsam poplar (Populus balsamifera).

X <u>Salix</u> <u>schneideri</u> Boivin (<u>S. lucida</u> X <u>S. nigra</u>)

Reported from Westfield, Kings Co.

Salix sericea Marsh. SILKY WILLOW MAP 38

Confined to southern half of Province in moist thickets and streambanks.

Salix viminalis L. OSIER MAP 39

Eurasian; spread from cultivation.

#### MYRICACEAE

Comptonia peregrina (L.) Coult. SWEET-FERN MAP 40

Common throughout the southeastern half on open sandy or gravelly roadsides, fields, and pastures. The leaves are rich in tannic acid and when steeped are used to treat rashes caused by poison ivy.

Myrica gale L. SWEET GALE MAP 41

Common throughout in shallow water, swamps, and bogs. The aromatic leaves can be used to flavor a kind of beer (Gaertner, 1967).

Myrica pensylvanica Loisel. BAYBERRY, CANDLEBERRY MAP 42

On dry or wet sterile soil especially along the eastern coast and Chignecto Bay.

#### JUGLANDACEAE

Juglans cinerea L. BUTTERNUT, WHITE WALNUT MAP 43

Restricted to the St. John, St. Croix, and Southeast Miramichi drainage systems on river terraces, and in rich woods. Oil extracted from the nuts used by native Indians (Vogel 1970). Bark and outer layers of the nuts used for a dark brown dye.

#### BETULACEAE

Alnus crispa (Ait.) Pursh GREEN or MOUNTAIN ALDER MAP 44
Uncommon throughout on rocky shores, moist sandy roadsides, and in thickets.

Alnus crispa (Ait.) Pursh var. mollis Fern. MAP 45

The common form throughout. The bark makes a warm brown dye on wool.

Alnus rugosa (Du Roi) Spreng. var. americana (Regel) Fern. SPECKLED ALDER MAP 46
Common throughout in swampy ground, on streambanks, and mountains.

X <u>Betula</u> <u>caerulea</u> Blanch. (X <u>B. caerulea-grandis</u> X <u>B. populifolia</u>) Reported from Grand Manan by Weatherby and Adams (1945). X <u>Betula caerulea-grandis</u> Blanch. BLUE BIRCH MAP 47

Occasional hybrid between <u>Betula papyrifera</u> var. <u>cordifolia</u> and <u>B. populifolia</u>. Should be looked for wherever the two species occur together.

X Betula fernaldii Lepage

A rare hybrid between <u>B. papyrifera</u> and <u>B. pumila</u> var. <u>pumila</u> reported from Rusagonis Station, Miscou Island, and Caraquet Island (<u>B. borealis</u> sensu Fernald, non Spach).

Betula glandulosa Michx. DWARF or SCRUB BIRCH

A very rare shrub of rocky mountain slopes often confused with B. pumila var. glandulifera. It has been reported from Big Bald Mountain.

Betula lutea Michx. f. YELLOW BIRCH MAP 49

Common throughout on rich moist lowlands to rocky mountain slopes. Lumber important for interior finish (B. alleghaniensis Brit.). Sap used by Acadians to produce a sugar, "sucre de sève".

Betula papyrifera Marsh. WHITE BIRCH, CANOE or PAPER BIRCH MAP 50

Common throughout on many soil types and sometimes forming pure stands after a fire. One of the most useful trees to the native Indians, used to cover their canoes, make many of their cooking utensils, their moose-calling horn, and kindling for their fires. The wood was a favorite for snowshoe frames. The tree can be tapped like the sugar maple to make sugar or sweet birch syrup. Important in N.B. for veneer stock.

Betula papyrifera Marsh. var. cordifolia (Regel) Fern. MAP 51

Occasionally found throughout with the species. Often considered a distinct species, B. cordifolia Regel. Considered a hybrid between B. lutea and B. papyrifera by Gleason and Cronquist (1963).

Betula papyrifera Marsh. var. macrostachya Fern. MAP 52

A rare variation with broad samaras on the seeds.

Betula papyrifera Marsh. var. pensilis Fern. MAP 53

A rare variation with strongly drooping branchlets and narrowly ovate leaves.

Betula populifolia Marsh. GREY, FIRE-, or OLDFIELD BIRCH MAP 54

Common throughout except in Northumberland and Madawaska counties on dry to wet sterile fields and open woodlands. Of little commercial importance but used locally for fuel and wood turning by craftsman.

Betula pumila L. LOW or SWAMP-BIRCH MAP 55

A rare shrub of bogs and open wooded swamps found mostly along the eastern coast, Sunpoke Lake area of Sunbury County and Grand Manan.

Betula pumila L. f. latipes (Winkler) Lepage

An uncommon variant of the species with more rounded or kidney-shaped leaves (B. pumila L. var. renifolia Fern.).

Betula pumila L. var. glandulifera Regel MAP 48

A rare shrub of rocky, mountain slopes. Often confused with and formerly called B. glandulosa var. glandulifera.

## Betula saxophila Lepage DWARF WHITE BIRCH

A rare problematical species appearing to combine some of the features of <u>B. papyrifera</u> and <u>B. pumila</u> var. <u>glandulifera</u> which occur with it. Found only near Summit Depot and on Mt. Carleton (<u>B. minor</u> (Tuckerm.) Fern.).

Corylus cornuta Marsh. BEAKED HAZELNUT MAP 56

Common throughout in rich thickets and borders of woods.

Ostrya virginiana (Mill.) K. Koch AMERICAN HOP-HORNBEAM, LEVERWOOD MAP 57 Mostly in rich woods in the southern half of the Province. The strong, tough wood is used locally for tool handles, wedges, and as a lever. Its wood is the hardest and heaviest of all our trees.

## FAGACEAE

## Fagus grandifolia Ehrh. AMERICAN BEECH MAP 58

Throughout in rich woods but concentrated towards the south. Nearly always found disfigured by the fungus disease, Nectria coccinea varafaginata following attacks of the beech scale (Cryptococcus fagi). Porcupines damage many trees by eating the bark and girdling the branches. The wood is not greatly valued in the Province, used chiefly for firewood and some hardwood pulp. Used by Micmacs to make canoe paddles and sometimes snowshoe frames.

### Quercus macrocarpa Michx. MOSSY-CUP OAK MAP 59

Moist woods and bottomlands centered in the St. John River Valley and scattered eastward as far north as Miscou Island. Because of its comparative rarity it is not used to any great extent by the lumber industry. It is reported that the acorns were used as a food source by the Micmacs (Speck and Dexter 1951). It is also an excellent street tree, little affected by air pollution.

#### Quercus robur L. ENGLISH OAK

Occasionally planted in the southern part of the Province and spreading locally to roadsides and borders of woods, as in Rockwood Park, Saint John and St. Andrews.

## Quercus rubra L. RED OAK MAP 60

Uncommon; on rocky or gravelly uplands, mostly towards the southern half of the Province, north to Miscou Island. Not common enough to be of any commercial value but used locally as an excellent source of firewood.

Quercus rubra L. var. borealis (Michx. f.) Farw. MAP 61

A variation found with the species with deeper acorn-cups and lighter grey bark of the branches.

#### ULMACEAE

## Ulmus americana L. AMERICAN or WHITE ELM MAP 62

In rich soils, especially along streams and bottomlands throughout but especially common in the watershed of the St. John River. Rapidly becoming decimated by the Dutch elm disease (Ceratocystis ulmi) believed to be carried by the native elm bark beetle (Hylurgopinus rufipes). Of most importance for its ornamental value, but occasionally used for furniture and the unpolished veneer for fruit and vegetable containers.

## Ulmus parvifolia Jacq. CHINESE ELM

Occasionally planted and trimmed as a hedge tree and escaping cultivation in waste areas such as railroad tracks. Reported from Fredericton and St. Stephen.

## Ulmus pumila L. DWARF or SIBERIAN ELM

Occurring as the above, but reported only from Fredericton.

## Ulmus rubra Muhl. SLIPPERY or RED ELM

Reported only from St. Andrews, and there thought to be planted or escaped from cultivation.

#### RANUNCULACEAE

Clematis verticillaris DC. PURPLE CLEMATIS OR VIRGIN'S-BOWER MAP 63
Uncommon to rare on rocky slopes and ledges throughout.

#### Clematis virginiana L. VIRGIN-BOWER MAP 64

Common throughout in low grounds, thickets, and borders of woods.

#### BERBERIDACEAE

# Berberis thunbergii DC. JAPANESE BARBERRY MAP 65

Occasionally escaped from cultivation in the southern part of the Province.

## Berberis vulgaris L. COMMON BARBERRY

Rarely escaped from cultivation as at Shediac, Westmorland County.

#### SAXIFRAGACEAE

## Ribes americanum Mill. WILD BLACK CURRANT MAP 66

Moist thickets and woods mostly towards the southern half of the Province and the St. John River Valley. Fruit palatable when cooked.

# Ribes cynosbati L. PRICKLY GOOSEBERRY

Probably erroneously reported by Macoun (1883) and based on a variety of R. oxyacanthoides.

# Ribes glandulosum Grauer SKUNK-CURRANT MAP 67

Throughout in moist woods, clearings, and rocky slopes. Although the bruised shrub and berries have the skunk odor, the berries are juicy and palatable.  $\frac{\hbox{Ribes lacustre}}{\hbox{Common throughout in moist woods and swamps.}} \ \ \frac{\hbox{Ribes CURRANT MAP 68}}{\hbox{Common throughout in moist woods and swamps.}} \ \ \text{The fruit makes a delicious tart jelly or sauce.}$ 

Ribes nigrum L. BLACK CURRANT MAP 69

Occasionally escaping from cultivation.

Ribes oxyacanthoides L. var. calcicola Fern. CANADA GOOSEBERRY MAP 70

Rarely found in rocky woods with the more common var. hirtellum.

All varieties have fruit considered superior to the cultivated species for preserves and jams (R. hirtellum Michx. var. calcicola Fern.).

Ribes oxyacanthoides L. var. hirtellum (Michx.) Scoggan MAP 71

Common throughout except in the central highlands in swampy or rocky woods, thickets, and clearings (R. hirtellum Michx.).

Ribes oxyacanthoides L. var. saxosum (Hook.) Cov. MAP 72

Found only along the Bay of Fundy (R. hirtellum Michx. var. saxosum (Hook.) Fern.).

Ribes sylvestre (Lam.) Mert. & Koch EUROPEAN RED CURRANT MAP 73

Commonly cultivated and speading to open woods and thickets (R. sativum (Rchb.) Syme).

Ribes triste Pallas RED CURRANT MAP 74

Common in cool moist woods. The smooth berries are similar in appearance and flavor to the cultivated red currant, but are inclined to drop before maturing (Fernald <u>et al</u>. 1958) (<u>R. rubrum</u> L. var. <u>propinquum</u> Trautv. & Mey.).

#### HAMAMELIDACEAE

Hamamelis virginiana L. WITCH-HAZEL MAP 75

Uncommon in the southern part of the Province, in damp or dry mixed woods. The leaves and sometimes entire plants are used to distill an aromatic extract (Pond's Extract), which is in some demand as an after-shave lotion and toilet water. The forked branches are sometimes used in water-divining, in the belief that they are sensitive to the presence of under-ground water.

## ROSACEAE

Amelanchier arborea (Michx. f.) Fern. JUNEBERRY, BILLBERRY, SHADBUSH, CHUKLEY-PEAR MAP 76

Mostly confined to the southern half of the Province on hillsides and in dry open woods. This species often grows into a sizable tree. Its fruit is said to be dry and insipid (Scoggan 1978).

Amelanchier bartramiana (Tausch) Roemer BARTRAM'S SHADBUSH MAP 77

Common throughout the Province in low thickets and boggy places.

Amelanchier canadensis (L.) Medic. SHADBUSH, etc. MAP 78

Uncommon in low ground, swamps and thickets mostly in the southern part of the Province. Often confused with A. arborea. The wood is very hard and heavy and, in the past, has been used for tool handles, cabinet wood, and (under the name of lancewood) for fishing rods, umbrella handles, and canes (Mathews 1915).

