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# Glossary

## **Aboriginal rights**

- Refer to practices, traditions or customs ("activity[ies]") which are integral to the distinctive culture of an aboriginal society and were practiced prior to European contact, meaning they were rooted in the pre-contact society (the date is no longer prior to 1846, the date British sovereignty was asserted in B.C.);
- Must be practiced for a substantial period of time to have formed an integral part of the particular aboriginal society's culture;
- Must be an activity that is a central, defining feature which is independently significant to the aboriginal society;
- Must be distinctive (not unique), meaning it must be distinguishing and characteristic of that culture;
- Must be based on an actual activity related to a resource: the significance of the activity is relevant but cannot itself constitute the claim to an aboriginal right;
- Must be given a priority after conservation measures (not amounting to an exclusive right);
- Must meet a continuity requirement, meaning that the aboriginal society must demonstrate that the connection with the land in its customs and laws has continued to the present day;
- May be the exercise in a modern form of an activity that existed prior to European contact;
- May include the right to fish, pick berries, hunt and trap for sustenance, social and ceremonial purposes (for example, ceremonial uses of trees and wildlife locations);
- May include an aboriginal right to sell or trade commercially in a resource where there is evidence to show that the activity existed prior to European contact "on a scale best characterized as commercial" and that such activity is an integral part of the aboriginal society's distinctive culture;
- May be adapted in response to the arrival of Europeans if the activity was an integral part of the aboriginal society's culture prior to European contact;
- Do not include an activity that solely exists because of the influence of European contact; and
- Do not include aspects of aboriginal society that are true of every society such as eating to survive.

Aboriginal rights arise from the prior occupation of land, but they also arise from the prior social organization and distinctive cultures of aboriginal peoples on that land. Treaty negotiations will translate aboriginal rights into contemporary terms.

(MARR, Glossary of Treaty-Related Terms. <http://www.gov.bc.ca/arr/rpts/glossary/default.htm>)

## **Allowable annual cut (AAC)**

The rate of timber harvest permitted each year from a specified area of land. AACs for timber supply areas (TSAs) and tree farm licences (TFLs), which account for most of the provincial harvest, are set by the government's chief forester in accordance with the Forest Act.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

## **At risk**

A wildlife species is deemed "at risk" when an evaluation shows some likelihood of extinction or extirpation given the current circumstances.

(Adapted from COSEWIC.

[http://www.cosewic.gc.ca/eng/sct0/assessment\\_process\\_e.cfm#tbl5](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl5))

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### **Backlog planting**

Planting that is overdue. In general, planting is considered backlog planting if more than 7 years have elapsed since a site was cleared (by harvesting, fire, insects or disease) in the Interior, and more than 3 years have elapsed on the Coast of British Columbia.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

Current operational use of the term “backlog” or “backlog planting” is usually restricted to areas harvested before 1988 that are of Good or Medium site productivity. This is based on the *Forest Practices Code of British Columbia Act of 1995*, which re-defined a backlog area as “an area from which the timber was harvested, damaged or destroyed before October 1, 1987; and, which in the district manager’s opinion, is insufficiently stocked with healthy, well-spaced trees of a commercially acceptable species.”

### **Biogeoclimatic zone**

A geographic area having similar patterns of energy flow, vegetation and soils as a result of a broadly homogenous macroclimate.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

British Columbia’s low-elevation biogeoclimatic zones are :

- Coastal Douglas-fir (CDF)
- Coastal Western Hemlock (CWH)
- Bunchgrass (BG)
- Ponderosa Pine (PP)
- Interior Douglas-fir (IDF)
- Interior Cedar–Hemlock (ICH)
- Sub-Boreal Spruce (SBS)
- Boreal White and Black Spruce (BWBS)
- Sub-Boreal Pine–Spruce (SBPS)
- Montane Spruce (MS)

The high-elevation zones are:

- Mountain Hemlock (MH)
- Engelmann Spruce – Subalpine Fir (ESSF)
- Spruce–Willow–Birch (SWB)
- Alpine Tundra (AT)

Descriptions of each zone are at

<http://www.for.gov.bc.ca/hre/becweb/resources/classificationreports/provincial/index.html>.

An interactive map showing all zones is at

<http://www.for.gov.bc.ca/hfd/library/documents/treebook/biogeno/biogeno.htm>.

### **Biomass**

The total mass of living organisms in a given area or volume. Forest biomass consists primarily of above-ground and below-ground tree components (stems, branches, leaves, and roots); other woody vegetation; and mosses, lichens, and herbs. Animal biomass typically comprises only a very small portion of total forest biomass.

