

# ENVIROTHON

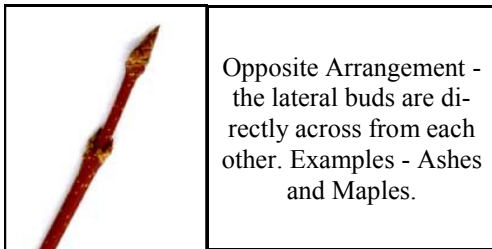
## Winter Tree Key

PRODUCED BY: ANGELA GILLESPIE, DENISE DERRICK, TAMARA TUCKER AND JESSICA DANARD

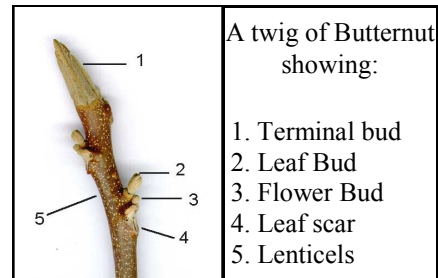
Trees that, for the most part, hold on to their leaves in the winter are called **CONIFEROUS** (“cone bearing” in Latin) trees, **EVERGREENS** or **SOFTWOODS**. The leaves are needle or scale-like. Softwood trees are “softer” in density, and ideal for pulp and paper. Coniferous forests are home to many fur-bearing mammals that do not migrate in the winter. Pine trees are an example of an Evergreen tree.

Trees that, for the most part, lose their leaves in the winter are called **DECIDUOUS** (“falling off” in Latin) trees, **BROAD-LEAVED TREES** or **HARDWOODS**. Hardwood trees are “harder” in density, and are used for furniture and flooring. A hardwood log in your fire will burn longer and hotter than a softwood log of the same size. Maple trees are an example of a Broad-leaved tree.

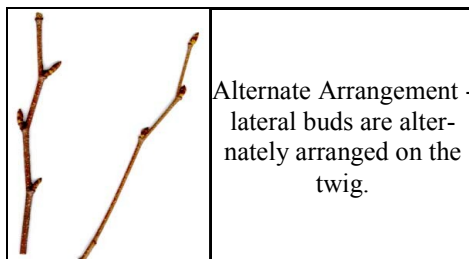
While using this key, a small ruler and hand lens may be useful in identifying the trees.



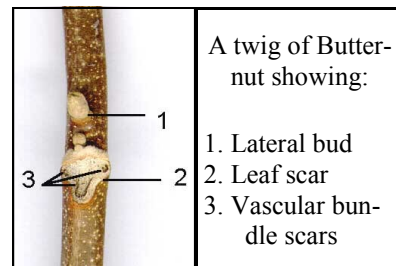
(Hendry, 2007)



(Hendry, 2007)



(Hendry, 2007)



(Hendry, 2007)

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# WINTER TREE ID KEY

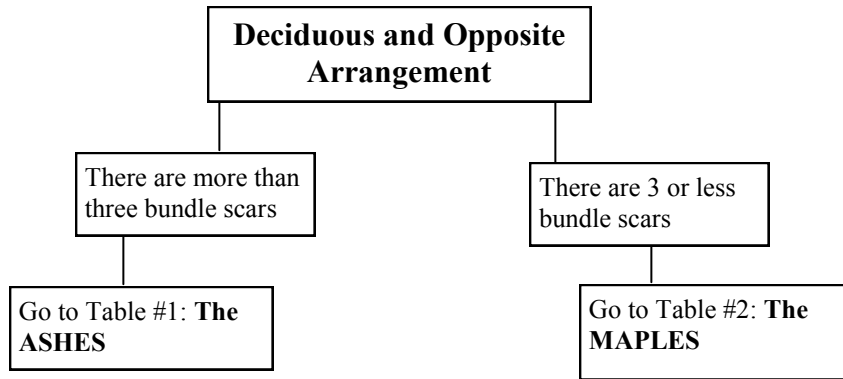


Table #1: the ASHES





<p><b>White ash</b></p> 	<p><b>Bark</b> Long single trunk; light gray; narrow ridges in a regular diamond pattern</p>	<p><b>Twigs</b> Stout; light to deep brown; shiny or dull grayish</p>	<p><b>Buds</b> Uppermost lateral buds touch terminal bud; <i>"white is tight"</i></p>	<p><b>Cool Fact</b> Tough, light and almost white, it is ideal for baseball bats, hockey sticks and tool handles</p>
<p><b>Black ash</b></p> 	<p><b>Bark</b> Long single trunk; light gray; soft; loose and scaly; corky ridges easily rubbed off</p>	<p><b>Twigs</b> Stout; grayish and dull; never shiny</p>	<p><b>Buds</b> Uppermost lateral buds do not touch the terminal buds; <i>"black is slack"</i></p>	<p><b>Cool Fact</b> Wood can be permanently bent, so it is perfect for snowshoes; long single trunk makes it flexible in the wind</p>