## Amelanchier fernaldii Wieg. MAP 79

A rare shrub of calcareous damp to dryish open barrens, thickets, ravines, and shores.

Amelanchier gaspensis (Wieg.) Fern. & Weath. MAP 80

An uncommon shadbush of ledges and shores (chiefly calcareous ( $\underline{\underline{A}}$  sanguinea var gaspensis Wieg.).

Amelanchier humilis Wieg. LOW JUNEBERRY MAP 81

Found occasionally on rocky or sandy shores and ledges along the western border of the Province.

Amelanchier intermedia Spach MAP 82

Occasional to common in thickets, shores, and swampy places in the south and along the east coast of the Province. Often mistaken for  $\underline{A}$ . canadensis. Considered by Landry (1976) to be a hybrid between  $\underline{A}$ . laevis and  $\underline{A}$ . canadensis.

Amelanchier laevis Wieg. SERVICEBERRY, SMOOTH-LEAVED SHADBUSH MAP 83

Common in the south and scattered in the north of the Province in thickets, dry to moist woods, margins of swamps and clearings. The wine-colored new leaves which unfold with the flowers are distinctive. The fruit is of excellent quality and when cooked, the flavor suggests sweet cherry pie. This species occasionally hybridizes with A. sanguinea and A. bartramiana in the Province producing various intermediate forms (A. arborea (Michx. f.) Fern. ssp. laevis (Wieg.) S. McKay).

## X Amelanchier quinti-martii Lalonde

A common hybrid of  $\underline{A} \cdot \underline{bartramiana}$  with  $\underline{A} \cdot \underline{arborea} \cdot \underline{Found}$  wherever the two species occur in proximity.

Amelanchier sanguinea (Pursh) DC. ROUND-LEAVED SHADBUSH MAP 84

An uncommon shrub of open woods and rocky slopes in the northeast and along the western border of the Province. The berries are very sweet and juicy.

Amelanchier stolonifera Wieg. MAP 85

Throughout except Northumberland County on acid rocky and sandy open habitats (A. spicata sensu G.N. Jones, 1949 in part, not (Lam.) Koch).

Amelanchier wiegandii Nielsen MAP 86

Uncommon throughout, on rocky or sandy places and streambanks.

Regarded by Landry (1976) as a hybrid between A. arborea and A. sanguinea.

Crataegus coccinea L. HAWTHORN MAP 87

Rare in thickets, pastures, and streambanks.

Crataegus dilatata Sarg.

Reported by Boivin (1966), but no specimens seen.

 $\frac{\text{Crataegus}}{\text{Rare in thickets and open woods along the St. John and St. Croix Rivers. (C. macrosperma Ashe).}$ 

Crataegus monogyna Jacq. ENGLISH HAWTHORN MAP 89
Occasionally cultivated and escaping to roadsides and hillside pastures in the southern part of the Province.

## (Crataegus oxyacantha L. WHITE THORN

Known only from St. Andrews where it has escaped from cultivation. Relevant collection in NY collected by M.O. Malte in 1929).

Crataegus rotundifolia Moench ROUND-LEAVED THORN MAP 90a

Occasionally found in thickets, along streambanks and hillsides in the southern part of the Province. The apple-like fruit of the hawthorns have a juicy pulp from which a delicious marmalade or jelly can be made. The quality of the fruit of the different species can, however, be determined only by experimentation (Fernald et al. 1958).

Crataegus succulenta Link var. macracantha (Lodd.) Egglest. LONG-SPINED THORN MAP 90b

An uncommon shrub of rocky pastures and borders of woods in the southern half of the province.

Physocarpus opulifolius (L.) Maxim. NINEBARK MAP 91
Introduced from western Canada and escaping to swampy ground, streambanks, and moist woods in the south.

# Potentilla fruticosa L. SHRUBBY CINQUEFOIL MAP 92

Wet or dry open ground, often in calcareous areas throughout except in the northern extremes of the Province.

Prunus americana Marsh. AMERICAN PLUM

Occasionally cultivated and rarely escaped. Very similar to  $\underline{P}$ . nigra but the leaves and sepals are glandless.

#### Prunus avium L. SWEET CHERRY

Occasionally cultivated and escaping to roadside thickets and borders of woods as at Fort Folly Point in Westmorland County.

## Prunus nigra Ait. CANADA PLUM MAP 93

A rare native and commonly cultivated shrubby plum found throughout but apparently native only to the south and west of the Province. This species has the largest flowers of the genus in our flora. The red or orange-red fruit are delicious and frequently abundant when the tree is carefully tended. (See R.P. Gorham 1943 for more details).

Prunus pensylvanica L. f. BIRD-, PIN-, or FIRE-CHERRY MAP 94

Common throughout in open woods, clearings, roadsides and recent burns.

## Prunus pumila L. SAND-CHERRY MAP 95

Scattered throughout on sandy beaches, dunes, and roadsides except along the eastern shore. The fruit are the largest of the eastern cherries and often occur in thick masses along the ground-hugging branches. From them delicious jellies and wines can be prepared.

## Prunus serotina Ehrh. BLACK or RUM-CHERRY MAP 96

Uncommon; in rich dry woods and fence rows mostly in the southern half of the Province. The juicy fruit is used to flavor alcoholic liqueurs and the bitter aromatic bark with an odor of bitter almond is used in cough medicines (Peattie 1958). Exceptionally large fruited forms have been found in the Woodstock area.

## Prunus virginiana L. CHOKE-CHERRY MAP 97

Throughout; in thickets, shores, rocky woods, and coastal bluffs. Like our other cherries often infected with the blackknot fungus, Apiosporina morbosa. Yellowish colored fruit are not uncommon (f. leucocarpa (Wats.) Haynie.

## Pyrus arbutifolia (L.) L. f. RED CHOKEBERRY MAP 98

Uncommon; in low open woods, wet thickets, and swampy ground. The fruit of all the chokeberries have a puckery quality when eaten raw, but become palatable when cooked. They are rich in pectin and useful to combine with other fruits in making jams to make them set more readily.

# Pyrus arbutifolia (L.) L. f. var. atropurpurea (Britt.) Robins. PURPLE CHOKEBERRY MAP 99

Common in peats, low thickets, wet to dry clearings mostly in the south and east  $(\underline{P} \cdot \underline{floribunda} \ \underline{Lindl} \cdot) \cdot$ 

Pyrus arbutifolia (L.) L. f. var. nigra Willd. BLACK CHOKEBERRY MAP 100

Uncommon in similar habitats or often drier thickets, and on bluffs and cliffs (P. melanocarpa (Michx.) Willd.). Forma rubriflora with red flowers was discovered in Albert County.

## X Pyrus arsenii (Britt.) Arsene

A rare hybrid between Sorbus americana with  $\underline{P}_{\bullet}$  arbutifolia varatropurpurea known from the Moncton area.

## X Pyrus hybrida Moench

Also known from the Moncton area, this is believed to be a hybrid of Sorbus americana with P. arbutifolia var. arbutifolia.

## X Pyrus jackii (Rehd.) Fern.

An uncommon hybrid of <u>Sorbus americana</u> with  $\underline{P} \cdot \underline{arbutifolia}$  varatropurpurea found in Saint John and Memramcook.

## Pyrus malus L. APPLE MAP 101

Spread from cultivation to roadsides, borders of woods, and clearings.

Rosa acicularis Lindb. PRICKLY ROSE

Known only from Miscou and the Fredericton area in sandy thickets or rocky slopes.

Rosa blanda Ait. MEADOW or RIVER ROSE MAP 102

Throughout in thickets and rocky slopes.

Rosa blanda Ait. var. glabra Crepin MAP 103

Scattered throughout mostly on rocky shores (R. johannensis
Fern.).

Rosa carolina L. MAP 104

Uncommon on dry sandy or rocky sites. More abundant on the east coast.

X Rosa centifolia L. CABBAGE ROSE MAP 105

Occasionally spread from cultivation.

Rosa cinnamomea L. CINNAMON-ROSE MAP 106

Frequently cultivated in the past and escaped to roadsides and fields.

Rosa eglanteria L. SWEET-BRIER or EGLANTINE

Cultivated and occasionally escaped as in Bass River, Kouchibouguac and Kingsclear.

Rosa micrantha Borrer

Very similar to R. eglanteria. Reported from Hillsborough and Boiestown where escaped from cultivation.

Rosa nitida Willd. BRISTLY-ROSE MAP 107

Uncommon throughout in acid bogs, wet thickets, and margins of ponds and streams.

Rosa palustris Marsh. SWAMP-ROSE MAP 108

Uncommon in wet ground and shores mostly in the south.

Rosa rugosa Thunb. SALT-SPRAY-ROSE MAP 109

Cultivated and introduced along roadsides, in sand dunes and seashore thickets. The large hips are rich in vitamin C.

Rosa spinosissima L. SCOTCH or BURNET-ROSE

Occasionally spread from cultivation as in Kent County.

Rosa virginiana Mill. VIRGINIA-ROSE MAP 110

Shores, swamps, thickets, and clearings throughout except uncommon in the northwest of the Province. Frequently hybridizes with  $\underline{R} \cdot \underline{carolina}$  where their ranges coincide, forming a series of intermediate forms.

Sorbaria sorbifolia (L.) A. Br. FALSE SPIRAEA MAP 111

Occasionally cultivated and escaping to thickets and clearings.

Sorbus americana Marsh. AMERICAN MOUNTAIN-ASH MAP 112

Common throughout in damp woods. The thoroughly ripe fruit can be used in jelly-making, especially after being touched by frost.

Sorbus aucuparia L. EUROPEAN MOUTAIN-ASH, ROWAN-TREE MAP 113

Spread from cultivation throughout the southern part of the Province north to Bathurst.

Sorbus decora (Sarg.) Schneid. SHOWY MOUNTAIN-ASH MAP 114

In rocky woods and shores throughout.

Spiraea alba Du Roi var. latifolia (Ait.) Ahles MEADOW-SWEET MAP 115

Common throughout in wet meadows, swampy ground and shores.

Spiraea tomentosa L. HARDHACK, STEEPLE-BUSH MAP 116

Scattered in sterile meadows and pastures in the southern half of the Province.

#### LEGUMINOSAE

Amorpha fruticosa L. FALSE-INDIGO

Occasionally cultivated and rarely escaped as at Upper Woodstock, Carleton County.

Robinia pseudo-acacia L. BLACK LOCUST MAP 117

Spreading from cultivation. It is the most durable of our hardwoods and especially useful for fence posts. The fuel value of this wood is higher than that of any other American tree, exceeding even hickory and oak, being almost equal, per cord at 20% moisture content, to a ton of anthracite coal (Peattie 1958).

Robinia viscosa Vent. CLAMMY LOCUST MAP 118

Planted and used as the black locust. It is native to eastern U.S. north to West Virginia and Pennsylvania. Spreading mostly by suckering from roots.

#### EMPETRACEAE

Corema conradii Torr. BROOM-CROWBERRY, POVERTY-GRASS

Collected only in the city of Saint John in 1878 by the Rev. James Fowler and not discovered since. In early spring, the masses of purple stamens are conspicuous where the plant abounds, as in some parts of Nova Scotia.

Empetrum nigrum L. BLACK CROWBERRY, CURLEWBERRY MAP 119

Common along the coast on acidic rocks, gravels, and peats. The berries are edible but form an important fruit only for those people living in far northern regions (Fernald et al. 1958).

## ANACARDIACEAE

Rhus radicans L. POISON IVY MAP 120

Rare in thickets, open woods, sandy and rocky places.

Rhus radicans L. var rydbergii (Small ex. Rydberg) Rehd. MAP 121
The more common form throughout except in extreme south.

## Rhus typhina L. STAGHORN-SUMAC MAP 122

Locally abundant in dry soil and rocky places throughout except in the extreme north of the Province. The leaves and twigs are rich in tannin and were used to cure leather. The leaves were included in Indian smoking mixtures and the berries were steeped and used as a cure for sorethroat and earache (Speck and Dexter 1951).