(Canadian Forest Service. Carbon Budget Model of the Canadian Forest Sector.

[http://carbon.cfs.nrcan.gc.ca/cbm/index\\_e.html](http://carbon.cfs.nrcan.gc.ca/cbm/index_e.html))

### **Broadleaved**

All trees classified botanically as Angiospermae. Also called “hardwoods”. Forest areas are classified as broadleaved if trees accounting for more than 75% of the tree volume (or number of stems in young forest) are broadleaved.

(Adapted from the definition used for temperate and boreal forest in: United Nations. 2001.

The Global Forest Resources Assessment 2000.

<http://www.fao.org/docrep/004/y1997e/y1997e1m.htm#bm58>)

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### **Brushing**

A silvicultural activity done by chemical, manual, grazing, or mechanical means to control competing forest vegetation and reduce competition for space, light, moisture, and nutrients with crop trees or seedlings.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### **Clearcutting**

The process of removing all trees, large and small, in a stand in one cutting operation. As a silvicultural system, clearcutting removes an entire stand of trees from an area of one hectare or more, and greater than two tree heights in width, in a single harvesting operation. A new even-aged stand is obtained by planting, natural or advanced regeneration or direct seeding. The opening size and dimensions created are generally large enough to limit significant microclimatic influence from the surrounding stand.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### **Clearcutting with reserves**

A variation of the clearcutting silvicultural system in which trees are retained, either uniformly or in small groups, for purposes other than regeneration.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### **Coarse woody debris**

Sound and rotting logs and stumps that provide habitat for plants, animals, and insects and a source of nutrients for soil development.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### **Community forest**

Specifically, a “community forest agreement” is a tenure agreement under the *Forest Act* that describes an area of Crown forest land to be managed by a community, under general supervision of the Forest Service, for a sustainable timber harvest as determined by an allowable annual cut.

More generally, community forest may refer to any forestry operation managed by a local government, community group or First Nation for the benefit of the entire community. The majority of community forests in B.C. are on Crown land under a timber tenure such as a forest licence, tree farm licence or community forest agreement.

(Adapted from MFR, Community Forests. <http://www.for.gov.bc.ca/hth/community/>)

### **Coniferous**

All trees classified botanically as Gymnospermae. Also called “softwoods”. Forest areas are classified as coniferous if trees accounting for more than 75% of the tree volume (or number of stems in young forest) are coniferous.

(Adapted from the definition used for temperate and boreal forest in: United Nations. 2001.

The Global Forest Resources Assessment 2000.

<http://www.fao.org/docrep/004/y1997e/y1997e1m.htm#bm58>)

### **Criterion**

A category of conditions or processes by which sustainable forest management may be assessed. A criterion is characterized by a set of related indicators that are monitored periodically to assess change.

(The Montréal Process. [http://www.mpci.org/rep-pub/1995/santiago\\_e.html#2](http://www.mpci.org/rep-pub/1995/santiago_e.html#2))

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**Dead organic matter (DOM)**

A generic term for all dead organic compounds in the ecosystem. These include standing dead trees, downed trees, coarse and fine woody debris, litter, soil carbon, and peat. (Canadian Forest Service. Carbon Budget Model of the Canadian Forest Sector. [http://carbon.cfs.nrcan.gc.ca/cbm/index\\_e.html](http://carbon.cfs.nrcan.gc.ca/cbm/index_e.html))

**Direct employment**

Jobs in a particular industry of interest, such as the forest industry or the ranching industry.

**Ecoregion**

Major ecosystem, resulting from large-scale predictable patterns of solar radiation and moisture, which in turn affect the kinds of local ecosystems and animals and plants found there.

(Bailey, R.G. 1998. Ecoregions: the ecosystem geography of the oceans and continents. Springer-Verlag: New York)

In British Columbia, ecoregion is defined differently, and used with the term ecosection:

An ecoregion is an area with major physiographic and minor macroclimatic or oceanographic variation. There are 43 ecoregions in British Columbia of which 39 are terrestrial. Ecoregions are meant to be mapped at 1:500,000 for regional strategic planning.

(MoE, Ecoregions of British Columbia.

<http://www.env.gov.bc.ca/ecology/ecoregions/index.html>)

**Ecosection**

Ecosections are terrestrial or marine areas that are subdivisions of ecoregions, with minor physiographic and macroclimatic or oceanographic variations. The more than 100 ecosections in British Columbia are mapped at 1:250,000 and used for resource emphasis planning.

(Adapted from MoE, Ecoregions of British Columbia.

