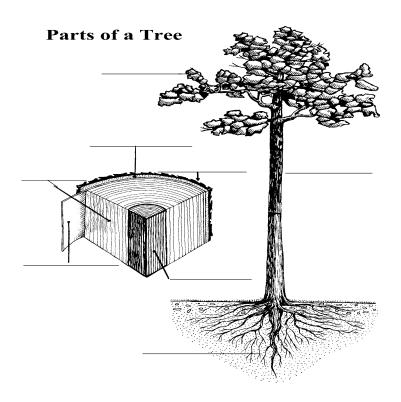
Name:	

Workbook Exercises Module 1: Introduction to Silviculture

* Please note that there is now a \$20 testing fee to receive a certificate for each module. If you would like to receive a certificate for completing this module, please send a cheque or money order (payable to the Minister of Finance) along with the completed quiz or workbook to Nova Scotia Department of Natural Resources Extension Services Division P.O. Box 698 Halifax, NS B3J 2T9

Exercise 1: Label the parts of a tree by filling in the blanks provided.

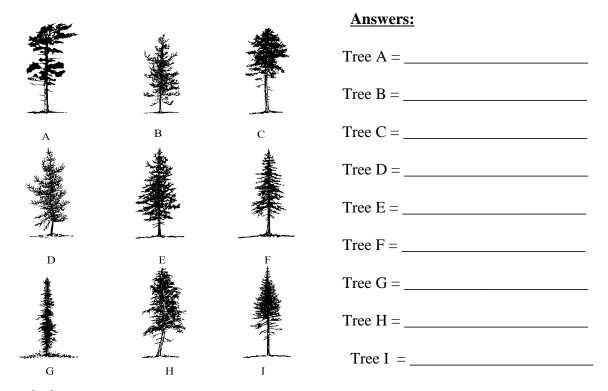


Exercise 2: Examine the trees on your woodlot. Note their characteristics below ie. age, species, longevity, shade tolerance, root structure, habitat, regeneration capability, reproduction methods.

Tree Characteristics	s:	 	 	

Exercise 2: Examine the pictures and descriptions provided and correctly identify each softwood tree species.

Pictures:



Descriptions:

Tree A: It is the only native 5-needled pine; needles are soft; cones are cigar-shaped; a tall tree having upper branches with upcurved tips. (*Pinus strobus*)

Tree B: A small-medium, 2-needled pine; needles are yellow-green and form a "V"; thick-scaled and curved cones; its range is the largest of any native Canadian pine. (*Pinus banksiana*)

Tree C: A tall, straight tree with the longest needles to 2-needled pines; bark is platy and distinctly red; short, oval cones; also known as Norway Pine. (*Pinus resinous.*)

Tree D: A small-medium sized tree with a long, straight trunk; needles are blue-green clusters that turn gold and fall in the autumn; cones are small and upright. (*Larix lariciana*)

Tree E: A medium-sized conifer with dense yellow-green foliage; needles are sharp, four-cornered and shiny; bark is reddish-brown; end of branches tend to curve upward. (*Picea rubens*)

Tree F: Needles are four-angled, sharp-pointed and blue-green with a rank odor when crushed; bark is thin and brown, inner bark is silvery white. (*Picea glauca*)

Tree G: Needles are four-cornered, blue green and blunt-pointed; inner bark is olive green; cones are short with rough-edges scales; branches form a definite clump at tip of crown.(*Picea mariana*)

Tree H: A large conifer with small, blunt tipped, glossy, dark green needles; cones are pale green, small and not erect; bark is reddish-brown and purplish-brown when scraped. (*Tsuga canadensis*)

Tree I: Steeple-shaped conifer; needles are blunt tipped and dark, shiny green above with two

white lines underneath; bark has numerous resin blisters. (Abies balsamea)

Exercise 3: Examine the pictures and descriptions provided and correctly identify each hardwood tree species.

Pictures: Answers: Tree A = Tree B = Tree C = Tree D = Tree E = Tree F = Tree G = Tree H = Tree I =

Tree A: A medium-sized to large tree with short trunk; leaves are lobed, wide, with few teeth; buds are opposite and sharp pointed; sap is used to make maple syrup. (*Acer saccharum*)

Tree B: A small tree with shiny, lance-shaped leaves; bark is smooth and reddish-brown with orange dashes; flowers are white and seeds are bright red. (*Prunus pensylvanica*)

Tree C: Bark is chalky white, papery, and easily peeled; leaves are smooth, alternate with a heart-shaped base; male flowers are long drooping catkins. (*Betula papyrifera*)

Tree D: A branchy tree with smooth grey bark; leaves are long-pointed, straight-veined, toothed and dark green; twigs are slender and zig-zag; buds are long with sharp ends. (*Fagus grandifolia*) *Tree E:* The only one of its species native to Nova Scotia; leaves have 7-11 lobes tipped with a stiff bristle; large, sturdy tree that bears acorns. (*Quercus rubra*)

Tree F: Leaves are compound and opposite, long and sparsely toothed; bark contains many deep vertical furrows; seeds are winged, paddle-shaped. (*Fraxinus americana L.*)

Tree G: A branchy tree with leaves having 3-5 lobes and being coarsely toothed, and turning red in the fall; twigs are slender, shiny and deep red with small white dots. (*Acer rubrum*)

Tree H: A medium-sized tree with yellow to golden papery bark that peels off in thin strips; leaves are oval shaped and toothed; twigs have a wintergreen taste. (*Betula alleghaniensis*)

Tree I: Leaves are small, coarse-toothed, trembling, shiny and green; smooth green bark when immature and dark grey and furrowed when older. (*Populus grandidentata*)

Tree J: Leaves are small, finely-toothed, trembling, lustrous dark green above and pale green below; twigs are shiny brown with sharp buds. (*Populus tremuloides*)

^{*} If you wish to discuss the workbook exercises or your answers, please feel free to contact 424-5444 or woodlot@gov.ns.ca.