## AQUIFOLIACEAE

 $\frac{\hbox{Ilex } \hbox{verticillata}}{\hbox{Scattered in damp thickets and swampy ground.}} \ \, \text{The bright red} \\ \ \, \text{berry clusters persist on the bush into the winter.} \\$ 

Nemopanthus mucronata (L.) Trel. MOUNTAIN-HOLLY, CATBERRY MAP 124

Common throughout in damp woods, thickets, and bog margins.

#### CELASTRACEAE

# Celastrus scandens L. CLIMBING BITTERSWEET

Probably native only in a few places along the St. John River in York County and probably destroyed by the headpond of the Mactaquac Dam. It is occasionally cultivated and often escapes to thickets, streambanks, and woods.

## ACERACEAE

Acer negundo L. "MANITOBA MAPLE", BOX-ELDER, ASH-LEAVED MAPLE MAP 125
Commonly cultivated and escaping to suitable low ground along rivers throughout. Mid-western farmers once tapped this tree to make a sugar similar to that of the sugar maple.

Acer negundo L. var. violaceum (Kirsch.) Jaeg. MAP 126

Found occasionally with the species and distinguished by purple twigs covered with a glaucous bloom.

Acer pensylvanicum L. STRIPED MAPLE, MOOSEWOOD MAP 127

Common throughout in rich cool woods. The leaves and young shoots are favorite food for moose and deer.

## Acer platanoides L. NORWAY MAPLE MAP 128

Often cultivated in urban situations and locally spreading. The seeds of this and other maples are a favorite food of the evening grosbeaks.

# Acer rubrum L. RED, SOFT, or SWAMP-MAPLE MAP 129

Common throughout in moist uplands, alluvial soils, and swamps. Maple sugar producers in the Province refer to this tree as soft maple and tap it as eagerly as the hard or sugar maple. The wood is used locally for manufacturing veneer and some furniture, but is only three-fourths as strong as sugar maple.

Acer rubrum L. f. tomentosum (Desf.) Dansereau

A minor variation of the species with the leaves permanently pubescent beneath is occasionally found.

Acer rubrum L. var. trilobum Koch CAROLINA MAPLE MAP 130

An uncommon variation with the leaves rounded or wedge-shaped at the base and only three-lobed, whereas the typical variety is five-lobed.

Acer saccharinum L. SILVER, WHITE, or RIVER-MAPLE MAP 131

Common in bottomlands and along streams in the St. John and Southeast Miramichi drainage systems and often cultivated elsewhere. A graceful but short-lived street tree.

Acer saccharum Marsh. SUGAR-, HARD-, or ROCK-MAPLE MAP 132

Common throughout in rich rocky or hilly woodlands. Reported as used by the Micmacs to make their bows and arrows and the sap was drawn off through porcupine quills to make maple syrup and sugar (Speck and Dexter 1951). Our most valuable commercial hardwood used for firewood, veneer, hardwood pulp, turning, furniture, and farm tools. It is the principal source of maple syrup and sugar in the Province.

Acer spicatum Lam. MOUNTAIN-MAPLE MAP 133

Locally common throughout in cool rocky woods.

#### RHAMNACEAE

Rhamnus alnifolia L'Her. ALDER-LEAVED BUCKTHORN MAP 134

Uncommon in swamps and moist or wet meadows and woods mostly in the north and west of the Province. Important as an overwintering host for certain aphids destructive to potatoes.

Rhamnus cathartica L. COMMON BUCKTHORN MAP 135

Introduced and escaped to open woods, pastures, and fence-rows in the south of the Province. The bitter-sweet berries of all species of buckthorn are powerfully cathartic.

Rhamnus frangula L. ALDER-BUCKTHORN

Introduced and escaped locally as in Blackville and Fredericton.

#### VITACEAE

Parthenocissus inserta (Kerner) Fritsch VIRGINIA CREEPER, WOODBINE MAP 136

Native to mid-western Canada east to Ontario. Cultivated and locally escaped to moist woods and thickets mostly in the south of the Province. The tendrils lack the adhesive disks of the following species. Variety macrophylla (Lauche) Rehd. with leaflets over 2 dm long is found occasionally with the species.

Parthenocissus quinquefolia (L.) Planch. VIRGINIA CREEPER, WOODBINE MAP 137
Cultivated for its brilliantly red early autumn foliage and ability to climb on smooth walls by means of adhesive disks. Locally escaping to moist woods and thickets. The berries are eaten by many species of birds.

Vitis riparia Michx. RIVERBANK- or FROST-GRAPE MAP 138

Native only to moist thickets of the St. John River and
Restigouche River systems. A superb jelly and fine wine can be made from the berries.

#### TILIACEAE

Tilia americana L. BASSWOOD, WHITEWOOD MAP 139

Most common in rich woods of the St. John River system, and occasionally found elsewhere in the Province where sugar maple, white ash, and eastern hemlock dominate the forest. It is too rare to be of commercial value but is used locally for carving and whittling.

(Tilia europaea L. EUROPEAN LINDEN

Often cultivated but not documented with certainty to have escaped in the Province.)

(<u>Tilia platyphyllos</u> Scop. BIGLEAF LINDEN

Status in our flora similar to the preceding species.)

#### CISTACEAE

Hudsonia tomentosa Nutt. GOLDEN HEATHER

A dwarf, heather-like shrub with yellow flowers found on sand dunes along the east coast as at Richibucto Head, Kent County, Youghall Beach, Gloucester County, and Fox Island, Northumberland County.

#### THYMELAEACEAE

Daphne mezereum L. DAPHNE, MEZEREON, SPURGE LAUREL

An ornamental shrub occasionally naturalized in thickets, hedgerows and along roadsides in the south of the Province as in Shediac,
Westmorland County, Acamac Backland, St. John County, Kingshurst, Kings
County and Creasey Lake, Charlotte County. All parts of the plant are
dangerously poisonous. The fruit is scarlet and could be attractive to
children.

Dirca palustris L. WICOPY, ROPE-BARK MAP 140

A rare shrub of rich deciduous or mixed woods known from the mid St. John River Valley and at Weldon, Albert County. The fibrous, remarkably pliant and tough bark was used by the Indians to make thongs (Fernald 1950).

#### ELAEAGNACEAE

Shepherdia canadensis (L.) Nutt. SOAPBERRY MAP 141

A rare shrub of calcareous rocks and banks. The soapy berries were sweetened and whipped to a froth by the Indians who apparently didn't mind the soapy taste (Fernald <u>et al</u>. 1958).

#### CORNACEAE

 $\frac{\text{Cornus}}{\text{In dry woods and rocky slopes throughout except towards the northeast corner.}} \text{It is occasionally found in hedgerows of farming country.}$ 

#### Cornus amomum Miller SILKY-DOGWOOD MAP 143

A rare shrub of swamps, damp thickets, and stream margins. It is intriguing to speculate that the Indians may have carried this plant into the Province to use as a smoking ingredient, as a black dye, and as a fever remedy. Its location along one of the most important portage routes lends support to this possibility.

Cornus amomum Miller var. schuetzeana (Meyer) Richett PALE-DOGWOOD Found occasionally with the species and differing chiefly in its narrow leaves which are lighter beneath (C. obliqua Raf.).

Cornus rugosa Lam. ROUND-LEAVED DOGWOOD MAP 144

Dry woods and rocky slopes mostly towards the south of the Province.

Cornus stolonifera Michx. RED-OSIER DOGWOOD MAP 145

Common throughout on shores and thickets. The bright red willow-like branches are a familiar sight along the roadsides (C. alba L.).

#### ERICACEAE

Andromeda glaucophylla Link. BOG-ROSEMARY MAP 146

A low shrub of bogs, peaty barrens, and occasionally margins of ponds throughout.

Arctostaphylos <u>uva-ursi</u> (L.) Sprengel BEARBERRY, KINNIKINICK MAP 147

Rare on exposed rock or sands along the coast and occasionally on exposed rocky summits inland. The Indians used the leaves in their smoking mixtures. The variety <u>coactilis</u> Fern. & Macbr. MAP 148 with fine white hairs on the twigs is found occasionally with the species.

# Chamaedaphne calyculata (L.) Moench var. angustifolia (Ait.) Rehd. LEATHER-LEAF MAP 149

A characteristic plant of peaty swales, bogs, and pond margins throughout the Province. This is the commoner of two integrating varieties separated by Fernald on the shape of the leaves and sepals. Variety latifolia (Ait.) Fern. MAP 150 has broader leaves, half as broad as long and rounded at the end while the sepals are broader, ovate, and blunt.

Gaylussaccia baccata (Wang.) K. Koch BLACK HUCKLEBERRY MAP 151

Uncommon on dry, acid, sandy, or rocky soils along the coast and inland along the St. John River as far as the Fredericton area. Also collected at Estey Lake in central Northumberland County. The black fruit is sweet but each has about 10 hard seeds that do not soften in cooking.

Gaylussacia dumosa (Andr.) T. & G. var. bigeloviana Fern. DWARF HUCKLEBERRY

Occasionally found near the coast on moist peaty soils and in sphagnum bogs. The berries are considered juicy and deliciously spicy (Fernald et al. 1958).

Kalmia angustifolia L. SHEEP LAUREL, LAMB'S-KILL MAP 153

Common throughout on barren lands with sterile or acid soils, especially areas of recent burns. The leaves contain andromedotoxins which can be poisonous to grazing animals.

Kalmia polifolia Wang. PALE LAUREL, BOG LAUREL MAP 154

A characteristic sphagnum bog plant throughout the Province.

<u>Ledum groenlandicum Oeder</u> LABRADOR TEA MAP 155

Common throughout in cold sphagnum bogs and wet peatlands. The young leaves are warmly aromatic and have been steeped to make a tea which has been found to help prevent scurvy (Speck and Dexter 1951).

Oxycoccus macrocarpus (Ait.) Pers. LARGE CRANBERRY MAP 156

An uncommon dwarf trailing shrub of swamps, wet shores, and occasionally open bogs. The large very tart fruit hold well on the plants over winter and can be collected in early spring. This is the source of the commercial cranberry. The name probably originated from crane berries alluding to some long-legged birds feeding on the berries (Vaccinium macrocarpon Ait.).

Oxycoccus quadripetalus Gilib. SMALL CRANBERRY MAP 157

Smaller in all its parts than the preceding species and confined to boggy or peaty soils. (Vaccinium oxycoccos L.).

Rhododendron canadense (L.) Torrey RHODORA MAP 158

Common throughout in bogs, damp thickets, acid barrens and rocky summits and slopes. The mauve flowers are very showy in late March to early June. The white flowered form (forma albiflorum (Rand & Redf.) Rehd.) occurs occasionally.

Vaccinium angustifolium Ait. LOW SWEET or LATE SWEET BLUEBERRY MAP 159

Common throughout on dry open barrens, peats, and open woods.

This species and its varieties are frequently cultivated in the south of the Province (V. pensylvanicum Lam.).

Vaccinium angustifolium Ait. var. hypolasium Fern. MAP 160

A well-marked variety with the leaves hairy beneath.

Vaccinium angustifolium Ait. var. <u>laevifolium</u> House MAP 161

A larger shrub than the typical variety.

Vaccinium angustifolium Ait. var. nigrum (Wood) Dole
Similar to the preceding variety but with leaves blue-green and the berries shiny black occurring occasionally throughout.

Vaccinium cespitosum Michx. DWARF BLUEBERRY MAP 162

A rare plant of gravelly or rocky shores, and openings along the coast.

Vaccinium corymbosum L. HIGHBUSH BLUEBERRY

A rare tall shrub (up to 4 m high) known only from Tower Hill in Charlotte County and possibly introduced and spread. This species and its cultivars are the source of the blueberry industry from southern New England, south.

