

## Glossary

### - A -

#### *Absorb*

To suck up or take up. A sponge absorbs water.

#### *Acre :*

Unit of area measurement that equals to 4046,87m<sup>2</sup> or 0.4 ha. We use it to measure very large areas of land.

#### *Adaptation*

Adjustment to environmental conditions. Young people adapt well to change. The black spruce is well adapted to Quebec's cold climate

#### *Adventitious (bud or root)*

Refers to plant structures arising at unusual places, such as on another structure when it reaches a certain stage of development.

#### *Allowable cut*

A maximum amount of timber that can be cut per year in a given area in perpetuity, the cut being offset by annual growth.

#### *Alternate (alternate leaves)*

Arranged singly along a twig or shoot. The cherry tree has alternate leaves.

#### *Arboreal*

Living on trees. Arboreal lichen can be found on some trees.

#### *Aromatic*

Having a pleasant odor. Thyme and savory are aromatic herbs.

### - B -

#### *Biological control*

The use of natural predators and parasites to reduce the populations of insects that



ravage forests. The use of natural agents, such as fungi, bacteria, or viruses, to control or fight against undesirable species.

## *Branchlet*

A small tree branch. A grouping of branchlets comprises a bough.

## *Brush cutting*

The action of removing vegetation that stifles regeneration so that new plants receive adequate light.

## *Budbreak*

The initiation of growth from a bud; when a plant's buds open.

## *Bush*

Dense shrubs and stands of small trees of normally unmerchantable species.

## - C -

## *Cambium*

A layer of cells between the wood and the secondary phloem where wood is formed.

## *Competing vegetation*

Plants that rapidly take hold in a clearing (area with no trees) and which impede the growth of the tree crop.

## *Complex*

Comprising many different elements. The forest ecosystem is complex.

## *Compost (noun)*

A mixture of organic matter used as fertilizer. An increasing number of people are making compost at home to fertilize their gardens.

## *Compost (verb)*

To produce compost by allowing farm or domestic waste (table scraps and the like) to decay, sometimes with the addition of minerals.

## *Cone*

A conical fruit in which the seeds are hidden under relatively hard scales arranged



around a central stem.

## *Conifer*

A cone-bearing tree or shrub whose leaves are needles or scales. Conifers produce their seeds within cones.

## *Crystallize*

To change into crystals. Water crystallizes into snow and ice when exposed to sufficient cold.

## *Cut with soil and regeneration protection*

Harvesting carried out taking specific measures to prevent damage to young trees and to the soil.

## - D -

## *Deciduous (foliage)*

Said of plants whose leaves are shed annually.

## *Detection*

The act of finding or detecting signs of injury or harm in a forest by fire, insects, disease, or competing plants (plants that hinder the crop to be produced).

## *Dieback*

The decline of a particular species as a result of environmental stress that may lead to the death of trees.

## *Dioecious*

A plant whose male and female flowers are on different trees.

## *Domestic waste*

The waste or garbage produced by the members of a family and which would be thrown out.

## *Dormancy*

The state in which organs, especially those of plants, do not grow for a period of time due to climatic or physiological conditions. It could be called the plant version of



hibernation.

## *Drought*

A prolonged period without rain that leaves the ground, and often even watercourses, dry. Severe drought in the summer results in forest fires.

## - E -

## *Earlywood*

A portion of the growth ring produced during the spring, when the tree's water requirement is high to produce buds. Also known as springwood.

## *Ecosystem*

A system formed by the interaction of a community of animals and plants with its environment.

## *Endemic*

Said of an organism (insect, virus, etc.) that is naturally present in a limited area (opposite of epidemic).

## *Epidemic*

Relating to an epidemic, which is the rapid development of a population (plant, animal, virus) to an extremely high and generally harmful level for the forest.

## *Ericaceae*

A family of plants and shrubs that includes blueberries and Labrador tea.

## *Erosion*

The act or process of eroding or eating away slowly. Erosion is caused by a range of natural structures or occurrences, such as rain, watercourses, wind, and glaciers, that causes soil deterioration. Bare ground erodes more easily than one covered with vegetation.

## *Evaporate*

To produce evaporation, that is, change from a liquid state into a vapor. In a figurative sense, one often hears expressions such as "his hopes for the future evaporated."



## *Evaporation*

The transformation of a liquid into a vapor. Water turns to vapor when boiled.

## *Even-aged*

Said of a forest or stand in which there is little difference in age among the trees.

## - F -

## *Fertilization*

The act or process of enriching the soil. Both chemical and organic substances are used as fertilizers.

## *Fertilize*

To make fertile or enrich the soil to increase or improve crop yield or growth. Fields are fertilized with manure in the fall.

