

Glossary of Forest Management Terms

Sustainable Forest Management: the management of forests according to the principles of sustainable development- trying to find a balance between social, economic, and environmental values.

Adaptive Management: A process for continually improving management policies and practices by learning from the outcomes of the operations.

Forest Management Plan: A plan for the management of a forest area usually for a full rotation cycle; includes the objectives, prescribed management activity

Forest Tenure: the right to harvest and sell timber from Crown Land.

Certification: procedure where an independent third party inspects forest management and utilisation practices to assess compliance with a set of ecological, economic and social standards for sustainable forestry.

Private Land: land owned by individuals.

Crown Land: land owned by the Crown- owned by all Canadians and is administered and regulated by the government.

Silviculture: the art and science of growing trees.

Annual Allowable Cut: amount of wood permitted to be harvested within a one year period on a sustainable basis; it considers factors including forest inventory, growth rates, regeneration success, natural mortality, impact of fire, insects and disease; it also takes into account other forest uses outside of timber production.

Even-aged: a stand that contains trees of one or two age classes; usually managed with clearcut harvest system

Uneven-aged: a stand that contains trees of all, or almost all, age classes; usually managed with selection harvest system

Clear Cut: a method of harvesting used in even-aged stands, involves removing all or most of the trees in an area in one operation.

Shelterwood: a method of harvesting that leaves individual trees or groups of trees or alternating strips standing to provide seed and cover conditions for natural or artificial regeneration

Selection harvest: a method of harvesting used in uneven-aged stands; selected trees are harvested leaving residual trees with more space to increase their growth, also used to promote the regeneration of trees

Timber Cruising: sample measurement of a stand that is used to determine an estimate of the amount of standing timber that the forest contains; measurements are collected at sample locations (plots); can give information on stand conditions, species composition, and volume.

Basal area: a basis of measurement that is used to determine how a piece of land is stocked with trees; $BA = 0.005454 \times DBH^2$, it is the measurement of the cross-sectional area of a tree stem at 1.3m above ground (diameter at breast height (DBH)); usually calculated at square feet per acre.

Pre-commercial thinning: silvicultural technique that involves removing undesirable trees from young forest stands before the trees are large enough to be of commercial value; trees that are left behind have access to more space, sunlight, moisture and nutrients and therefore grow faster and stay healthy.



Skidder: vehicle used in a logging operation for pulling cut trees out of a forest; logs are transported from the cutting site to a landing where they are loaded onto a truck

Feller buncher: vehicle with an attachment that can rapidly cut and gather trees; pinching device grabs trees while a circular saw then cuts it and places it in a stack for a skidder

Forwarder/porter: vehicle that carries cut logs from the stump to the roadside landing; different from a skidder in that it carries logs clear of the ground

Timber: wood in any of its stages

Reforestation: the establishment of trees on a harvested area; can be done through artificial (seeding, planting) or natural regeneration

Deforestation: the removal of a forest and replacement with something else; transformation of forest area to non-forest

Afforestation: the establishment of a forest in areas where the land use was not forest

Board foot: unit of measurement of lumber; 1 inch thick, 1 foot wide, 1 foot long

Certification: a voluntary, market-based mechanism aimed at promoting sustainable forest management and takes into account environmental, economic and social issues

Careful logging: techniques used by loggers to minimize damage to the forest, soil, wildlife habitat and hydrology

Natural Disturbance Emulation: choosing the silvicultural system (clearcut, shelterwood, selection) that best imitates natural disturbance patterns for a given forest type

Certified Tree Marker: individual who decides what to cut and what to leave in partial-cut harvests. The Tree Marker is responsible for compliance with all ecological standards and guidelines (i.e. wildlife habitat retention)

Tree-length harvest: tree limbs and crown are removed and left on site

Full-tree harvest: limbs and crown are removed after taking the tree off site

Vegetation Management: use of manual (brushsaw), natural (fire) or chemical (herbicide) treatments to promote regeneration of desired tree species after harvest

Forest Management Unit (FMU): a discrete forestry planning area.

Forest Resource Inventory: a provincial database of all Crown forests, providing information on species composition, age and volume. FRI data is collected via aerial photography and analyzed by trained interpreters

Free-to-grow: the growth stage at which regenerating trees have sufficiently outcompeted surrounding vegetation and can be re-entered into the Forest Resource Inventory

Non-Timber Forest Products: products such as maple syrup, mushrooms or herbs that can be collected from forests without removing trees

Dendrochronology: the study of patterns of tree rings- age and history.