Vaccinium myrtilloides Michx. SOUR-TOP or VELVET-LEAF BLUEBERRY MAP 163

Common throughout in moist woods, swamps, and clearings. Branches and leaves covered with a velvety hairiness. The sour berries have a heavy bloom.

Vaccinium uliginosum L. var. alpinum Bigel. ALPINE BLUEBERRY

A dwarf shrub reported only from Bald Mountain, Northumberland
County.

Vaccinium vitis-idaea L. var. minus Lodd. MOUNTAIN-CRANBERRY, ROCK-CRAN-BERRY, LINGBERRY MAP 164

An uncommon low shrub of rocky or dry peaty acid soil. Most common on the Fundy coast. This is the "PARTRIDGE-BERRY" of Newfoundland and is considered one of the stable fruits of all northern lands. The berries are superior after frosts.

#### OLEACEAE

Fraxinus americana L. WHITE ASH MAP 165

Found mostly in the southern half of the Province in rich upland or sometimes lowland woods. The wood is heavy and strong and is used for sporting goods, handles, agricultural tools, and furniture. The Micmacs used the wood for axe and knife handles (Speck and Dexter 1951).

Fraxinus nigra Marsh. BLACK ASH MAP 166

A characteristic tree of swampy woodlands throughout. It is the preferred local wood used for basketmaking by the Micmacs.

Fraxinus pennsylvania Marsh. RED ASH MAP 167

A characteristic tree of the lower St. John River Valley and found occasionally north to the Quebec border along the river. It is sometimes found growing with F. americana and can be separated by the downy buds and twigs, and very short stalks of the leaflets. The variety austini Fern. with toothed leaflets occurs with and often outnumbers the species with leaflets untoothed. Variety subintegerrima (Vahl.) Fern. is reported from Kouchibouguac National Park (Monroe 1979).

Syringa vulgaris L. COMMON LILAC MAP 168

Often cultivated and frequently persisting near old homesteads.

#### SOLANACEAE

Solanum dulcamara L. BITTERSWEET NIGHTSHADE MAP 169

An Eurasian introduction spreading to thickets and waste areas near settlements. The entire plant is suspected of being poisonous (Fernald et al 1958). Variety villosissimum Desv. with branches and leaves softly downy occurs occasionally with the species.

#### RUBIACEAE

Cephalanthus occidentalis L. BUTTONBUSH

Known only from the St. Croix River at St. James, Charlotte County and from Grand Lake, Queens County.

#### CAPRIFOLIACEAE

Diervilla lonicera Mill. BUSH-HONEYSUCKLE MAP 170

Common throughout in dry woods, clearings, and rocky places.

X Lonicera bella Zabel

A cultivated hybrid between  $\underline{L}_{\bullet}$  morrowi Gray and  $\underline{L}_{\bullet}$  tatarica  $\underline{L}_{\bullet}$  occasionally spreading to thickets.

Lonicera canadensis Bartr. FLY-HONEYSUCKLE MAP 171

A common plant of cool, moist woodlands throughout.

Lonicera oblongifolia (Goldie) Hook. SWAMP FLY-HONEYSUCKLE

This rare shrub of mostly calcareous bogs, swampy thickets and wet woods is known only from St. Leonard, Madawaska County, Meredith Settlement, Charlotte County, and Centreville, Carleton County.

Lonicera tatarica L. TARTARIAN HONEYSUCKLE MAP 172

Locally escaped from cultivation to thickets, borders of woods, and shores.

Lonicera villosa (Michx.) R. & S. MOUNTAIN FLY-HONEYSUCKLE MAP 173

With its various varieties, this low shrub is found throughout in peaty or rocky barrens and bogs. The blue berries are delicious, somewhat resembling the flavor of the true blueberry and are known in Eastern Maine as WATERBERRIES (Fernald et al, 1958). The degree of pubescence varies greatly and several varieties have been named based mostly on this character. They occur occasionally with the species.

Sambucus canadensis L. COMMON ELDERBERRY MAP 174

Locally common especially towards the south on open, wet, rich soils. The berries are popularly used in making folk wines and for pie fillings and jelly. The flowers make a delectable fritter when dripped in a rich batter and fried in deep fat.

Sambucus racemosa L. var. pubens (Michx.) Koehne RED-BERRIED ELDER MAP 175

Common throughout in woods and clearings. The berries are inedible.

Symphoricarpus albus (L.) Blake var. <u>laevigatus</u> (Fern.) Blake SNOWBERRY Frequently cultivated and occasionally escaping to roadsides, rocky banks, and thickets. The species may be native to the Province, but it is difficult to separate from the introduced variety from the Pacific slope.

Viburnum acerifolium L. DOCKMACKIE, ARROW-WOOD, MAPLE-LEAVED VIBURNUM Found only at Sprague's Falls, Charlotte County.

Viburnum alnifolium Marsh. HOBBLEBUSH, WITCH-HOBBLE, MOOSEWOOD MAP 176

Common throughout in mixed woods and cool ravines. All species of viburnum bear berries with a thin edible pulp suggesting dates, raisins, or prunes. They are seldom gathered, however, because of the large size of the stone in relation to the small size of the flesh.

<u>Viburnum</u> <u>cassinoides</u> L. WITHEROD, WILD-RAISIN MAP 177

Common throughout in thickets, clearings, swamps, and borders of woods.

Viburnum dentatum L. var. <u>lucidum</u> Ait. ARROW-WOOD

Known only from Good Corner, Carleton County, McAdam, York County, and Loon Bay, Charlotte County in damp thickets.

Viburnum edule (Michx.) Raf. SQUASHBERRY, MOOSEBERRY MAP 178

Common only in the northwest of the Province on mountains, cool slopes, and swamps. In Newfoundland and Cape Breton the berries, less acid than V. trilobum, are in high repute for "squash" or sauce and jellies (Fernald et al 1958).

Viburnum lantana L. WAYFAIRING-TREE, TWISTWOOD

Cultivated and escaped occasionally as at Fredericton and Saint John.

Viburnum lentago L. SWEET VIBURNUM, NANNYBERRY

A rare shrub of streambanks and borders of woods found only near the St. Croix River, Charlotte County, and along the Eel River in Carleton County.

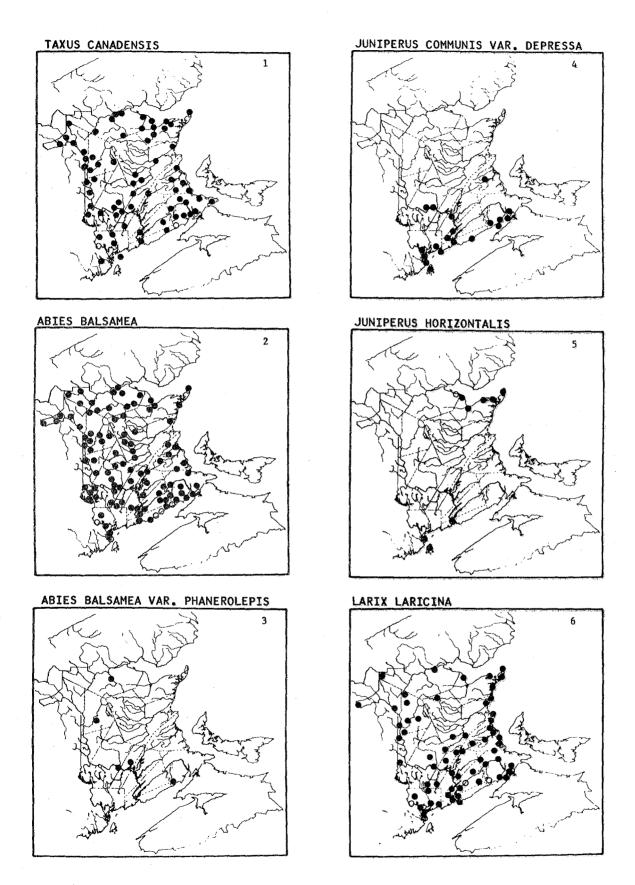
Viburnum opulus L. var. americanum Ait. HIGHBUSH-CRANBERRY MAP 179

A common shrub of cool woods, thickets, shores, and rocky slopes throughout except rare along the east coast. Used for sauces in many areas where the bog-cranberries are unknown (V. trilobum Marsh.). The similar European Wayfaring Tree (V. opulus L.) is often cultivated and occasionally escapes. The fruit is bitter compared to the Canadian species.

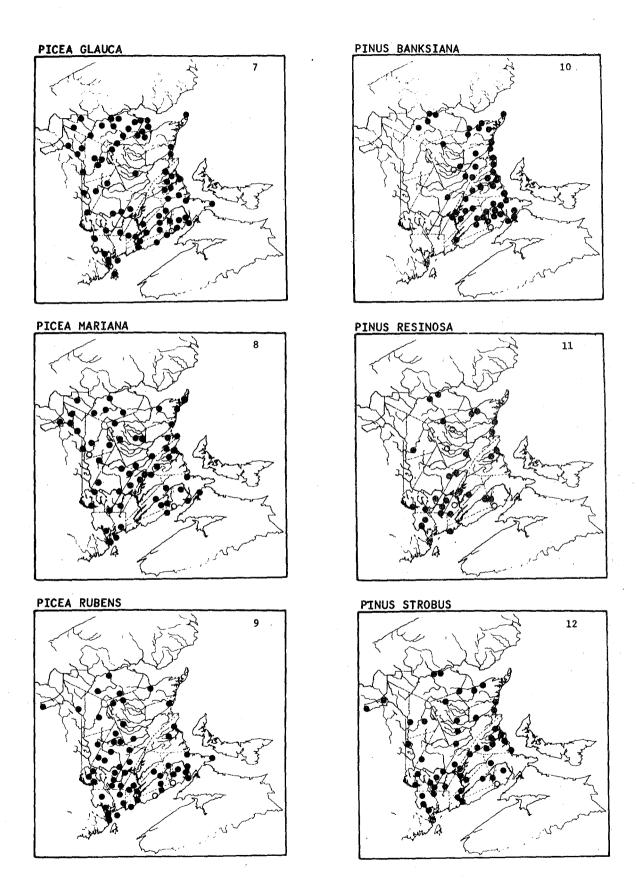
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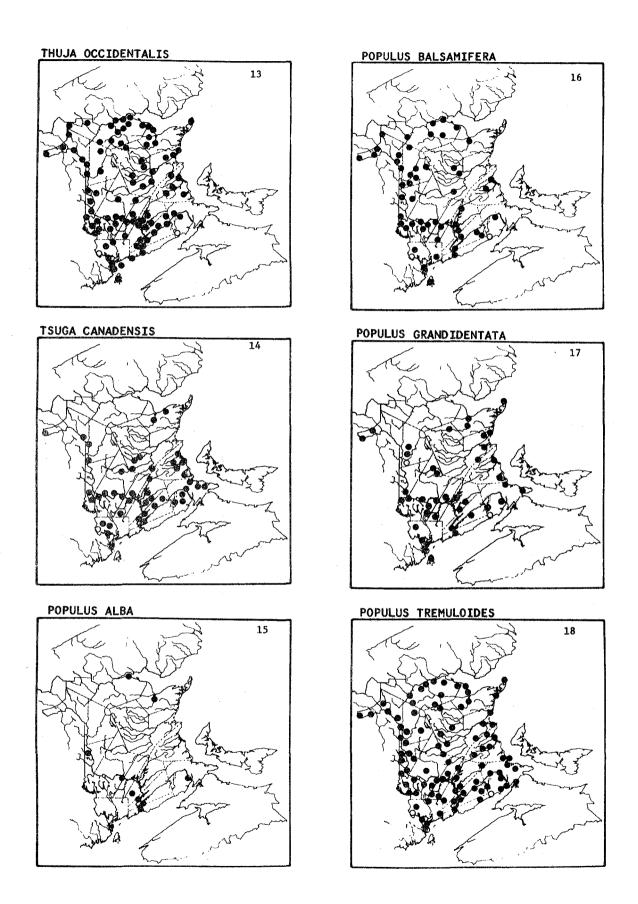
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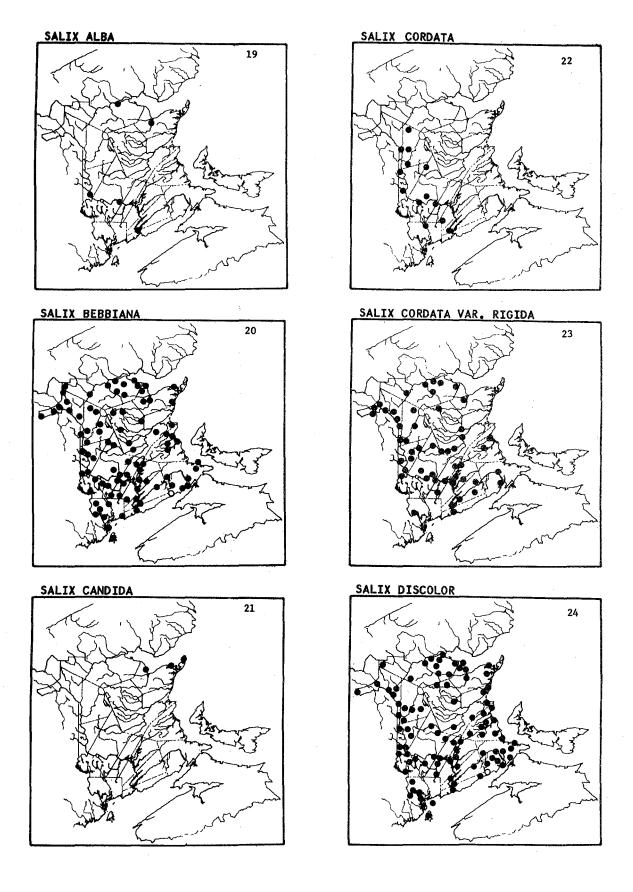
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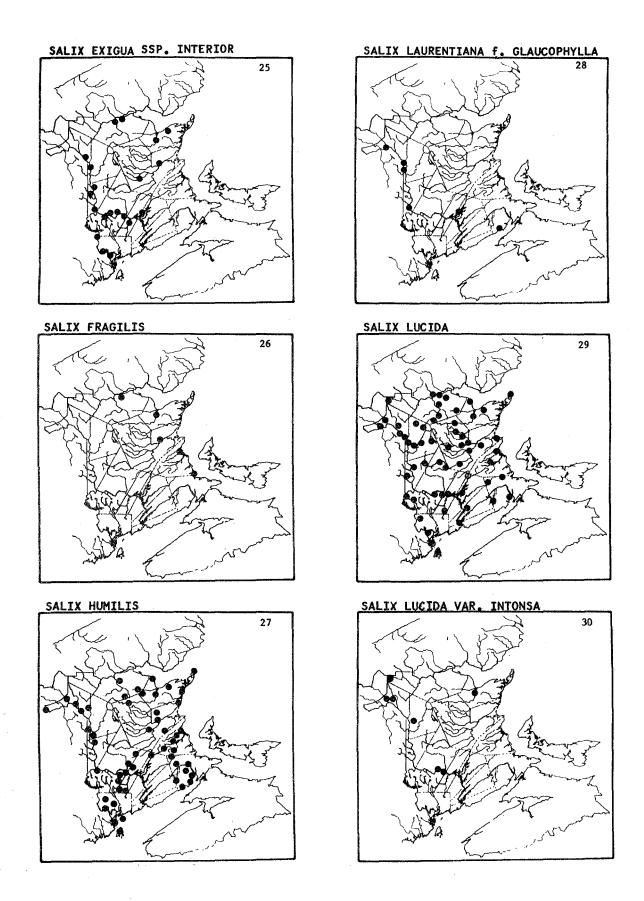