## *Fertilizer*

A product that is used to enrich the soil to increase or improve crop yield or growth.

## *Flora*

The plant life (including trees and shrubs) growing in a specific area.

## *Forest ecology*

The study of forests and their ecology, including the application of soil science, botany, zoology, and the like to forestry. Also referred to as silvics.

## *Forest management*

The study of the administration, direction, and organization of a wooded area.

## *Forest mensuration*

The measurement of volume, growth, and development of trees and stands.

## - G -

## *Girdling*

The practice of making an incision around a living stem, branch, or root in order to kill the structure. Also known as deadening. Insects and rodents can also injure or



kill a tree by girdling it.

## *Green manure*

An herbaceous crop plowed under when green to enrich the soil.

## *Growth inhibitor*

A substance that inhibits or halts the growth of trees.

## *Growth*

The act or process of growing or developing when referring to an organism. Tree growth is slow.

## - H -

## *Hardwood*

A tree whose leaves drop in the fall, as opposed to evergreens or conifers, which have needles (fir, spruce) or scales (cedar). The maple, lilac, and oak are examples of hardwood trees.

## *Harshness*

Severity, extreme rigor. The harshness of winter refers to periods of intense cold that are hard to withstand.

## *Harvesting*

The act of removing trees from the forest for a variety of uses, such as making paper or lumber.

## *Heartwood*

The hard, inner layers of wood which, in the growing tree, have ceased to contain living cells. It is often colored by tannin in hardwood trees and by resin in softwood species. The only function of heartwood is to support the tree.

## *Hectare*

A unit of area measurement equal to 10 000 square metres used to measure very large areas of land. One hectare measures 100 metres by 100 metres and equals 2.5 acres.



## *Heliophilous*

Said of plants that like light or sunlight.

## *Herbaceous (plant)*

Said of a plant that does not contain wood. Such plants are generally green and soft.

## *Host*

The organism on which another organism (parasite) grows and derives nutrition.

## *Humus*

The top layer of soil produced by the decomposition of vegetable or animal matter. Dead leaves and other plant matter gradually convert into humus.

## - I -

## *Insecticide*

A substance that destroys insects.

## - K -

## *Key*

A dry, one-seeded, winged fruit that can be carried on the wind. Also referred to as samara.

## - L -

## *Landfill*

An area for the burial of solid waste.

## *Landslide*

The more or less rapid downslope gravitational movement of a body of soil.

## *Larva*

The immature, wingless, feeding stage of an insect that undergoes complete metamorphosis.

## *Latewood*





A portion of the growth ring produced during the latter part of the growing season, such as later summer and early fall, when the tree's water requirement is lower. Also known as summerwood.

## *Leafstalk*

The slender stalk by which a leaf is attached to the stem.

## *Lichen*

A complex organism composed of a fungus in symbiotic union with an alga that is very resistant to cold, heat, and drought.

## *Lignification*

The maturing of fruits and transformation of young branches into wood that occurs at the end of summer in preparation for winter.

## - M -

### Mature (stand or forest)

Having reached its age of utilization.

## *Mulch*

A layer of straw, bark, or other plant matter used to conserve moisture in the soil, to protect certain fruits from rotting through contact with the soil, and to inhibit the growth of other plants, such as weeds.

## - N -

## *Needle*

The very narrow, somewhat pointed leaves on some conifers. Fir needles are flat.

## - O -

### *Opposed (opposed leaves)*

Said of leaves that appear in pairs (by two) on opposite sides of the leafstalk. The sugar maple has opposed leaves.





## *Organic soil*

Soil that comes from decomposed living matter. Humus - comprised of leaves and other plant waste, insects, decomposed animals, excrement, and so on - is an organic soil.

## *Organism*

A complex, organized body of parts functioning together.

## *Overmature (stand)*

A very old stand in which tree growth is slight or has stopped.

## - P -

## *Paired keys*

A double key. A key is a one-seeded fruit with a dry, flat wing. A paired key contains two seeds.

## *Perennial*

Said of plants that have a life cycle of at least two years.

## *Pest*

Any organism that causes injury or loss to a forest. Insects and mammals are pests.

## *Pesticide*

A substance used to fight against harmful animals or plants.

## *Photosynthesis*

The synthesis of organic matter in the presence of sunlight by plants. Chlorophyll is essential to photosynthesis.

## *Phytocide*

Any chemical preparation used to kill or inhibit the growth of certain plants, their spores, or seed. Arboricides (tree killer) kill trees (woody plants); herbicides kill weeds; and fungicides kill fungi.

