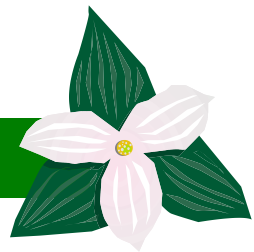




Tree Identification

of Common Tree Species found in Ontario

As simple as one – two – tree!





Topics covered

- What is a tree?
- Forest regions of Canada
- Coniferous vs. Deciduous
- What's in a name?
- Identification features
- Coniferous trees of Ontario
- Deciduous trees of Ontario



What is a tree?

- Woody perennial plant
- Grows to a height of at least 4.5 m
- Two divisions:
 - Pinophyta (cone-bearing plants)
 - Magnoliophyta (flowering plants)



Natural Resources
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Ressources naturelles
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des forêts

FOREST REGIONS of CANADA





Coniferous vs. Deciduous

Coniferous

- Also known as softwoods and evergreens
- Bears a needle-like or scale-like leaves
- Needle or scale-like leaves do not fall in autumn (except for larch)
- Bears a cone
- 14 native species in Ontario

Deciduous

- Also known as hardwoods and broadleaf trees
- Bears a leaf
- Leaves fall off the tree in the autumn
- Has a true flower
- 84 native species in Ontario



What's in a name?

- Each tree has a common name and a scientific name.
- Common name may change depending on where you live
- Scientific names are grouped by Family, Genera and Species and never change.
 - Common Name: Sugar maple
 - Scientific name: *Acer saccharum* Marsh.
 - Family: Aceraceae
 - Genus: Acer
 - Species: Saccharum
 - Person who named the tree: Marsh.



How to identify a tree?

- Learn the tree identification features
- Know your site or habitat
 - Upland, lowland, soil type
- Use a tree identification key
- Determine whether coniferous or deciduous.
- Check to see bud or leaf arrangement



Tree Identification Features

1. Leaf
2. Twig and bud
3. Bark
4. Size and form
5. Shade tolerance
6. Seed
7. Wood
8. Site or habitat

A vertical decorative strip on the left side of the slide, featuring a close-up of autumn leaves in various colors including yellow, orange, red, and green.

1. Leaf identification

- A: Leaf type
- B: Arrangement on twig
- C: Leaf shape
- D: Leaf margin



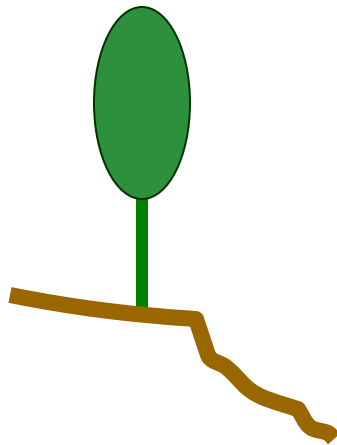
A: Leaf Types

- Simple or Compound Leaf
- Scale-like Leaf
- Needle-like Leaf
 - Singly on twig
 - In bundles of 2, 3, 5 or more