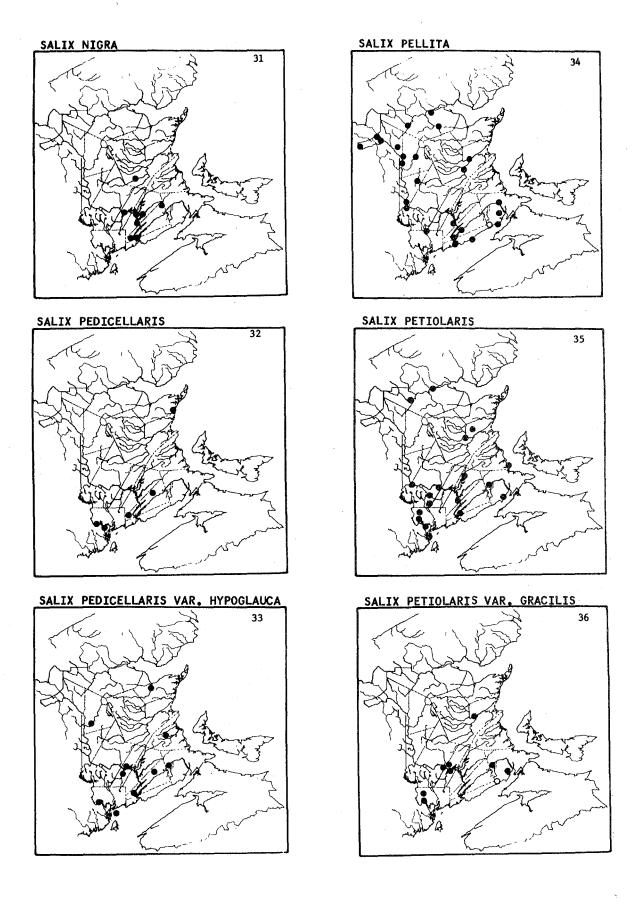
- A specimen bearing the species name has been recorded.
- O One or more specimens of the species has been seen by a reliable observer.

