

GLOSSARY

selected terms, copied from the Silviculture Survey Manual

<https://www.for.gov.bc.ca/hfp/silviculture/Silviculture%20Survey%20Procedures%20Manual%202016.pdf>

Acceptable species: Acceptable species are ecologically suited to the site, but management activities are not aimed at establishing them. The reasons for including a species in this category may be for biodiversity or due to site limitations (e.g. pest risk)

Advance regeneration: Regeneration that was present on an opening prior to harvesting. Advance regeneration, if present, should be carefully evaluated to determine its potential for future management. This term was formerly known as Prince ... er ... maybe that was advancedd regeneration.

Basic silviculture: The silviculture treatments that are carried out to ensure regeneration to the free growing stage; compare with **incremental silviculture**

Brush: This refers to competing vegetation, such as broadleaf species, shrubs or herbs.

Brushing: A silviculture treatment to remove broadleaf species, shrubs or herbs that compete with conifers.

Commencement Date: The date when harvesting, excluding road and landing construction, begins on the area under the silviculture plan or prescription.

Countable conifer: Conifers meeting or exceeding a minimum countable height and counted towards the maximum density determination during a free growing survey. See also Maximum density.

Countable height: The height above which all trees are tallied and considered as countable conifers – see **median height**

Crop tree: A tree in a young stand selected to be retained until final harvest.

Cut block: A specific area with defined boundaries authorized for harvest. Compare with **Opening**

FG: Free growing. See **free growing tree** & **free growing stand**

Fill planting: Supplementary planting required to augment poorly stocked natural regeneration or to replace seedlings that have died on previously planted sites.

Forest Development Plan: An operational plan under the Forest Practices Code containing a licensee's plans for harvesting, road construction and silviculture activities.

Forest health factor: Biotic or abiotic influences on the forest that are usually naturally occurring components of forest ecosystems. Biotic influences include fungi, insects, plants, animals, bacteria and nematodes. Abiotic influences include frost, snow, fire, wind, sun, drought, nutrients and mechanical human caused injury.

Forest Practices Code (FPC): The Forest Practices Code is a term commonly used to refer to the Forest Practices Code of British Columbia Act. This also includes regulations under the Act.

Free growing height: The minimum height that a crop tree must attain before it forms part of a free growing stand.

Free growing tree: A healthy, preferred or acceptable well-spaced tree that is at least the minimum height and is at least the minimum size relative to competing vegetation within the effective growing space.

Free growing stand: A stand with a sufficient number (exceeds MSS) of FG trees but does not exceed the **maximum density**.

Ghost tree: Trees that, for a specified reason, will not count towards the stocking of the stand but has an impact on the development of the regeneration

Incremental silviculture: Refers to treatments carried out to maintain or to increase the yield and the value of forest stands. Treatments include site rehabilitation, conifer release, spacing, pruning and fertilization. compare with **basic silviculture**

Inter-tree distance: The actual horizontal distance (nearest 0.1m) between two trees on a stem-to-stem (center to center) basis. See also **Minimum Inter Tree Distance**

Juvenile spacing: A silviculture treatment resulting in the reduction in density of young stands, preferably between 3 meters to 5 meters in height, to control stocking, prevent stagnation and improve crop tree quality so that at final harvest end-product quality and value is increased.

Lower Confidence Limit: This statistical value at the lower end of the confidence interval of well-spaced trees per hectare that another survey on the stratum would be expected to find, nine times out of ten. In most cases, the LCL (@90% confidence) of a survey must exceed MSS before the opening can be considered satisfactorily restocked or free growing.

Maximum density: The maximum allowable stand density of total countable conifers, above which openings must be spaced in order to achieve free growing status.

Median Height: The middle height. Used in the countable conifers and countable broadleaf determination.

Milestone Survey: There are two important reporting points and as a result two milestone surveys. These are the **regeneration delay** survey and the **free growing** survey. Stocking surveys are not milestone surveys

Minimum height at free growing: The minimum height that a healthy, well-spaced tree must attain in order to be considered free growing (if specified in the SP document). Minimum heights vary by species and site series.

Minimum inter-tree distance (MITD): The minimum horizontal distance between two trees on a center-to-center basis. Inter-tree distance is calculated or measured to the nearest 1/10 of a meter.

Minimum preferred stocking standard (MSSp): The minimum number of well-spaced trees per hectare, of preferred species only, that must be present for the stratum to be considered satisfactorily restocked or free growing.

Minimum stocking standard (MSS, MSSp+a): The minimum number of well-spaced trees per hectare, of preferred and acceptable species, that must be present for the stratum to be considered satisfactorily restocked or free growing.

MSS: Minimum stocking standard.

M-value: The maximum number of healthy, well-spaced trees that may be tallied in a single plot. This value is calculated by dividing the target stocking standard for the stratum by the plot multiplier. This prevents over-stocking in one plot compensating for under-stocking in others. This is a key concept in the survey system.

NAR: Net area to be reforested.

Natural regeneration: The renewal of a tree crop by natural means.

NCBr: Non-commercial brush.

Net area to be reforested (NAR): The area on which the licensee is responsible for establishing a free growing crop of trees. This figure is the sum of Standard Unit (SU) areas. The NAR does not include any NP, reserves, or NCBr that are not deemed to be the obligation of the licensee.

Non-productive (NP): Land that is incapable of growing a merchantable stand within a reasonable length of time.

Not satisfactorily restocked (NSR): Productive forest land that has been denuded and has not been regenerated to the specified stocking standards for the opening.