<http://www.env.gov.bc.ca/ecology/ecoregions/index.html>)

**Ecosystem**

A functional unit consisting of all the living organisms (plants, animals, and microbes) in a given area, and all the non-living physical and chemical factors of their environment, linked together through nutrient cycling and energy flow. An ecosystem can be of any size – a log, pond, field, forest, or the earth's biosphere – but it always functions as a whole unit. Ecosystems are commonly described according to the major type of vegetation, for example, forest ecosystem, old-growth ecosystem, or range ecosystem.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Effective population size**

The size of an ideal population, which when contrasted to the population under study, would possess the same rate of increase in inbreeding, or decrease in genetic diversity due to genetic drift.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Endangered**

A wildlife species facing imminent extirpation or extinction.

(COSEWIC. [http://www.cosewic.gc.ca/eng/sct0/assessment\\_process\\_e.cfm#tbl5](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl5))

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**Ex situ**

Transfer of organisms (plant or animal) from one site (eg., in the wild) to another site (e.g., seed banks, zoos), for the purpose of maintenance or breeding as a means of conserving the organism.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Extinct**

A wildlife species that no longer exists.

(COSEWIC. [http://www.cosewic.gc.ca/eng/sct0/assessment\\_process\\_e.cfm#tbl5](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl5))

**Extirpated**

A wildlife species no longer existing in the wild in B.C., but occurring elsewhere.

(Adapted from COSEWIC.

[http://www.cosewic.gc.ca/eng/sct0/assessment\\_process\\_e.cfm#tbl5](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl5))

**Fertilizing**

The addition of fertilizer to promote tree growth on sites deficient in one or more soil nutrients. Also used to improve the vigor of crop trees following juvenile spacing or commercial thinning.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**First Nation**

- a. An aboriginal governing body, organized and established by an aboriginal community, or
- b. The aboriginal community itself.

(MARR, Glossary of Treaty-Related Terms. <http://www.gov.bc.ca/tno/rpts/glossary/default.htm>)

**Forest****Forest land****Forest cover**

Forest refers to one or both of land (forest land) and its associated plant community (forest cover), where the land area exceeds 0.5 ha and 10% of the land area is covered by the crowns of trees able to reach a height of 5 m at maturity. Land that temporarily does not meet these criteria, due to human intervention or natural causes, is considered forest if it is expected to revert to forest.

(Adapted from the definition used for temperate and boreal forest in: United Nations. 2001.

The Global Forest Resources Assessment 2000.

<http://www.fao.org/docrep/004/y1997e/y1997e1m.htm#bm58>)

**Forest-associated**

A forest-associated species has a measurable dependence on a forest ecosystem(s) for any aspect of its life history, including indirect dependence, such as consuming forest-based or forest-derived resources. A forest-associated species may be:

- (1) forest dependent and forest dwelling: A species requiring forest conditions for all or part of its requirements for food, shelter or reproduction.
- (2) forest dependent but not forest dwelling: A species not using or living in forest habitats, but that is significantly affected by disturbance or changes in adjacent forests.
- (3) forest using but not forest dependent: A species that is not forest dependent, but makes marginal use of forest habitats.
- (4) known to be forest-associated, but information is insufficient to categorize it as (1), (2) or (3).

(Adapted from a workshop for the National Status 2005 report on criteria and indicators.

Canadian Council of Forest Ministers. <http://www.ccfm.org/>)

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### **Genetic diversity**

Genetic diversity refers to differences at the gene level among individuals of the same species. Genetic diversity can be observed at several levels, such as: 1. differences between trees within a local area, and 2. differences between areas or stands of trees across the species range.

(Adapted from Genes Trees and Forests, Brochure 9. 1983. MFR, Research Branch. <http://www.for.gov.bc.ca/hfd/pubs/Docs/Bro/Bro09.htm> and Yanchuk, A.D., M. Carlson, and J. Woods. 1992. Genetic Diversity in Forest Management. Information Leaflet. B.C. Min. For., Res. Br., Victoria, B.C.)

### **Genetic gain**

An improvement in the mean genotypic value of a selected character, obtained as a result of breeding. The gain is the product of the degree of heritability and the selection differential for that character.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

### **Genetic resource archive**

For genetic conservation: *Ex-situ* collections of germplasm.