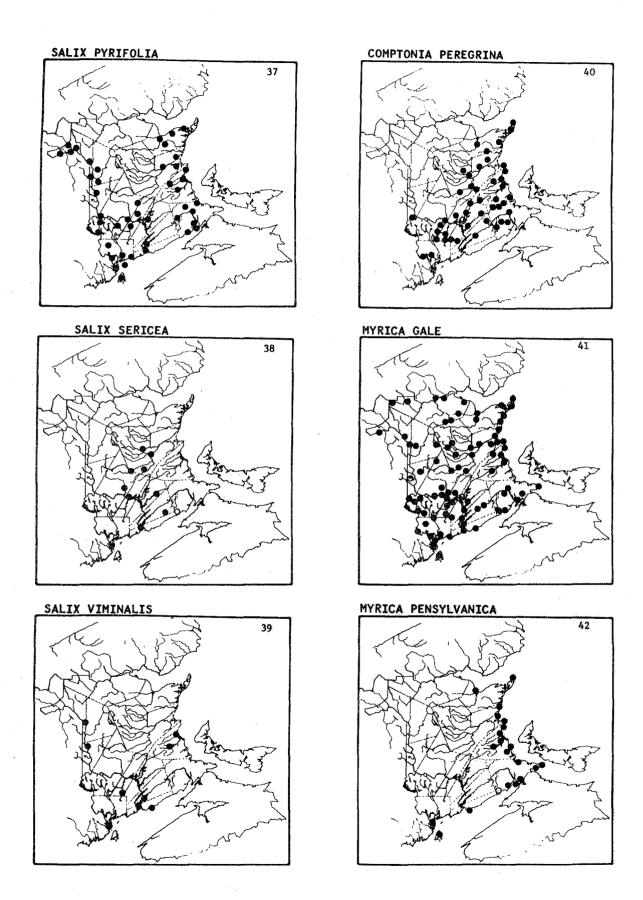


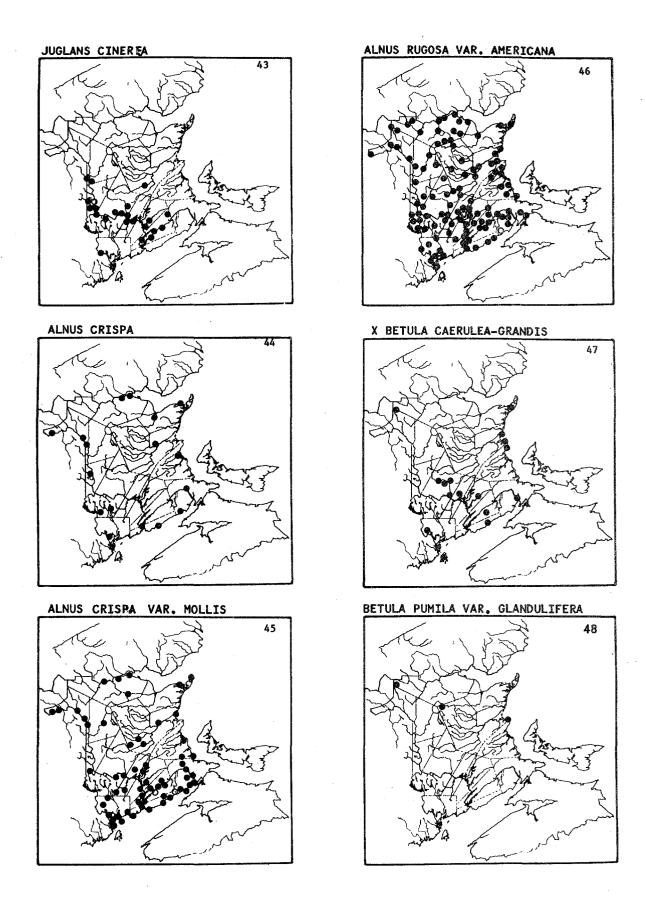


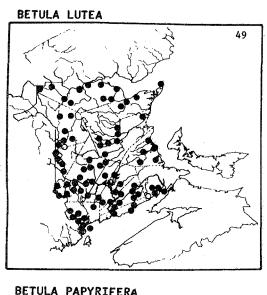


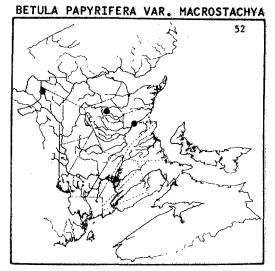


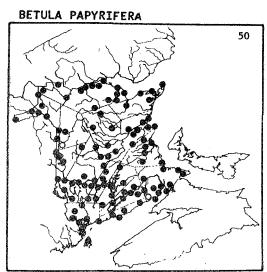


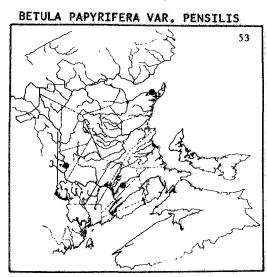


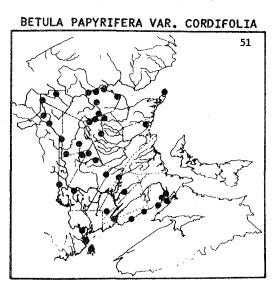


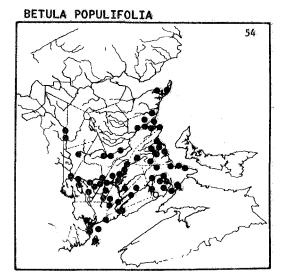


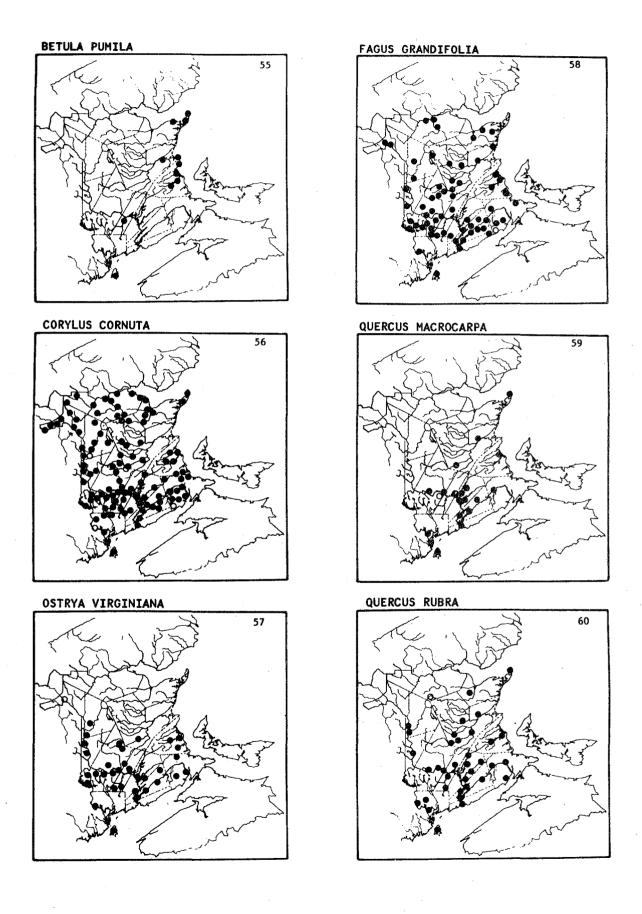


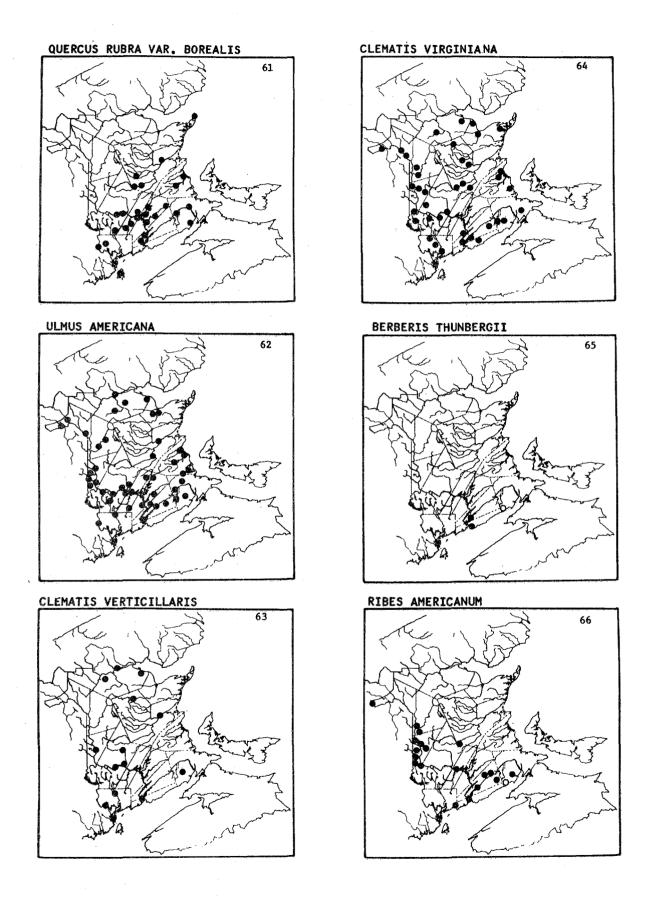


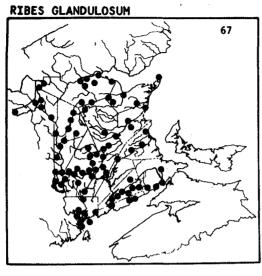


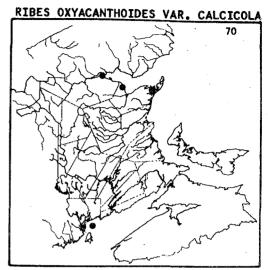


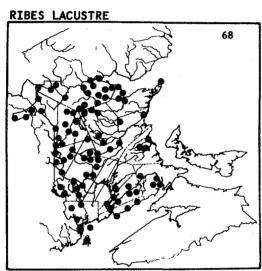


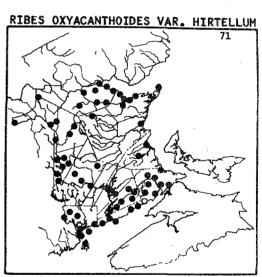


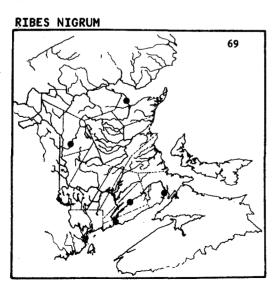


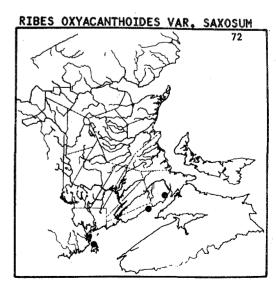


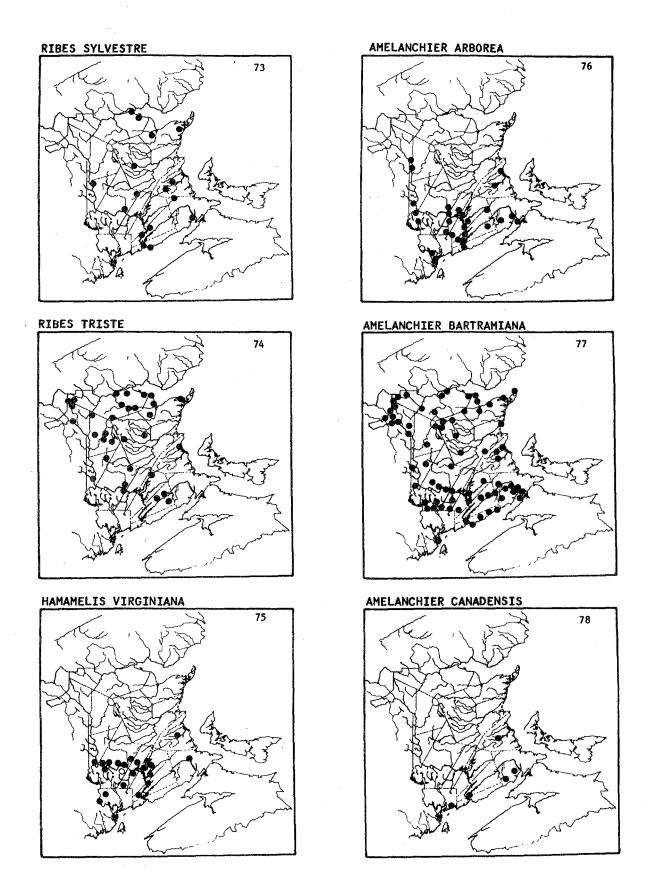


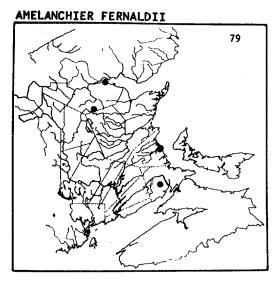


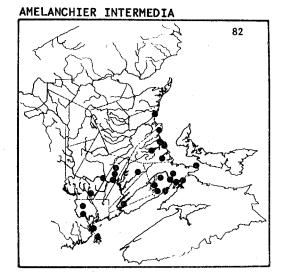


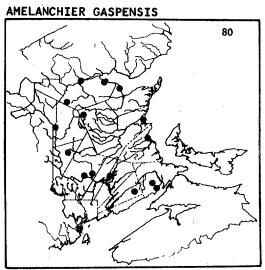


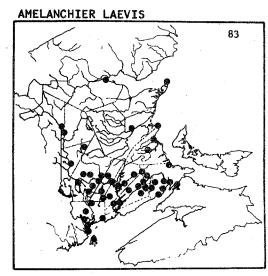


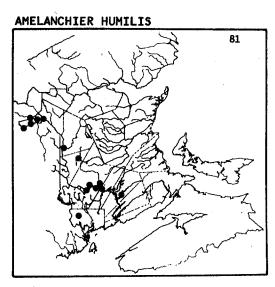


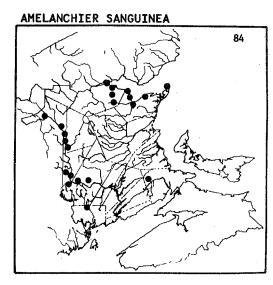


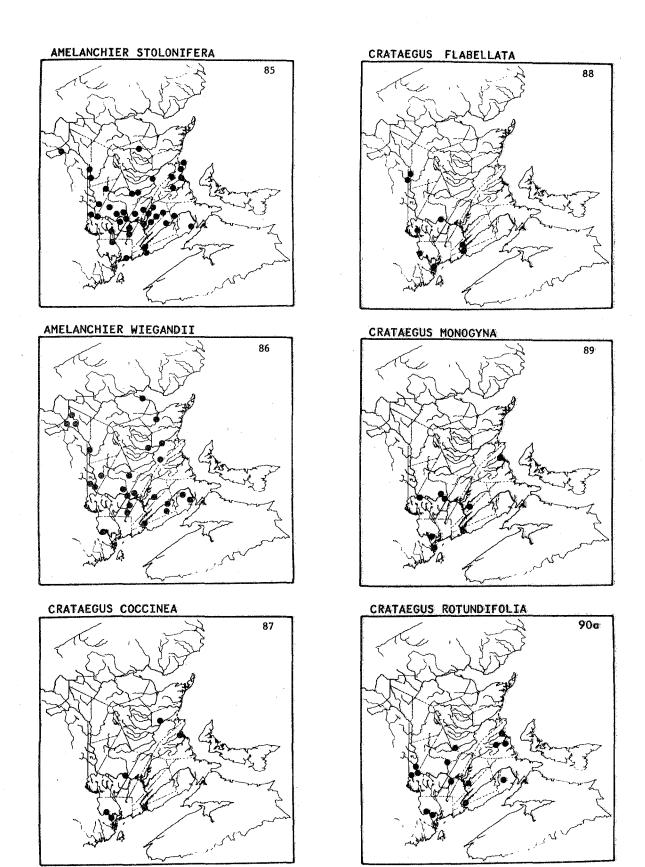


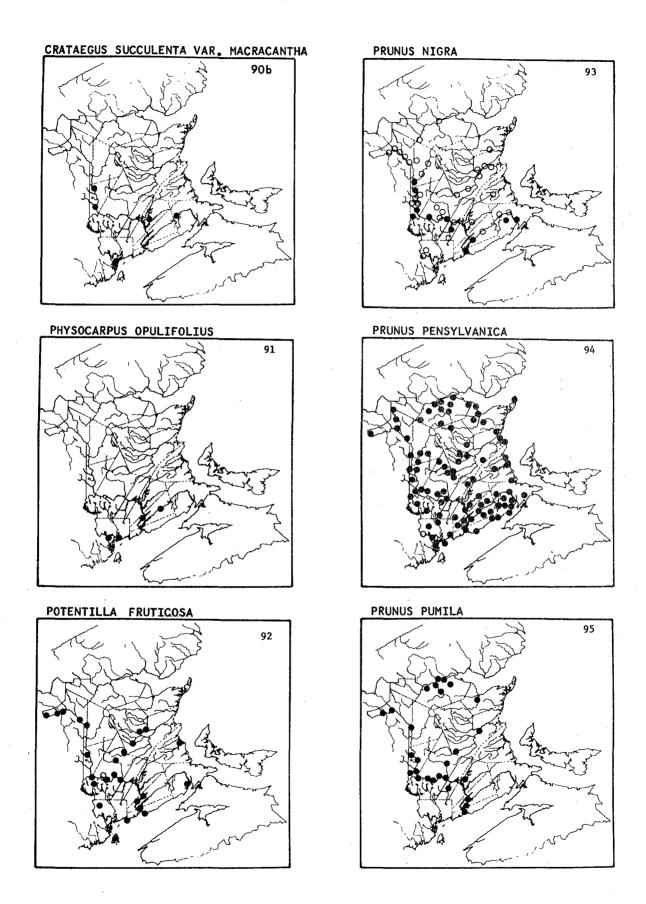


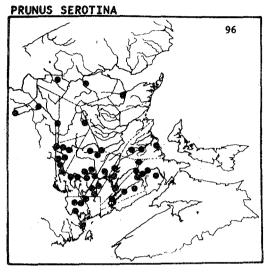


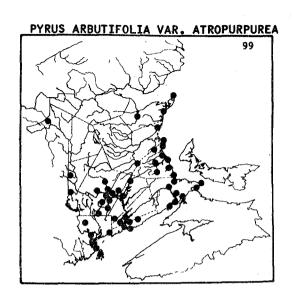


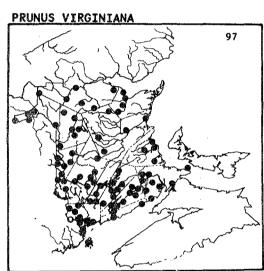