No-work zones: Areas in which equipment and people are not allowed during forestry operations, usually for safety or ecological reasons.

NP: Non-productive. Can be NP nat (naturally occurring) or NP unnat (roads and landings)

Not FG: Not free growing (NFG).

NSR: Not satisfactorily stocked.

Opening: An area denuded of trees by means of harvesting, insects, disease, fire, wind, flooding, landslide or by any other similar events

Overtopping: Vegetation that is taller than the crop species, within a 1 meter radius around the crop species

PHSP: Pre harvest silviculture prescription

Plantable spot: A suitable microsite on which a seedling could be planted.

Plot multiplier: The factor used to multiply the tree count in the survey plot to yield the equivalent stems per hectare. It is calculated by dividing the area of one hectare (10 000 m²) by the area of the sample plot. For example, a plot radius of 3.99 m has an area of 50 m² and a resulting plot multiplier of 200. (10 000m² ÷ 50m² = 200)

Potential Free Growing Tree: The concept used in the Free Growing Guidelines to identify a tree that may be free growing if there are less than a specified number of countable sized broadleaf trees present in the plot

Preferred species: Those species ecologically suited to the site. Management activities are primarily aimed at establishing preferred species. The characteristics of these species are consistent with the desired timber and non-timber objectives for the opening.

Pre-harvest silviculture prescription (PHSP): A legally binding, site-specific plan describing the nature and extent of any timber harvesting and silviculture activities carried out on an opening. The PHSP outlines standards and timelines that the owner of the opening must achieve (i.e. regen delay & FG). PHSPs are the 'pre-Forest Practices Code' equivalent to Silviculture Prescriptions.

Preparable spot: A microsite that is presently unsuitable for planting but, with site preparation, would become an acceptable planting microsite.

Regeneration date / delay: The date/ time period by which a MSSp and MSSpa must be achieved.

RESULTS: This is an acronym for **Reporting Silviculture Updates and Land status Tracking System**. This is the Ministry of Forest's corporate database used to track silviculture information on openings.

Satisfactorily restocked (SR): Productive forest land that has been denuded and subsequently regenerated to the specified stocking standards in the "**silviculture plan or prescription**" (see below).

SIBEC: An acronym for the method of determining site index which uses biogeoclimatic classification system

Silviculture plans and prescriptions: The generic term used in this document to describe collectively the documents containing the applicable stocking standards and stand management objectives. Pre-harvest Silviculture Prescription (PHSP), Silviculture Prescription (SP), Forest Development Plan (FDP), Forest Stewardship Plan (FSP) and Site Plan (SP) may all be included under this heading.

Silviculture survey: An examination of an opening for the purpose of providing information on how the stand are progressing relative to the prescribed management objectives (stocking standards).

Site index: A measure of site growth potential for a given tree species over a fixed time period. It is the average top height of trees of a certain species at fifty years measured at breast height. The top height trees are the 100 largest DBH trees per hectare of the species being considered. The breast height age is the number of annual growth rings at 1.3 m from the point of germination

Site preparation: Disturbance of an area's topsoil and ground vegetation to create conditions suitable for regeneration.

Site rehabilitation: The conversion of potentially productive land presently occupied by stands of undesirable species or by brush, back to a condition appropriate for establishing desired coniferous species

Satisfactorily restocked (SR): Productive forest land that has been denuded and has been regenerated to the specified stocking standards for the opening.

Stand density: A measure of stocking, described in terms of stems per hectare.

Stand management prescription (SMP): A site-specific plan describing the nature and extent of the silviculture activities planned for a free growing stand of trees. SMPs facilitate the achievement of specified social, economic and environmental objectives.

Stand tending: A variety of forest management activities carried out at different stages in the life of a stand. Treatments may include juvenile spacing, brushing, commercial thinning, fertilization, conifer release, site rehabilitation, mistletoe control, seed tree control and pruning.

Standards Unit (SU): An area within a cutblock that is subject to uniform limits for soil disturbance and stocking standards (e.g. regen delay & FG).

Statistical sampling: The selection of sample units from a population and the measurement and/or recording of information on these units to obtain estimates of population characteristics

Stocking standards: Stocking standards detail site-specific, legal requirements stated in a “silviculture prescription” (i.e. PHSP, SP, FDP or FSP). They specify the standards required to reforest denuded areas with a healthy new crop of trees within specific time frames. Stocking standards include, but are not limited to:

- TSS & MSS of preferred/ acceptable species
- MITD
- conifer to brush ratio
- maximum density
- regen delay/ date
- free growing dates & heights

Stocking status: Stocking is an indication of growing space occupancy relative to stocking standards. Status refers to whether the site has met those standards. Stocking status is most often described as SR, NSR, FG or NFG

Stocking survey: A survey used to determine the stocking of an opening by describing both the preferred and acceptable well-spaced and total trees, and to generate an inventory label for updating the forest cover map. Conducted between formal regen and FG surveys.

Stratification: The process of defining and identifying populations with similar characteristics within an opening.

Stratum (or called Polygon): A subdivision of a forest area to be inventoried based on a group of trees with the same or similar species composition, age, and/or height class, (plural = strata)

Target stocking standard (TSS): The number of well-spaced, preferred and acceptable trees per hectare that will, in normal circumstances, produce an optimum free growing crop.

Walk-through: An initial reconnaissance of an opening prior to the onset of a survey.

Well-spaced stems per ha (WS): The number of healthy, preferred and acceptable trees, in one hectare, that are all at least the minimum horizontal inter-tree distance from one another. The inter-tree distance is specified in the silviculture plan or prescription