Leaf Types continue

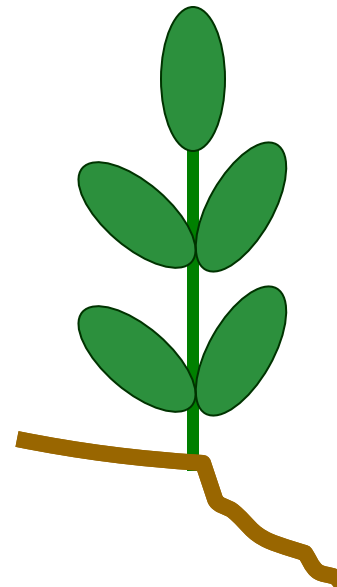
Simple

- undivided



Compound

- Divided into leaflets



Leaf Types continue

Scale-like Leaf



Needle-like Leaf



In
bundles
of 5



In
bundles
of 2

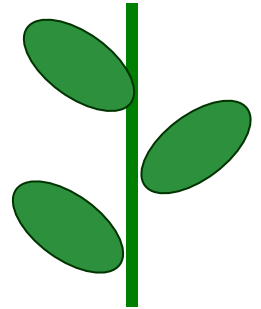


Singly on
twig

B: Leaf Arrangement

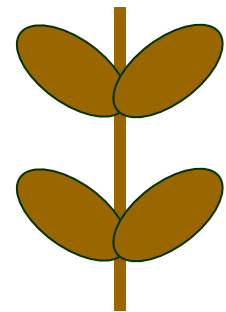
- Alternate

- Leaves grow alternately on twig



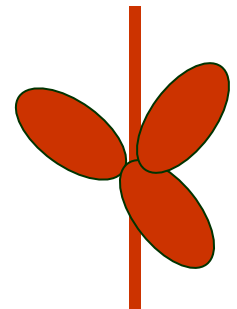
- Opposite

- Leaves grow opposite of each other on twig

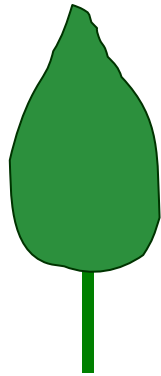


- Whorled

- Leaves grow in a circular fashion on the twig



C: Leaf Shape



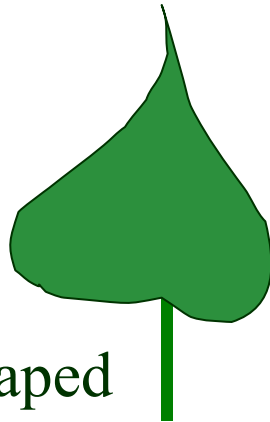
oval



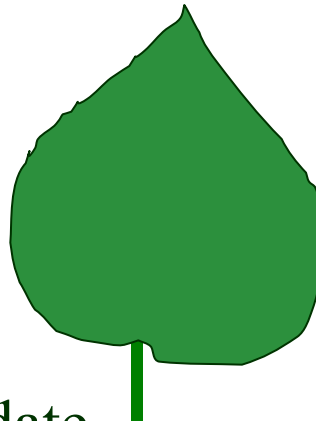
reversed
oval



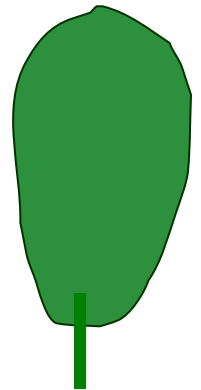
linear



heart-shaped



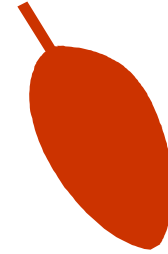
cordate



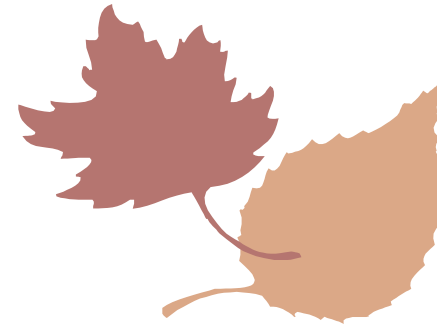
cuneate

D: Leaf Margins

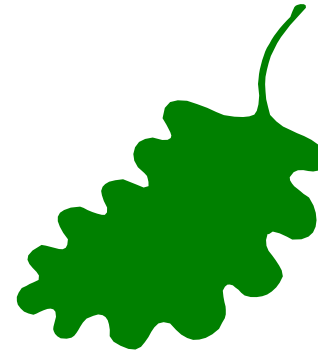
■ Smooth →



■ Toothed →

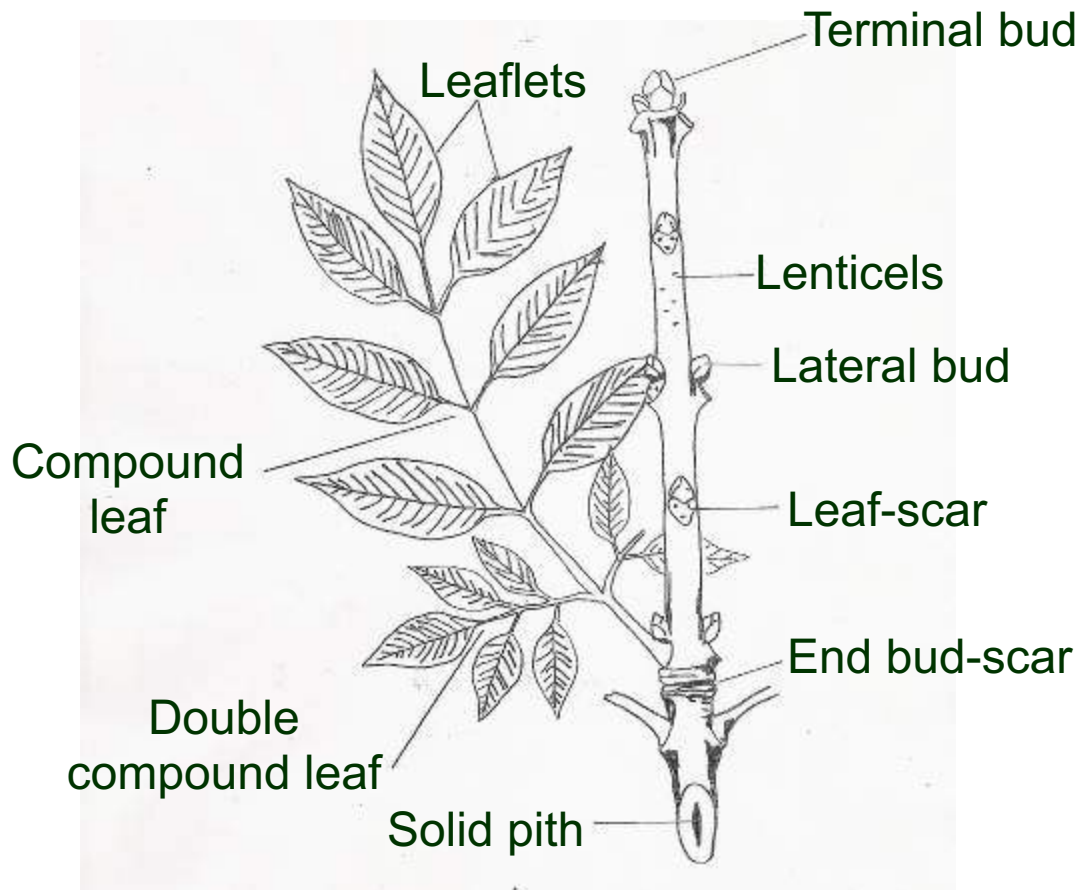


■ Wavy or lobed →



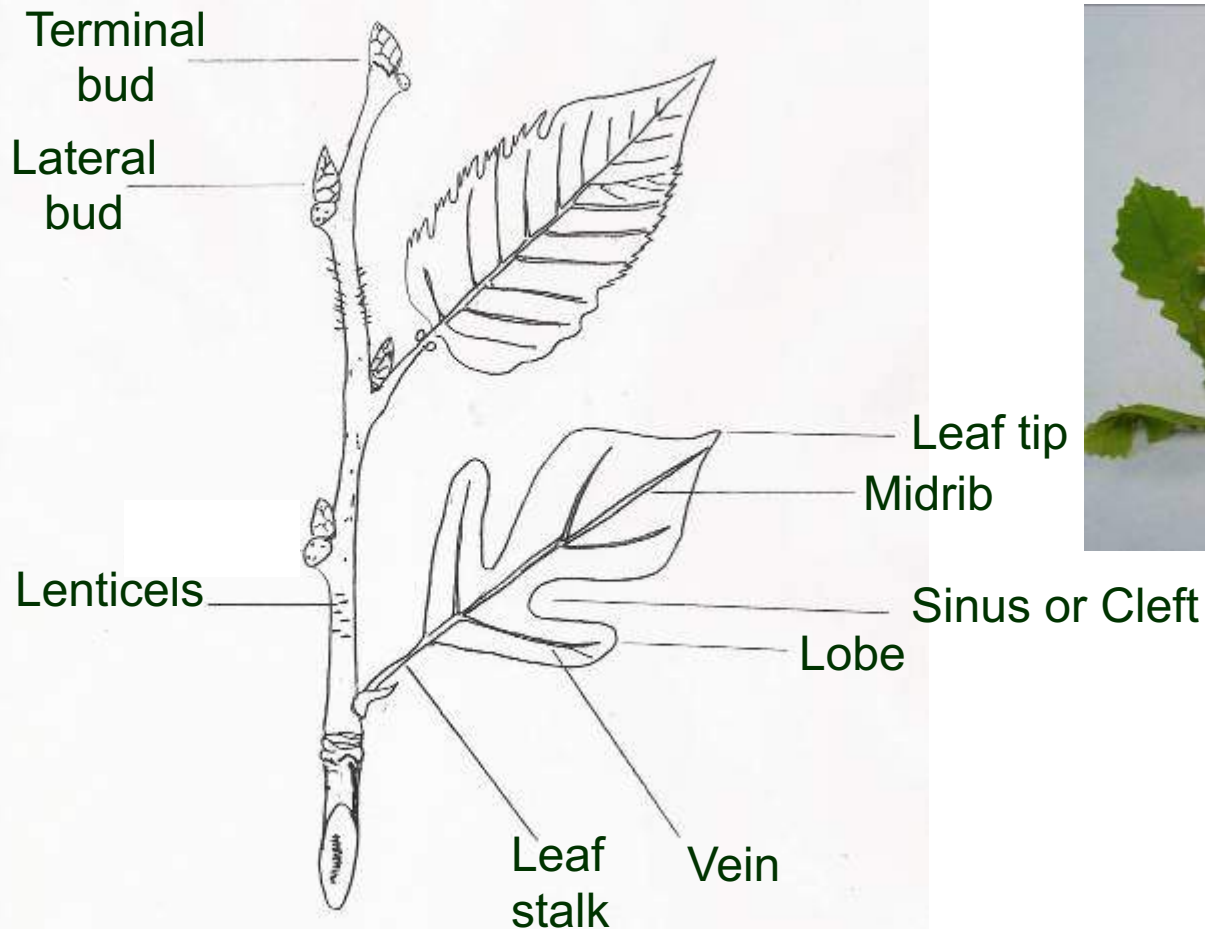
2. Twig and Buds

- Twig with opposite bud arrangement



Twig and Buds continue

- Twig with alternate bud arrangement



3. Bark

- Identifying features:

- Colour

White



Grey



Brown/Black



- Structure

Flaky



Smooth



Rough



3. Bark

- Identifying features:
 - Pattern



Furrowed



Flat Topped Ridges

3. Bark

- Varies by age and growth rate



4. Size and Form