Table #2: the MAPLES

<p><b>Sugar maple</b></p> 	<p><b>Bark</b> Dark-gray plates; curl out at one end; bark peels at sides of vertical strip</p>	<p><b>Twigs</b> Shining reddish-brown to green; hairless</p>	<p><b>Buds</b> Sharp-pointed; many scales spirally arranged; hairy scales; reddish brown</p>	<p><b>Cool Fact</b> Used to make maple syrup</p>
<p><b>Red maple</b></p> 	<p><b>Bark</b> Plates curling at ends; flaky; bark peels from top and bottom of vertical strips</p>	<p><b>Twigs</b> Shining red to grayish-brown; hairless</p>	<p><b>Buds</b> Hairless; blunt; broad; red to grayish-brown; smooth ; shiny</p>	<p><b>Cool Fact</b> Used by First Nations to cure cataracts and hives</p>
<p><b>Silver maple</b></p> 	<p><b>Bark</b> Dark reddish-brown; long, thin flakes; shaggy looking</p>	<p><b>Twigs</b> Same as above</p>	<p><b>Buds</b> Same as above</p>	<p><b>Cool Fact</b> Twigs have an unpleasant odour when broken</p>

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# WINTER TREE ID KEY

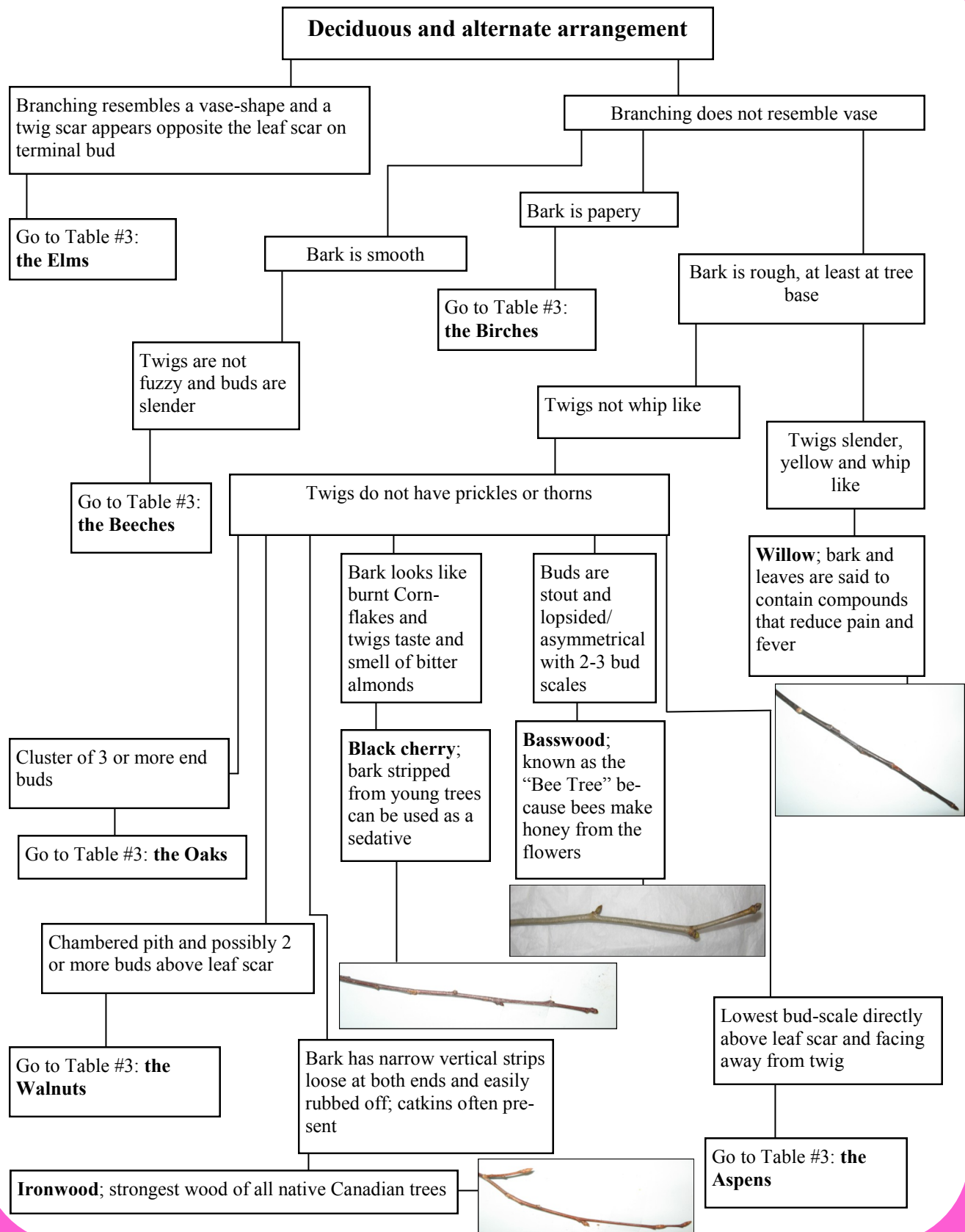










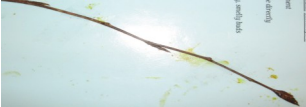


Table #3: Deciduous Alternate Arrangement

Species	Bark	Twigs	Buds	Cool fact
<b>White Elm</b> 	Light and dark layers; ash-gray to grayish-brown	Smaller buds closer to end of twig; narrow; relatively hairless; zigzag pattern	4-8 mm; light hairy scales; terminal bud tilted; sharp-pointed	Commonly used for railroad ties because of its strength and durability
<b>American Beech</b> 	Light bluish-gray; thin	Slightly zigzag; slender, light brown	2-3 cm; sharp-pointed; slender; diverge from twig; many scales; bristly nut may be present	Its smooth bark makes it perfect for initial carving