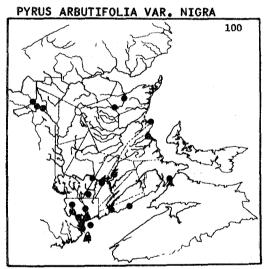


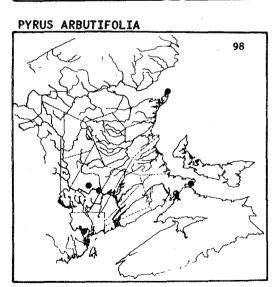


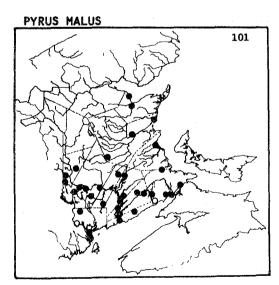


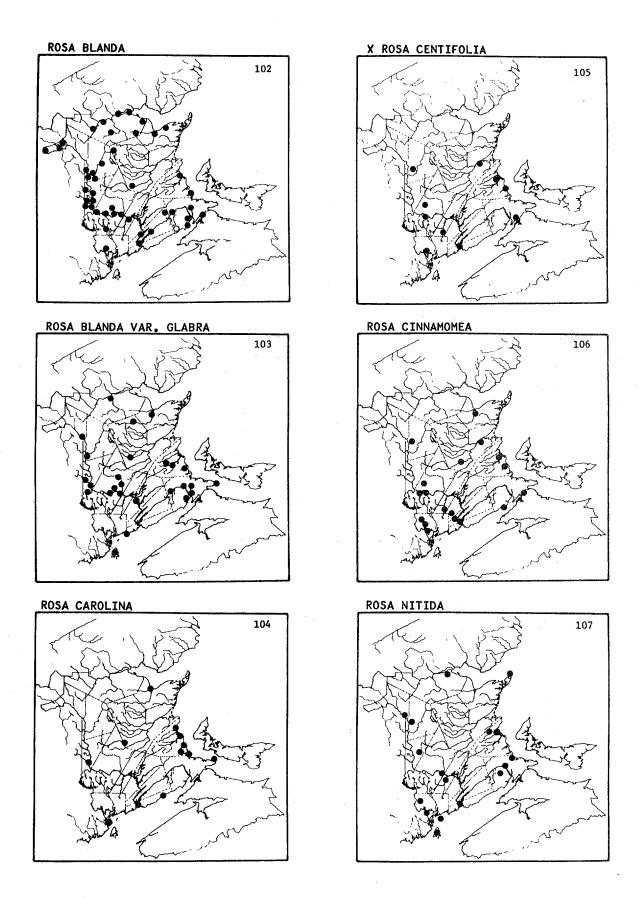


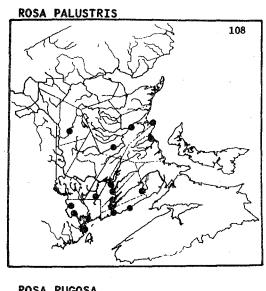


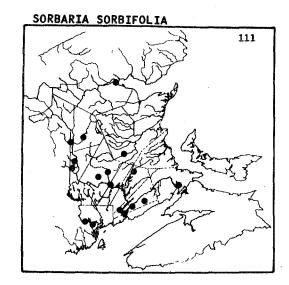


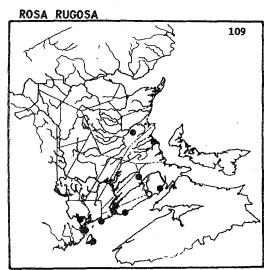


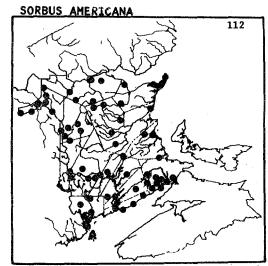


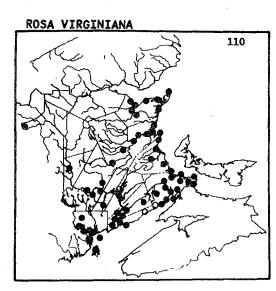


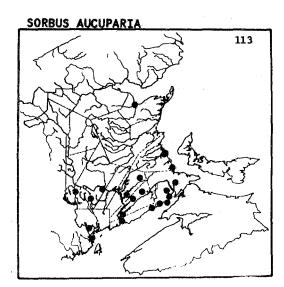


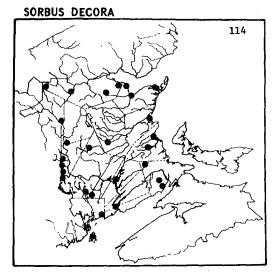


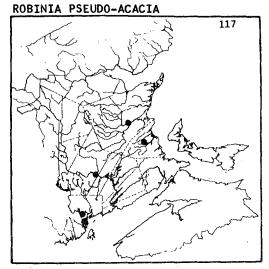


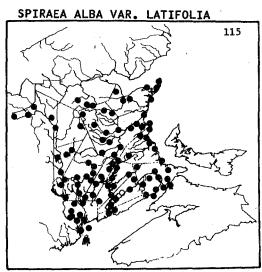


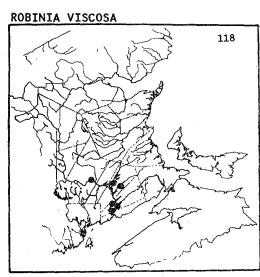


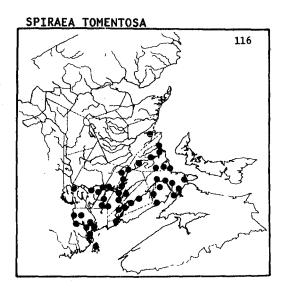


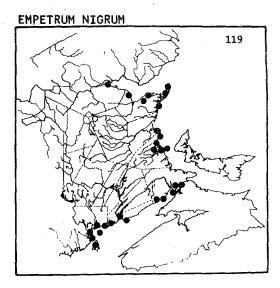


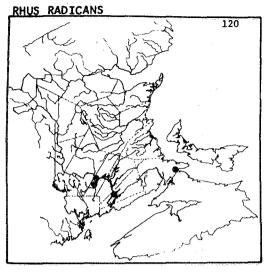


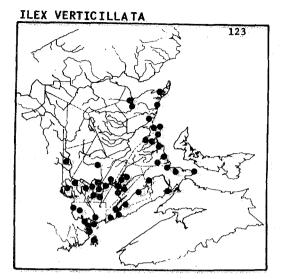


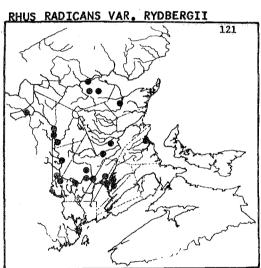


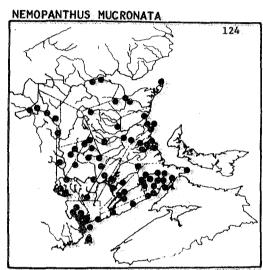


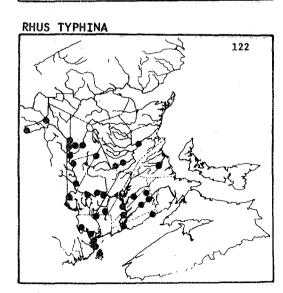


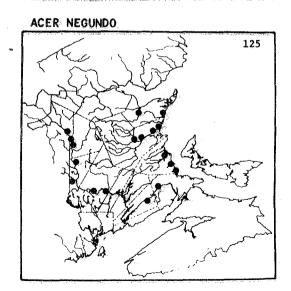


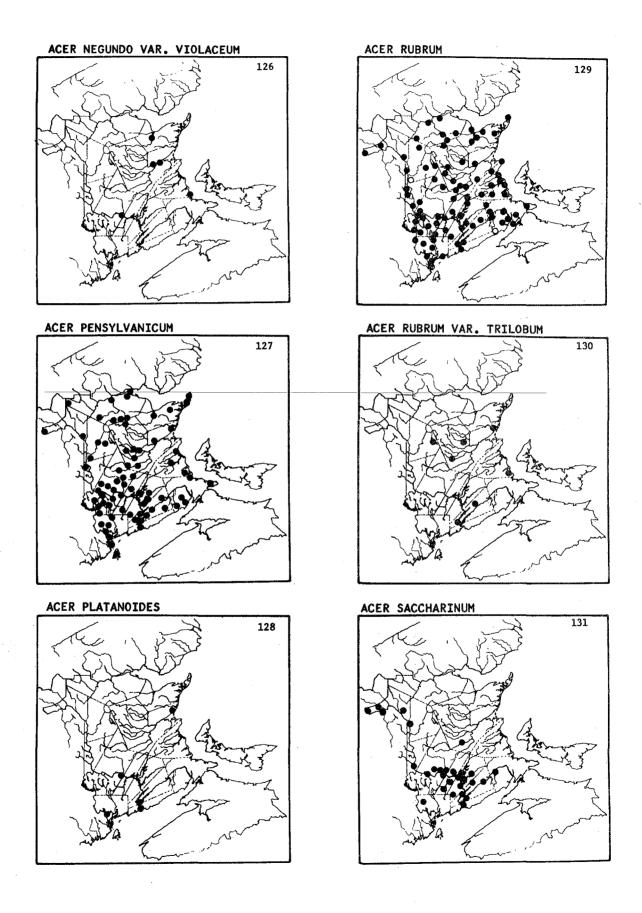


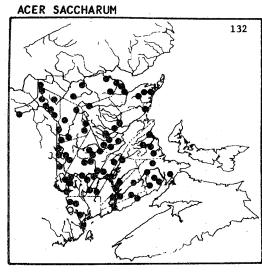


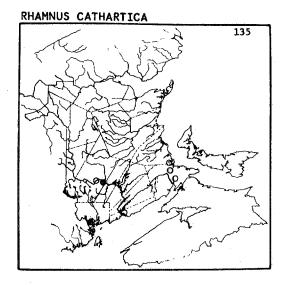


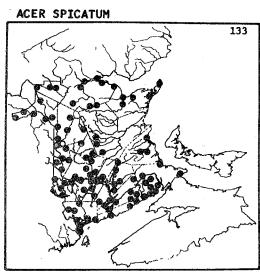


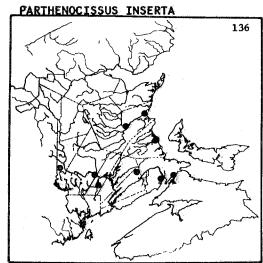


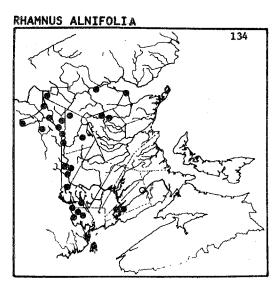


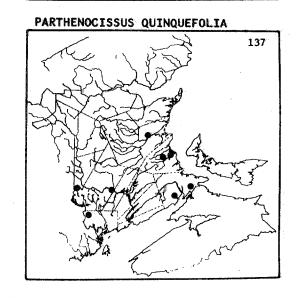