- Form refers to the shape of the crown, the branches and the trunk.
- Each species has a characteristic form when grown in the open





5. Shade Tolerance

- All tree species have a tolerance level for shade.
 - Intolerant
 - Species that cannot survive in shaded conditions. They need direct sunlight to grow.
 - Intermediate
 - Species that can survive in partially shaded conditions.
 - Tolerant
 - Species that can live in shaded conditions



Shade Tolerance Chart

Tolerant	Intermediate	Intolerant
Hemlock	White pine	Red pine
Balsam fir	Yellow birch	Walnut
Ironwood	Oak	Butternut
Beech	Elm	Hickory
Sugar maple	Ash	White birch
	Spruce	Black cherry
	Cedar	Tamarack
	Red maple	Jack pine
	Silver maple	Willow
	Basswood	Aspens
		Poplars
		Grey birch



6. Seed

- Acorns and Nuts

e.g. oaks, American beech, American chestnut

- Winged

e.g. maples, eastern hemlock, spruces

- Fleshy fruit and pods

e.g. viburnums, dogwoods, black locust

7. Wood

- Density
- Colour
- Grain

Butternut



Hemlock



Cedar



Oak

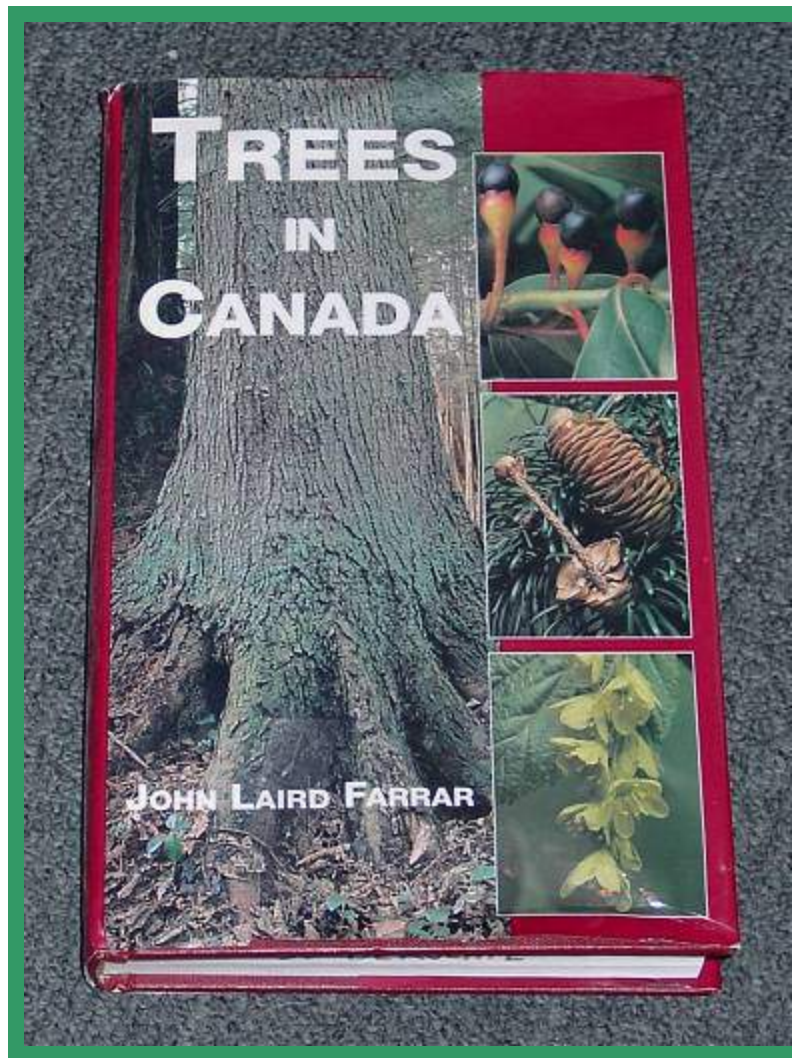




8. Site or Habitat

- Soil structure, texture and fertility, moisture regime, slope and aspect and climate all have an impact on species of trees growing on a particular site
- Examples:
 - Bog – black spruce, larch
 - Upland, rocky terrain – sugar maple, hickory, beech, red oak, jack pine
 - Lowland – black ash, red maple, elm, tamarack

Trees of Canada



A great source of information!