## *Pigment*

Any of various biological substances that produce color in the tissues of organisms,



especially plants. Carotene is the yellow pigment that gives color to carrots.

## *Pioneer species*

A plant capable of taking hold and growing in treeless areas. Such plants are replaced by others later on. The quaking aspen is a pioneer species.

## *Pistil*

The female structure of a flower, located at its center.

## *Planting*

The act of creating a forest by planting seedlings (young trees).

## *Pollen*

A dust-like material comprised of microscopic particles produced by flowers that serves as the fertilizing agent (male role) in flowering plants.

## *Processing*

The action of treating or preparing by some particular process in order to change or modify something's form, shape, or appearance. Paper is made by processing wood pulp.

## - R -

## *Recycle*

To treat or process waste so as to make it suitable for reuse. New paper and cardboard can be produced by recycling paper.

## *Regeneration*

The renewal of a forest. Trees begin to grow again.

## *Release*

The act of freeing seedlings (young trees) by eliminating plants that overtop or closely surround them.

## *Reproductive system*

The complex system of organs in males and females dedicated to the function of reproducing the species, that is, living organisms giving life to organisms of the



same species. For example, pairs of mammals of the opposite sex mate, with the female giving birth to the young. Trees, however, have male and/or female flowers; reproduction begins when the pollen is conveyed to the female flower.

## *Resin*

A plant secretion from certain trees, such as the pine and fir.

## *Root hair*

A hair-like growth on the root which absorbs water and minerals for the plant.

## *Root system*

The underground portion of a tree, including the roots and root hairs.

## - S -

## *Sandy soil*

A soil that is composed of very fine inorganic particles, such as sand grains.

## *Sapwood*

The outer layer of wood in a living tree (between the bark and the heartwood (duramen). Also known as alburnum.

## *Scarification*

The act or process of breaking up the ground in preparation for regeneration.

## *Seed tree*

A tree selected for seed collection or left after harvesting to produce seeds that will germinate and create a new forest.

## *Seedling*

A young plant grown from a seed.

## *Selection method*

A method of regenerating a forest stand and maintaining an uneven-aged structure by removing some trees in all size classes either singly or in small groups or strips. The selection method is carried out in sugarbushes

## *Shade-intolerant*



Said of a plant that does not grow well in the shade.

## *Shade-tolerant*

Said of plants that can thrive in the shade.

## *Shrub*

A woody plant smaller than a tree that often does not have a main trunk. The Canada yew and leatherwood are examples of shrubs.

## *Site preparation*

Treatment, such as plowing or scarifying, that modifies the site to provide favorable conditions for natural or artificial regeneration.

## *Soil drainage*

The natural process of moisture loss from soil as runoff or groundwater.

## *Stamen*

The male organ of the flower.

## *Stand*

A community of trees possessing sufficient uniformity in composition, age, arrangement, or condition, to be distinguishable from the forest or other growth on adjoining areas.

## *Stigmata*

The tip of a pistil which is receptive to pollen grains. Pollen grains stick to its surface.

## *Stoma*

A microscopic pore containing a tiny hole called an ostiole, through which gases are exchanged. Plants breathe through their stomata.

## *Strategy*

The art of coordinating actions to achieve a desired end.

## *Strip cutting*

The removal of the crop in strips in one or more operations, generally for encouraging regeneration. Seeds from mature trees in the strips help speed the regeneration.



## *Structure*

The way in which parts of a whole are arranged. The structure of a plant, a piece of furniture, a book, and so on.

## *Sucker*

A shoot arising from a root bud growing under the surface of the soil.

## *Sugarbush*

A stand or forest made up predominantly of sugar maples and red maples.

## *Susceptibility (stand)*

The potential for a stand to be affected or destroyed by insects or disease.

## *Sylvicultural regime*

Treatments designed to promote and achieve specific stand management objectives.

## - T -

## *Tending*

Any operation carried out for the benefit of a forest crop or any individual therein.

## *Tissue*

An aggregate of similar cells having the same function. The tissue in a flower stem is different from that in the flower's petals.

## *Tree breeding*

The application of genetic principles to the improvement of trees, such as to solve a specific problem or in order to obtain a given product.

## - U -

## *Uneven-aged*

Said of a forest or stand in which there is a range of difference in age among the trees.

## - V -



## *Vesicule*

A bladder-like cyst or sac (similar to a blister) that contains a fluid. The fir has resin-filled vesicles in its bark.

## *Virus*

An ultramicroscopic infectious (capable of infecting with disease) agent.

## *Vulnerability (of a stand)*

The sensitivity or susceptibility of a stand to be easily affected or even destroyed such as by insects or disease.

- W -

- X -

- Y -

- Z -