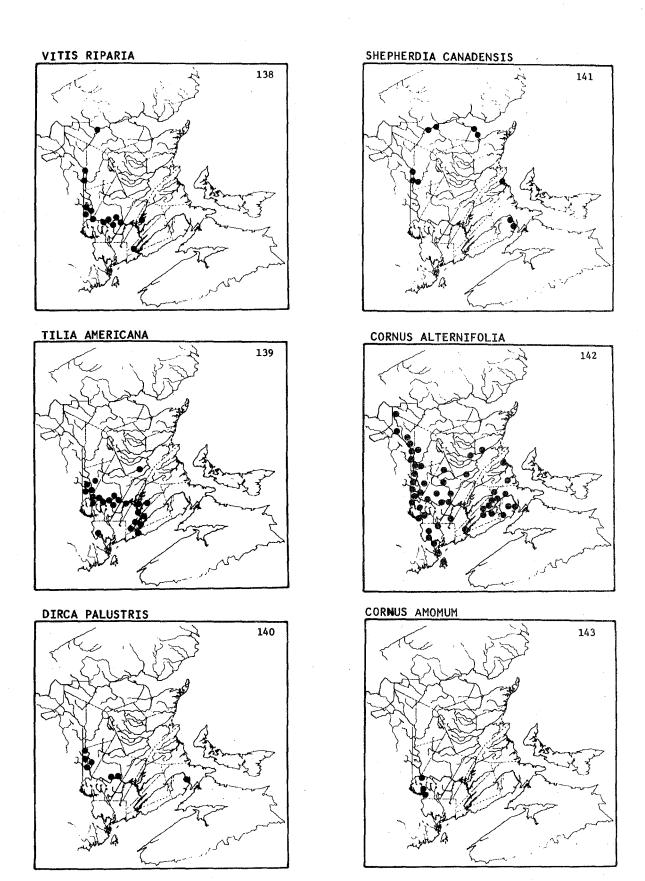


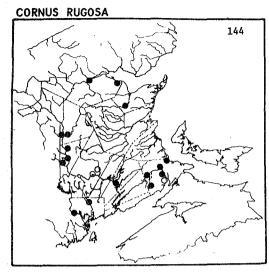


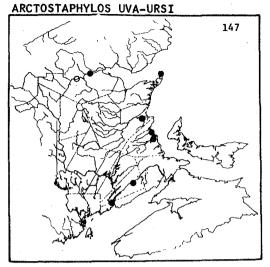


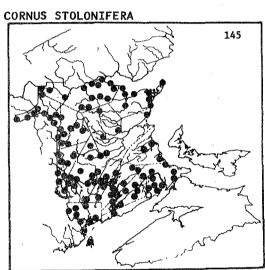


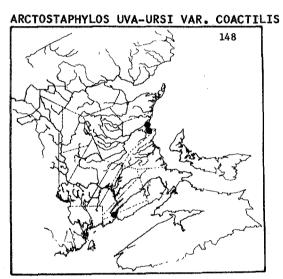


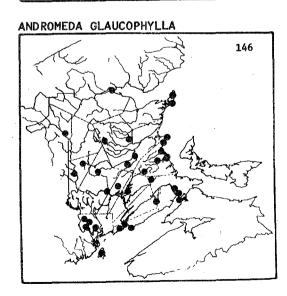


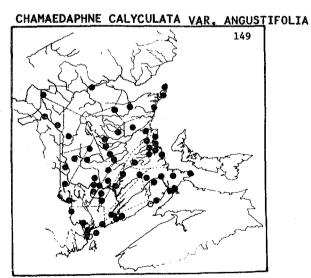


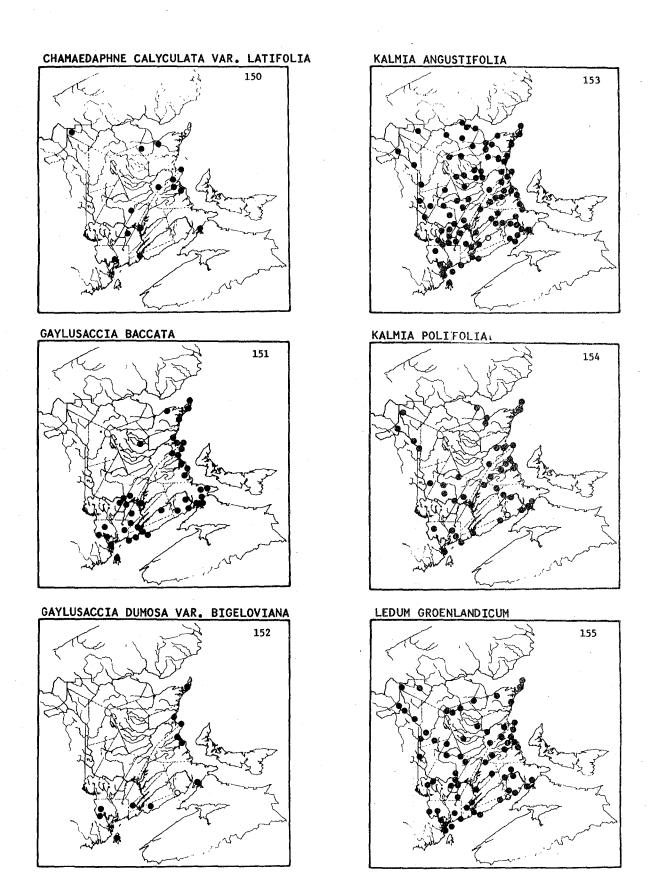


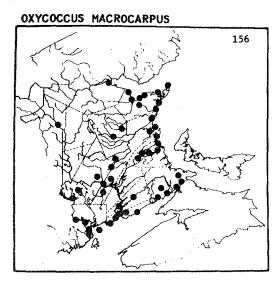


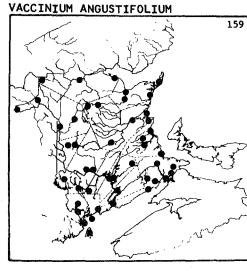


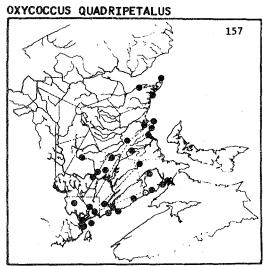


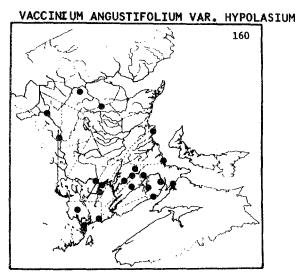


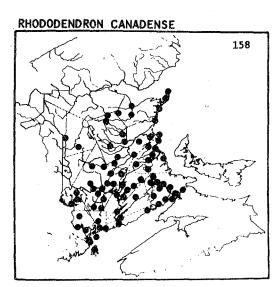


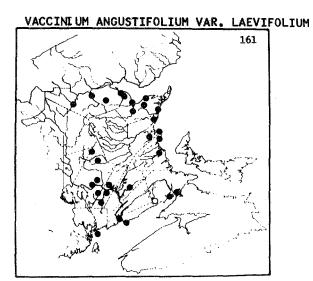


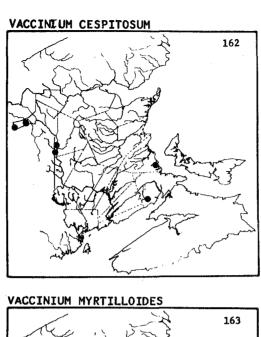


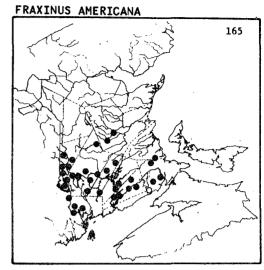


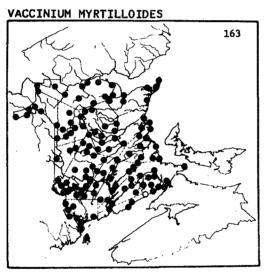


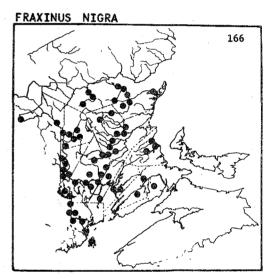


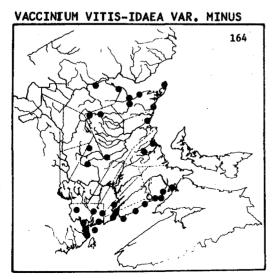


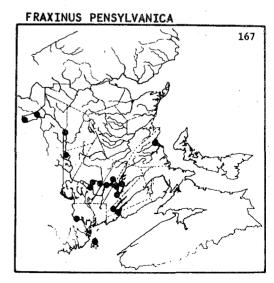


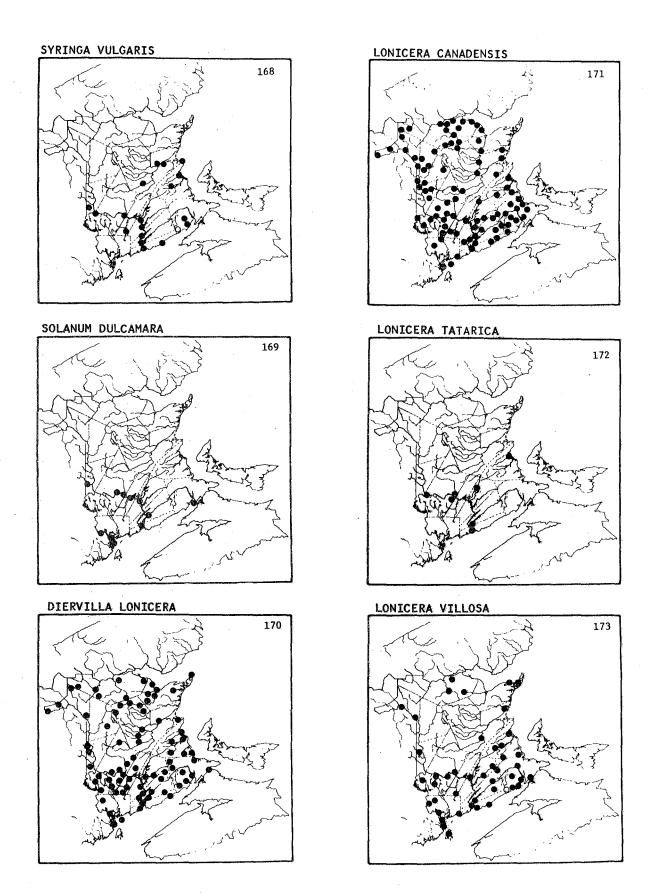


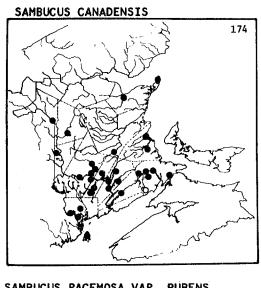


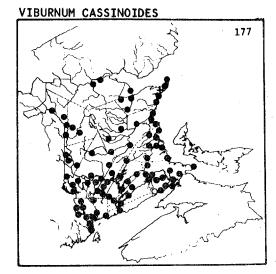


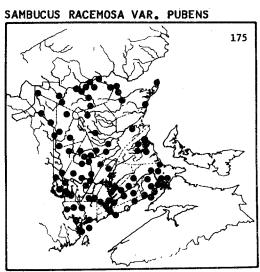


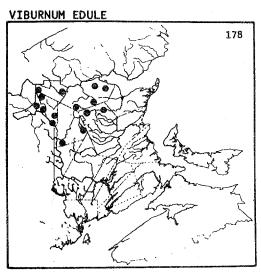


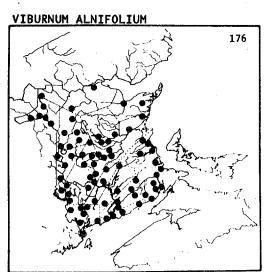


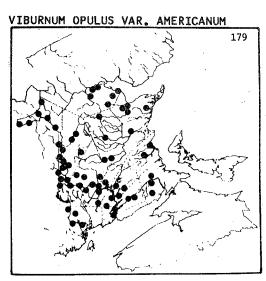












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