Written by:
John Laird Farrar

ISBN: 1-55041-199-3

Published by: Fitzhenry & Whiteside Limited and the Canadian Forest Service, Natural Resources Canada

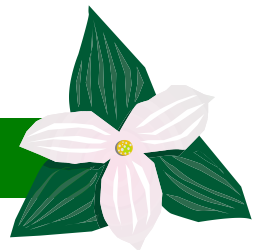


Coniferous

Needle Trees, Evergreens, Softwoods

Class: Magnoliopsida

Division: Pinophyta



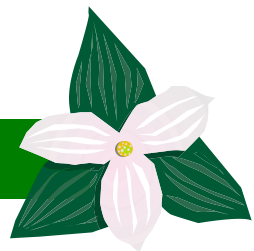
A vertical strip on the left side of the slide features a close-up of autumn leaves in various colors including yellow, orange, red, and green.

Coniferous Leaf

- Scale-like Leaf
- Needle-like Leaf
 - Singly on twig
 - Needles in bundles



Scale-Like Leaf



Eastern Red-Cedar

- *Juniperus virginiana*
Eastern Juniper, Red juniper



Eastern White Cedar

- *Thuja occidentalis*
- Northern White Cedar, Swamp Cedar, Eastern Arbovitae





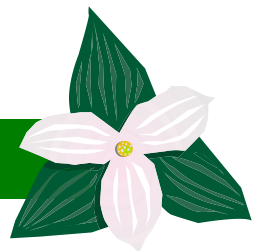
Other Conifers with Scale-Like Leaves

common juniper	<i>Juniperus communis</i>	shrub	native	ON, Canada
creeping juniper	<i>Juniperus horizontalis</i>	shrub	native	ON, Canada
chinese juniper	<i>Juniperus chinensis</i>	shrub	alien	Asia
savin juniper	<i>Juniperus sabina</i>	shrub	alien	Europe
oriental cedar	<i>Thuja orientalis</i>	tree	alien	Asia
sawara-cypress	<i>Chamaecyparis pisifera</i>	tree	alien	Japon
hinoki-cypress	<i>Chamaecyparis obtusa</i>	tree	alien	Japon



Needle-Like Leaf

* Singly on Twig *



Balsam Fir

- *Abies balsamea*
- Canada Balsam, Canada Fir, White Fir



White Spruce

- *Picea glauca*
- Cat Spruce, Skunk Spruce, Pasture Spruce, Canadian Spruce



Blue Spruce

- *Picea pungens*
- Colorado Spruce, Silver Spruce



Red Spruce

- *Picea rubens*
- Eastern Spruce, Yellow Spruce



Black Spruce

- *Picea mariana*
- Bog Spruce, Swamp Spruce



Norway Spruce

- *Picea abies*
- Common Spruce



Eastern Hemlock

- *Tsuga canadensis*
- Canada Hemlock, Hemlock Spruce





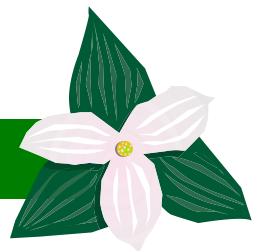
Other Conifers with Needle-Like Leaves (Single Needles)

dawn redwood	<i>Metasequoia glyptostroboides</i>	tree	alien	Asia
bald-cypress	<i>Taxodium distichum</i>	tree	alien	USA
japanese-cedar	<i>Cryptomeria japonica</i>	tree	alien	Asia
noble fir	<i>Abies procera</i>	tree	alien	USA
nordmann fir	<i>Abies nordmanniana</i>	tree	alien	Europe
spanish fir	<i>Abies pinsapo</i>	tree	alien	USA
white fir	<i>Abies concolor</i>	tree	alien	USA
serbian spruce	<i>Picea omorika</i>	tree	alien	Europe
english yew	<i>Taxus baccata</i>	tree	alien	Europe
japonese yew	<i>Taxus cuspidata</i>	shrub	alien	Japon
canada yew	<i>Taxus canadensis</i>	shrub	native	ON, Canada



Needle-Like Leaf

* Needle Bundles *



Red Pine

- *Pinus resinosa*
- Norway Pine



Austrian Pine

- *Pinus nigra*
- European Black Pine



Jack Pine

- *Pinus banksiana*
- Black Pine, Gray Pine, Scrub Pine, Banksian Pine



Scots Pine

- *Pinus sylvestris*
- Scotch Pine



Mugho Pine

- *Pinus mugo*
- Swiss Mountain Pine



Eastern White Pine

- *Pinus strobus*
- Northern White Pine,
Weymouth Pine



Pitch Pine

- *Pinus rigida*



Tamarack

- *Larix laricina*
- American Larch, Alaska Larch



European Larch

- *Larix decidua*





Other Conifers with Needle-Like Leaves (Needles in Bundles)

umbrella-pine	<i>Sciadopitys verticillata</i>	tree	alien	Japon
bristlecone pine	<i>Pinus aristata</i>	tree	alien	USA
japanese larch	<i>Larix kaempferi</i>	tree	alien	Japon
siberian larch	<i>Larix sibirica</i>	tree	alien	Asia
deodar cedar	<i>Cedrus deodara</i>	tree	alien	Asia
atlas cedar	<i>Cedrus atlantica</i>	tree	alien	Africa
cedar-of-lebanon	<i>Cedrus libani</i>	tree	alien	Asia