<b>White Birch</b> 	Powdery; white; peels easily	Reddish-brown	Green-brown; sticky	Bark is used to make canoes and wigwams
<b>Yellow Birch</b> 	Golden; in plates, doesn't peel easily	Copper-coloured	Dry and brown	Twigs have wintergreen smell and TASTE
<b>Red Oak</b> 	Red lines between ridges; wide, flat gray ridges	Acorn cups may be present	6-8 mm; sharp-pointed; hairless except at tip; reddish	Oak galls, the product of an interaction between insects and oak trees, were once used to make ink
<b>White Oak</b> 	Light ash-gray; scaly	Hairless	Rounded reddish-brown scales; hairless; lateral buds spread wide from twig	Carrying a piece of this tree is said to bring good luck
<b>Bur Oak</b> 	Light gray-brown; deeply furrowed and ridged	Corky ridges	3-7 mm; rounded terminal bud; woody hairs projecting past bud	These slow-growing and long-lived trees have been known to live up to 1000 years
<b>Black Walnut</b> 	Deeply furrowed; almost black; intersecting ridges	Stout; orange-brown; a little hairy; chambered pith	Hairy and light brown; 8-10 mm; no hairy pad between bud and leaf scar	Sends out chemical "poison" into the ground to prevent growth of other plants
<b>Large tooth Aspen</b> 	Upper crown rusty orange-green; generally green-yellow	Hairless or slightly silky	0.5-1 cm; fine gray hairs; "dull"	The main use of the wood is for paper
<b>Trembling Aspen</b> 	Smooth with a waxy appearance; upper crown creamy white; mature bark darker and rougher at base of tree	Slender, shiny	0.5-1 cm; reddish-brown; sharp-pointed; appear waxy and hairless	The wood is commonly used for sauna benches
<b>Balsam Poplar</b> 	Gray-black; deeply fissured	Reddish-brown to dark orange to gray with age	1-3 cm; 5 bud scales; sticky; aromatic	Bitter aspen taste