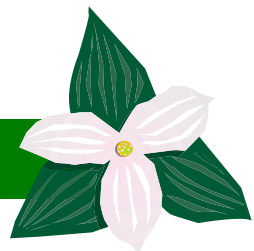


Deciduous

Broadleaf, Hardwoods, Flowering Trees

Division: Magnoliophyta

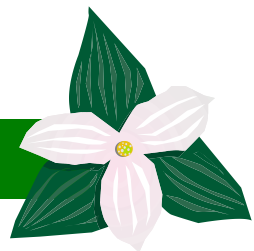
Class: Magnoliopsida





Opposite Leaf Arrangement

Simple Leaf Type



Sugar Maple

- *Acer saccharum*
- Hard Maple, Rock Maple, Bird's-Eye Maple



Red Maple

- *Acer rubrum*
- Swamp maple, soft maple



Silver Maple

- *Acer saccharinum*
- Soft maple, White Maple, River Maple



Black Maple

- *Acer nigrum*
- Black Sugar Maple,
Rock Maple



Mountain Maple

- *Acer spicatum*
- Dwarf Maple, Moose Maple



Striped Maple

- *Acer pensylvanicum*
- Moose Maple, Moosewood, Goosefoot Maple



Norway Maple

- *Acer platanoides*



Norway Maple



“Columnare”
“Erectum”
“Olmsted”



“Crimson King”
“Crimson Sentry”



“Drummondii”
“Harlequin”



“Cleveland”



“Faasens Black”



“Globosum”
“Globe”



“Schwedler”



“Emerald Queen”

Sweet Viburnum

- *Viburnum lentago*
- Nannyberry, Sheepberry



European Buckthorn

- *Rhamnus cathartica*
- Common Buckthorn, Purging Buckthorn





Other Deciduous Trees, Opposite Leaf Arrangement (Simple Leaves)

sycamore maple	<i>Acer pseudoplatanus</i>	tree	alien	Europe
amur maple	<i>Acer ginnala</i>	shrub-tree	alien	Asia
japanese maple	<i>Acer palmatum</i>	shrub-tree	alien	Asia
european cranberry viburnum	<i>Viburnum opulus</i>	shrub	alien (naturalized)	Europe
wayfaring viburnum	<i>Viburnum lantana</i>	tree	alien (naturalized)	Europe
squashberry viburnum	<i>Viburnum edule</i>	shrub	native	ON, Canada
cranberry viburnum	<i>Viburnum trilobum</i>	shrub	native	ON, Canada
eastern flowering dogwood	<i>Cornus florida</i>	tree	native	ON, Canada
cornelian-cherry	<i>Cornus mas</i>	shrub-tree	alien	Eurasia
kousa dogwood	<i>Cornus kousa</i>	tree	alien	Asia



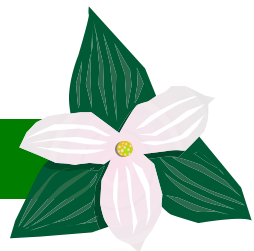
Other Deciduous Trees, Opposite Leaf Arrangement (Simple Leaves)

common lilac	<i>Syringa vulgaris</i>	shrub-tree	alien (naturalized)	Europe
northern catalpa	<i>Catalpa speciosa</i>	tree	alien	USA
southern catalpa	<i>Catalpa bignonioides</i>	tree	alien	USA
burning-bush euonymus	<i>Euonymus atropurpureus</i>	shrub-tree	native	ON, Canada
european euonymus	<i>Euonymus europaeus</i>	tree	alien	Europe
winged euonymus	<i>Euonymus alatus</i>	shrub-tree	alien	Asia
button-bush	<i>Cephalanthus occidentalis</i>	shrub	native	ON, Canada
katsura-tree	<i>Cercidiphyllum japonicum</i>	tree	alien	Asia
silver buffalo-berry	<i>Shepherdia argentea</i>	shrub-tree	native	ON, Canada



Opposite Leaf Arrangement

Compound Leaf Type



Manitoba Maple

- *Acer negundo*
- Box-Elder, Ashleaf Maple



White Ash

- *Fraxinus americana*
- American Ash, Canadian White Ash



Black Ash

- *Fraxinus nigra*
- Swamp Ash, Hoop Ash, Basket Ash



Red Ash

- *Fraxinus pennsylvanica*
- Green Ash, Soft Ash



Horsechestnut

- *Aesculus hippocastanum*
- Common horsechestnut, chestnut





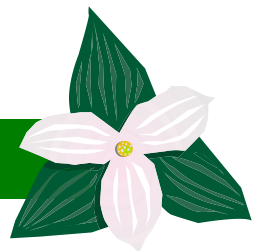
Other Deciduous Trees, Opposite Leaf Arrangement (Compound Leaves)

ohio buckeye	<i>Aesculus glabra</i>	tree	alien	USA
green ash	<i>Fraxinus pennsylvanica</i> var. <i>subintegerrima</i>	tree	native	ON, Canada
northern red ash	<i>Fraxinus pennsylvanica</i> var. <i>austini</i>	tree	native	ON, Canada
blue ash	<i>Fraxinus quadrangulata</i>	tree	native	ON, Canada
pumpkin ash	<i>Fraxinus profunda</i>	tree	native	ON, Canada
european ash	<i>Fraxinus excelsior</i>	tree	alien	Europe
amur corktree	<i>Phellodendron amurense</i>	tree	alien	Asia
american elder	<i>Sambucus canadensis</i>	shrub	native	ON, Canada
eastern red elderberry	<i>Sambucus pubens</i>	shrub	native	ON, Canada



Alternate Leaf Arrangement

Compound Leaf Type



Butternut

- *Juglans cinerea*
- White walnut, Lemon Walnut, Oilnut



Black Walnut

- *Juglans nigra*
- American walnut



Shagbark Hickory

- *Carya ovata*
- Upland hickory, Scalybark Hickory



Shellbark Hickory

- *Carya laciniosa*
- Big shagbark hickory, Kingnut Hickory, Big Shagbark Hickory



Red Hickory

- *Carya glabra*
- Pignut Hickory, Black Hickory, Broom Hickory



Bitternut Hickory

- *Carya cordiformis*
- Swamp Hickory



Kentucky Coffeetree

- *Gymnocladus dioica*
- Coffeenut



Black Locust

- *Robinia pseudoacacia*
- False Acacia, Common Locust



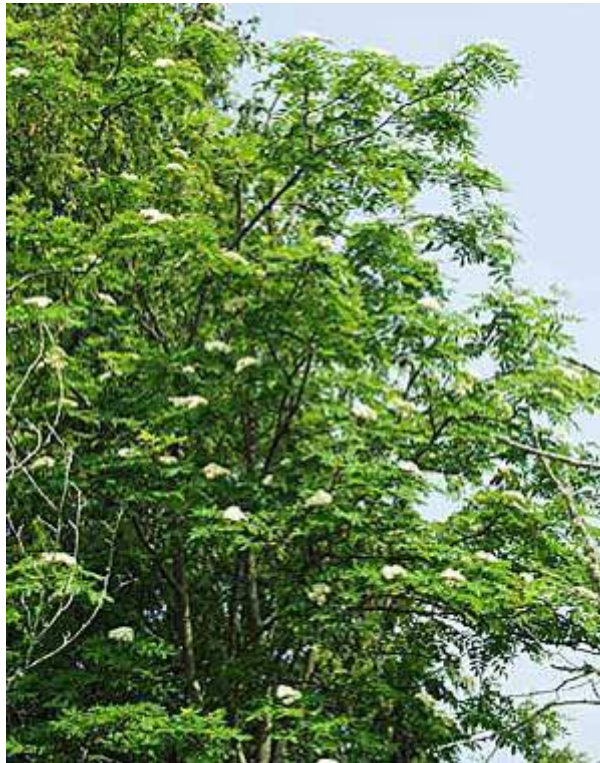
Honey Locust

- *Gleditsia triacanthos*
- Thorny Locust, Sweet Locust, Tree-Thorned Acacia



Showy Mountain Ash

- *Sorbus decora*
- Northern Mountain Ash, Dogberry



Staghorn Sumac

- *Rhus typhina*
- Velvet Sumac, Sumac Vinegar-Tree



Common Hoptree

- *Ptelea trifoliata*
- Wafer Ash, Stinking Ash, Three-Leaved Hop-Tree



Tree-of-Heaven

- *Ailanthus altissima*
- Ailanthus, Chinese-Sumac





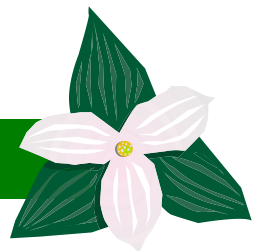
Other Deciduous Trees, Alternate Leaf Arrangement, (Compound Leaves)

siberian pea-tree	<i>Caragana arborescens</i>	shrub-tree	alien	Asia
laburnum	<i>Laburnum anagyroides x Laburnum watereri</i>	tree	alien	Europe
yellow-wood	<i>Cladastis lutea</i>	tree	alien	USA
japanese angelica-tree	<i>Aralia elata</i>	tree	alien	Asia
common prickly-ash	<i>Zanthoxylum americanum</i>	shrub-tree	native	ON, Canada
american mountain-ash	<i>Sorbus americana</i>	shrub-tree	native	ON, Canada
european mountain-ash	<i>Sorbus aucuparia</i>	tree	alien (naturalized)	Europe
shining sumac	<i>Rhus copallina</i>	shrub-tree	native	ON, Canada
smooth sumac	<i>Rhus glabra</i>	shrub	native	ON, Canada
poison-sumac	<i>Toxicodendron vernix</i>	shrub-tree	native	ON, Canada



Alternate Leaf Arrangement

Simple Leaf Type –
Lobed Leaf Margins



Sycamore

- *Platanus occidentalis*
- Buttonball, American Sycamore, American Plane-Tree



Sassafras

- *Sassafras albidum*
- White Sassafras, Cinnamon-Wood, Greenstick, Mitten-Tree



Tulip Tree

- *Liriodendron tulipifera*
- Tulip-Poplar, Yellow-Poplar, Tulip-Magnolia, Whitewood



Red Oak

- *Quercus rubra*
- Northern Red Oak, Grey Oak



Black Oak

- *Quercus velutina*
- Yellow Oak, Quercitron Oak



Pin Oak

- *Quercus palustris*
- Swamp Oak, Spanish Oak, Water Oak



White Oak

- *Quercus alba*
- Stave oak, Northern White Oak



Bur Oak

- *Quercus macrocarpa*
- Blue Oak, Mossycup Oak, Scrubby Oak



Swamp White Oak

- *Quercus bicolor*
- Blue Oak, Swamp Oak



Chinquapin Oak

- *Quercus muehlenbergi*
- Yellow Chestnut Oak, Yellow Oak, Rock Oak





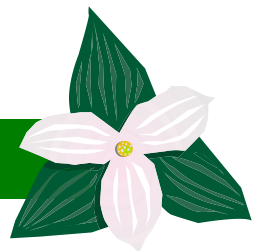
Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Lobed Margin)

london plane-tree	<i>Platanus occidentalis x Platanus orientalis</i>	tree	alien	Europe
white mulberry	<i>Morus alba</i>	tree	alien (naturalized)	Asia
sweetgum	<i>Liquidambar styraciflua</i>	tree	alien	USA
northern pin oak	<i>Quercus ellipsoidalis</i>	tree	native	ON, Canada
shumard oak	<i>Quercus shumardii</i>	tree	native	ON, Canada
scarlet oak	<i>Quercus coccinea</i>	tree	alien	USA
dwarf chinquapin oak	<i>Quercus prinoides</i>	shrub- tree	native	ON, Canada
english oak	<i>Quercus robur</i>	tree	alien (naturalized)	Europe



Alternate Leaf Arrangement

Simple Leaf Type –
Toothed Leaf Margins



Red Mulberry

- *Morus rubra*



American Beech

- *Fagus grandifolia*
- Red Beech



American Chestnut

- *Castanea dentata*
- Sweet Chestnut



Witch Hazel

- *Hamamelis virginiana*
- American Witch-Hazel, Snapping-Hazel, Spotted-Alder, Winterbloom



Basswood

- *Tilia americana*
- American Linden, Whitewood, Spoonwood, Bee-Tree, Lime-Tree



White Birch

- *Betula papyrifera*
- Paper Birch, Canoe Birch, Spoolwood, Silver Birch





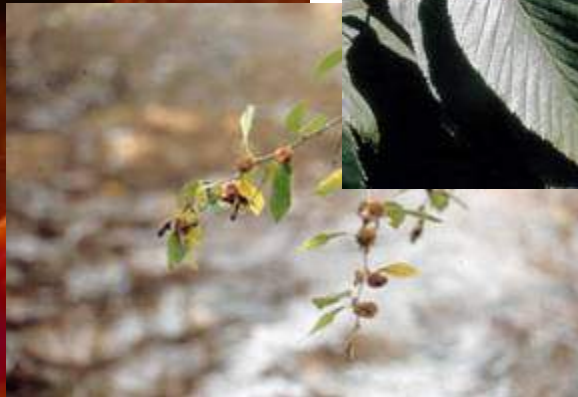
Gray Birch

- *Betula populifolia*
- White Birch, Swamp Birch, Fire Birch, Wire birch



Yellow Birch

- *Betula alleghaniensis*
- Gold Birch, Swamp Birch, Curly Birch, Red Birch, Newfoundland-Oak