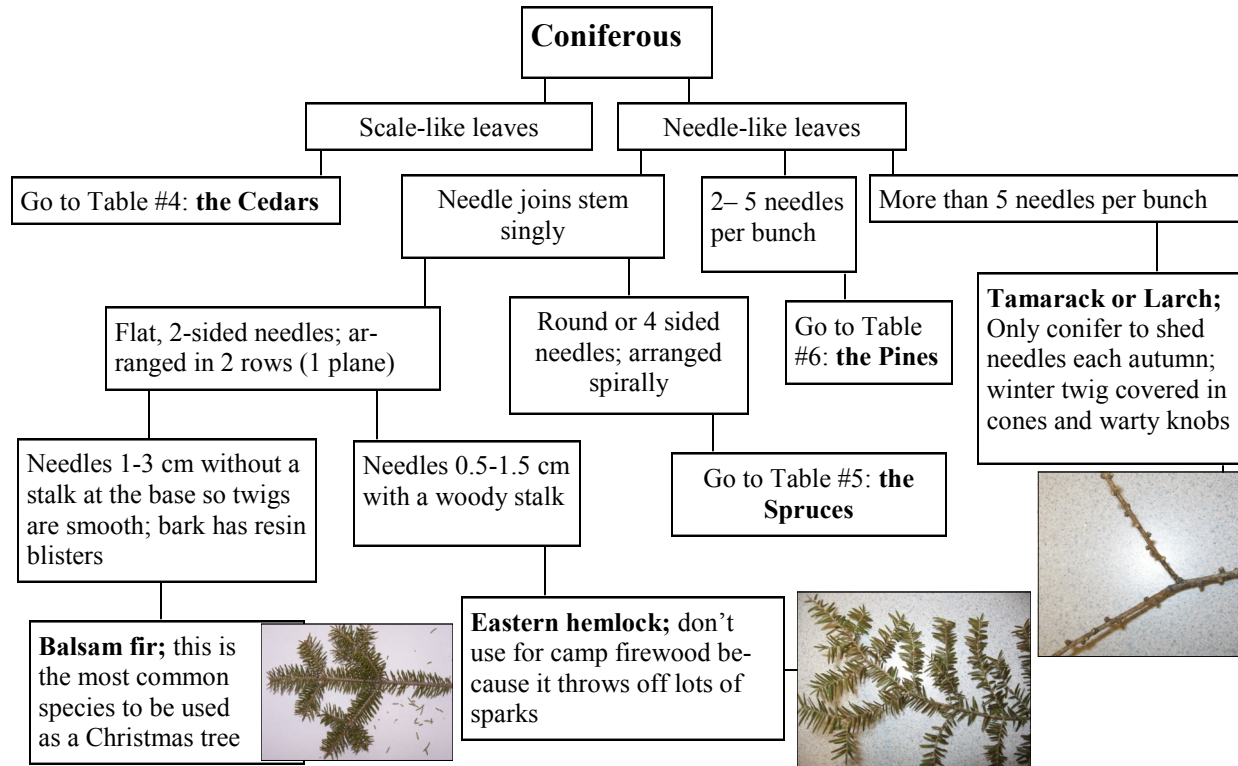


Table #4: **the Cedars**


<p><b>Eastern white cedar</b></p> 	<p><b>Bark</b> Long, narrow, gray strips</p>	<p><b>Twigs</b> Broadly fan-shaped</p>	<p><b>Scales</b> Overlapping; dull yellowish-green turning bronze-coloured in the winter</p>	<p><b>Cool fact</b> Eastern white cedar trees more than 700 years old have been found in Ontario's Niagara Escarpment.</p>
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Table #5: **the Spruces**





<p><b>White Spruce</b></p> 	<p><b>Bark</b> Thin, flaky or scaly; grey; freshly exposed inner bark under scales pink</p>	<p><b>Twigs</b> Straw-coloured; smooth; no hairs; inner bark silvery and glistens</p>	<p><b>Needles</b> 2-2.5 cm; often curved; green to bluish-green</p>	<p><b>Cool fact</b> White spruces gets its nickname "Skunk" spruce because of its unpleasantly pungent odour if crushed</p>
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Table #6: **the Pines**

<p><b>White pine</b></p> 	<p><b>Bark</b> Dark-grey; rectangular block-like appearance</p>	<p><b>Needles</b> Bunches of 5, soft and flexible; bluish-green</p>	<p><b>Cool fact</b> Long, straight trunks historically used as masts for wooden sailing ships</p>
<p><b>Red pine</b></p> 	<p>Large pink and gray scales</p>	<p>Bunches of 2; 10-15 cm; straight; shiny, dark green sheath at base</p>	<p>The name comes from the colour of the bark</p>
<p><b>Jack pine</b></p> 	<p>Thin red-brown flakes</p>	<p>Bunches of 2; 2-4 cm; spread apart</p>	<p>Cones remain closed for many years unless exposed to extreme heat, as in a forest fire</p>



All pictures in this document, excluding those on page 1, were taken by:  
Angela Gillespie and Denise Derrick

Website consulted in the creation of this document include:

<http://wmuma.com/nature/trees/wintertreeiddec2000.html>

<http://gaia.flemingc.on.ca/~dhendry/specdes.htm>

<http://www.umaine.edu/umect/mainetreeclub/MTC.htm>

<http://www.museum.state.il.us/muslink/forest/htmls/trees.html>

<http://www.oplin.lib.oh.us/products/tree>

<http://www.domtar.com/arbre/english>

<http://gaia.flemingc.on.ca/~dhendry/trelec.htm>