Speckled Alder

- *Alnus incana* ssp. *rugosa*
- Tag Alder, Gray Alder, Hoary Alder, Red Alder, River Alder



Blue Beech

- *Carpinus caroliniana*
- American hornbeam, Musclewood, Ironwood, Smooth-Barked Ironwood



Ironwood

- *Ostrya virginiana*
- American Hop-Hornbeam, Leverwood, Deerwood, Rough-Barked Ironwood



Pussy Willow

- *Salix discolor*
- Tall Pussy Willow, Glaucous Willow, Pussy Feet



Black Willow

- *Salix nigra*
- Swamp Willow



Golden Weeping Willow

- *Salix alba* var. *vitellina*
- White Willow, Weeping Willow, Common Willow, French Willow



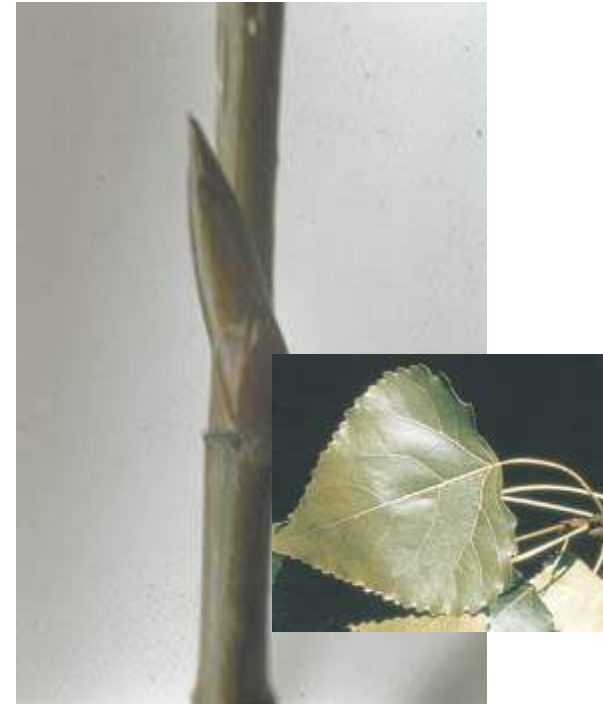
Balsam Poplar

- *Populus balsamifera*
- Eastern Balsam Poplar, Hackmatack, Balm Poplar, Balsam, Rough-Barked Poplar



Eastern Cottonwood

- *Populus deltoides*
- Big Cottonwood, Necklace Poplar, Liard



Trembling Aspen

- *Populus tremuloides*
- Quaking Aspen, Aspen Poplar, Golden Aspen, Smalltooth Aspen



Large-tooth Aspen

- *Populus grandidentata*
- Big-Toothed Aspen, Large-tooth Poplar



A vertical decorative strip on the left side of the slide, featuring a collage of autumn leaves in various colors including yellow, orange, red, and green.

Lombardy Poplar

- *Populus nigra*
- European Black Poplar, Column Poplar

A vertical decorative strip on the left side of the slide, featuring a collage of autumn leaves in various colors including yellow, orange, red, and green.

Silver Poplar

- *Populus alba*
- White Poplar, Silver-Leaved Poplar, European White, Silver Maple

White Elm

- *Ulmus americana*
- American Elm, Grey Elm, Soft Elm, Water Elm, Swamp Elm



Rock Elm

- *Ulmus thomasii*
- Cork Elm, Winged Elm



Slippery Elm

- *Ulmus rubra*
- Red elm, Moose Elm, Soft Elm, Sweet Elm



Hackberry

- *Celtis occidentalis*
- Common Hackberry, Northern Hackberry, Bastard Elm, Nettle-Berry, Sugarberry



A vertical strip on the left side of the slide features a close-up of autumn leaves in various colors including yellow, orange, red, and green.

Common Apple

- *Malus sylvestris*
- Wild Apple, Paradise Apple

Pin Cherry

- *Prunus pensylvanica*
- Wild Red Cherry, Fire Cherry, Bird Cherry, Hay Cherry



Black Cherry

- *Prunus serotina*
- Black Chokecherry, Rum Cherry, Cabinet Cherry, timber Cherry, Wine cherry



Choke Cherry

- *Prunus virginiana*
- Eastern Chokecherry, Red Choke Cherry, Sloetree, Wild Cherry, Chuckley-Plum



A vertical strip on the left side of the slide features a close-up of autumn leaves in various colors including yellow, orange, red, and green.

Canada Plum

- *Prunus nigra*
- Red Plum, Black Plum, Wild Plum, Horse Plum

A vertical strip on the left side of the slide features a close-up of autumn leaves in various colors including yellow, orange, red, and green.

American Plum

- *Prunus americana*
- Wild Plum, Brown Plum, Red Plum, Yellow Plum

Fleshy Hawthorn

- *Crataegus succulenta*
- *Succulent Hawthorn*





Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Toothed Margin)

chestnut oak	<i>Quercus montana</i>	tree	alien	USA
european beech	<i>Fagus sylvatica</i>	tree	alien	Europe
chinese chestnut	<i>Castanea mollissima</i>	tree	alien	Asia
common winterberry	<i>Ilex verticillata</i>	shrub-tree	native	ON, Canada
english holly	<i>Ilex aquifolium</i>	shrub-tree	alien (naturalized)	Europe
american holly	<i>Ilex opaca</i>	shrub-tree	alien	USA
mountain-holly	<i>Nemopanthus mucronatus</i>	shrub-tree	native	ON, Canada
glossy buckthorn	<i>Rhamnus frangula</i>	shrub-tree	alien (naturalized)	Europe
little-leaf linden	<i>Tilia cordata</i>	tree	alien	Europe
white linden	<i>Tilia tomentosa</i>	tree	alien	Eurasia
mountain paper birch	<i>Betula cordifolia</i>	tree	native	ON, Canada
european white birch	<i>Betula pendula</i>	tree	alien (naturalized)	Eurasia



Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Toothed Margin)

cherry birch	<i>Betula lenta</i>	tree	native	ON, Canada
green alder	<i>Alnus viridis</i>	shrub	native	ON, Canada
european black alder	<i>Alnus glutinosa</i>	tree	alien (naturalized)	Europe
beaked hazel	<i>Corylus cornuta</i>	shrub	native	ON, Canada
american hazel	<i>Corylus americana</i>	shrub	native	ON, Canada
turkish hazel	<i>Corylus colurna</i>	tree	alien	Eurasia
european filbert	<i>Corylus avellana</i>	shrub- tree	alien	Eurasia
peachleaf willow	<i>Salix amygdaloides</i>	tree	native	ON, Canada
sandbar willow	<i>Salix exigua</i>	shrub- tree	native	ON, Canada
bebb willow	<i>Salix bebbiana</i>	shrub- tree	native	ON, Canada
littletree willow	<i>Salix arbusculoides</i>	shrub- tree	native	ON, Canada
balsam willow	<i>Salix pyrifolia</i>	shrub- tree	native	ON, Canada



Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Toothed Margin)

shining willow	<i>Salix lucida</i>	tree	native	ON, Canada
laurel willow	<i>Salix pentandra</i>	tree	alien	Eurasia
crack willow	<i>Salix fragilis</i>	tree	alien (naturalized)	Europe
golden willow	<i>Salix alba</i>	tree	alien	Asia
hybrid white willow	<i>Salix alba x Salix fragilis</i>	tree	alien	Eurasia
meadow willow	<i>Salix petiolaris</i>	shrub- tree	native	ON, Canada
heartleaf willow	<i>Salix eriocephala</i>	shrub- tree	native	ON, Canada
satiny willow	<i>Salix pellita</i>	shrub- tree	native	ON, Canada
basket willow	<i>Salix viminalis</i>	tree	alien (naturalized)	Eurasia
purple-osier willow	<i>Salix purpurea</i>	shrub- tree	alien	Eurasia
violet willow	<i>Salix daphnoides</i>	shrub- tree	alien	Europe
simon poplar	<i>Populus simonii</i>	tree	alien	Asia



Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Toothed Margin)

carolina poplar	<i>Populus nigra x Populus canadensis</i>	tree	alien	Europe
scotch elm	<i>Ulmus glabra</i>	tree	alien (naturalized)	Europe
siberian elm	<i>Ulmus pumila</i>	tree	alien (naturalized)	Asia
english elm	<i>Ulmus procera</i>	tree	alien (naturalized)	Europe
japanese zelkova	<i>Zelkova serrata</i>	tree	alien	Asia
dwarf hackberry	<i>Celtis tenuifolia</i>	shrub- tree	native	ON, Canada
downy serviceberry	<i>Amelanchier arborea</i>	shrub- tree	native	ON, Canada
smooth serviceberry	<i>Amelanchier laevis</i>	shrub- tree	native	ON, Canada
roundleaf serviceberry	<i>Amelanchier sanguinea</i>	shrub- tree	native	ON, Canada
mountain serviceberry	<i>Amelanchier bartramiana</i>	shrub	native	ON, Canada
wild crab apple	<i>Malus coronaria</i>	tree	native	ON, Canada
siberian crab apple	<i>Malus baccata</i>	tree	alien	Europe



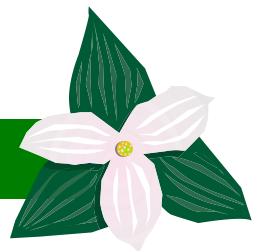
Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Toothed Margin)

sweet cherry	<i>Prunus avium</i>	tree	alien (naturalized)	Asia
sour cherry	<i>Prunus cerasus</i>	tree	alien (naturalized)	Eurasia
japanese flowering cherry	<i>Prunus serrulata</i>	tree	alien	Asia
amur choke cherry	<i>Prunus maackii</i>	tree	alien	Asia
pear hawthorn	<i>Crataegus calpodendron</i>	shrub- tree	native	ON, Canada
fireberry hawthorn	<i>Crataegus chrysocarpa</i>	shrub- tree	native	ON, Canada
dotted hawthorn	<i>Crataegus punctata</i>	tree	native	ON, Canada
downt hawthorn	<i>Crataegus mollis</i>	tree	native	ON, Canada
cockspur hawthorn	<i>Crataegus crus-galli</i>	tree	native	ON, Canada
scarlet hawthorn	<i>Crataegus coccinea</i>	shrub- tree	native	ON, Canada
fanleaf hawthorn	<i>Crataegus flabellata</i>	shrub- tree	native	ON, Canada
one-seeded hawthorn	<i>Crataegus monogyna</i>	tree	alien (naturalized)	Europe
washington hawthorn	<i>Crataegus phaenopyrum</i>	tree	alien	USA



Alternate Leaf Arrangement

Simple Leaf Type –
Smooth Leaf Margins



Pawpaw

- *Asimina triloba*
- False Banana, Pawpaw Custard-Apple, Prairie Banana



Black Gum

- *Nyssa sylvatica*
- Black Tupelo, Sourgum, Pepperidge



Cucumber Tree

- *Magnolia acuminata*
- Cucumber Magnolia, Pointed-Leaved Magnolia





Other Deciduous Trees, Alternate Leaf Arrangement, (Simple Leaves, Smooth Margin)

alternate-leaf dogwood	<i>Cornus alternifolia</i>	shrub-tree	native	ON, Canada
rosebay rhododendron	<i>Rhododendron maximum</i>	tree	native	ON, Canada
redbud	<i>Cercis canadensis</i>	tree	native	ON, Canada
saucer magnolia	<i>Magnolia X soulangiana</i>	shrub-tree	alien	Eurasia
sea-buckthorn	<i>Hippophae rhamnoides</i>	shrub-tree	alien	Eurasia
russian-olive	<i>Elaeagnus angustifolia</i>	tree	alien (naturalized)	Eurasia
silverberry	<i>Elaeagnus commutata</i>	shrub-tree	native	ON, Canada
common smoke-tree	<i>Cotinus coggygria</i>	shrub-tree	alien	Eurasia
osage-orange	<i>Maclura pomifera</i>	tree	alien	USA



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