(The Forest Genetics Council of British Columbia, Glossary of Forest Genetics Terms. <http://www.fgcouncil.bc.ca/index.html>)

### **Greenhouse Gases**

Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. This property causes the greenhouse effect. Water vapour (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), and ozone (O<sub>3</sub>) are the primary greenhouse gases in the Earth's atmosphere. Moreover there are a number of entirely human-made greenhouse gases in the atmosphere, such as the halocarbons and other chlorine- and bromine-containing substances, dealt with under the Montréal Protocol. Besides CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub>, the Kyoto Protocol deals with the greenhouse gases sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

(Intergovernmental Panel on Climate Change Third Assessment Report, Glossary of Terms. <http://www.ipcc.ch/pub/syrgloss.pdf>)

### **Heterozygosity**

An individual having two different alleles or forms of the same gene in all diploid cells. Different alleles determine alternative characteristics of inheritance, so an organism with different alleles in a pair of genes (e.g. Aa, rather than the same alleles, AA or aa) can pass on either of the two genes (A or a). Consequently, it may not always breed true to type and maintains higher genetic diversity than an organism with the same alleles.

(Adapted from: Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

### **Indicator**

A quantitative or qualitative variable used to describe a state or condition. When observed periodically, it shows a trend. It provides information that is factual, usually for a specific time and place.

(Adapted from: the definition used by The Montréal Process. [http://www.mpci.org/rep-pub/1995/santiago\\_e.html#2](http://www.mpci.org/rep-pub/1995/santiago_e.html#2))

### **Indirect employment**

Jobs in other businesses or industries supplying goods and services to a selected industry that provides direct employment. Jobs providing goods and services to the direct employees and indirect employees, known as induced employment, are not included. For example, a sawmill providing direct employment in the forest industry also provides indirect employment

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to retailers, accountants and various trades for special jobs which the sawmill employees are not trained to handle, to produce the direct outputs of the sawmill. The directly and indirectly employed workers buy goods and services for their own use, creating induced employment. Induced employment is not included in indirect employment, to avoid double-counting.

### ***In situ***

Maintaining the genetic variability of a population in approximately the same geographic and ecological conditions under which it evolved through on site retention, with the use of artificial or natural regeneration.

(Adapted from State University of New York College of Environmental Science and Forestry. Faculty of Forestry. Forest Genetics Glossary.

[http://www.esf.edu/for/maynard/GENE\\_GLOSSERY.html#Germplasm%20conservation](http://www.esf.edu/for/maynard/GENE_GLOSSERY.html#Germplasm%20conservation) and Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

### **Interim measures agreements**

These include Forest and Range Agreements and other similar agreements between the Ministry of Forests and Range and eligible First Nations designed to provide for "workable accommodation" of aboriginal interests that may be impacted by forestry decisions during the term of the agreement, until such time as those interests are resolved through treaty. These agreements provide the Ministry with operational stability and assist First Nations to achieve their economic objectives by providing revenue and direct award of timber tenure.

(MFR, Aboriginal Affairs Branch.

[http://www.for.gov.bc.ca/haa/Docs/Public\\_Q&A\\_Oct27\\_2004.htm#general1](http://www.for.gov.bc.ca/haa/Docs/Public_Q&A_Oct27_2004.htm#general1))

### **IUCN categories of protected areas**

The International Union for Conservation of Nature and Natural Resources (IUCN, now known as The World Conservation Union) defines a protected area as "an area of land and/or sea especially dedicated to the protection of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means." It divides them into six categories, depending on their objectives:

**Category I** – Protected area managed mainly for science or wilderness protection (Strict Nature Reserve/Wilderness Area);

**Category II** – Protected area managed mainly for ecosystem protection and recreation (National Park);

**Category III** – Protected area managed mainly for conservation of specific natural features (National Monument);

**Category IV** – Protected area managed mainly for conservation through management intervention (Habitat/Species Management Area);

**Category V** – Protected area managed mainly for landscape/seascape conservation and recreation (Protected Landscape/Seascape);

**Category VI** – Protected area managed mainly for the sustainable use of natural ecosystems (Managed Resource Protected Area).

The categories reflect a gradient of management intervention. In Categories I–III, strict protection is the rule and natural processes are paramount, Category II and III sites combining this with facilities for visitors. In Category IV, in effect the managed nature reserve, the manager intervenes to conserve or if necessary restore species or habitats. Category V is about protecting cultural, lived-in landscapes, with farms and other forms of land-use. The new Category VI, the sustainable use reserve, is a protected area deliberately set up to allow use of natural resources, mainly for the benefit of local people.

(IUCN. 2000. Protected areas: Benefits beyond boundaries – WCPA in action.

<http://www.iucn.org/themes/wcpa/pubs/other.htm#action>)

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**Keystone species**

Species that are dominant in function and possibly (but not necessarily) in structure within any one ecosystem. They hold a crucial role in supporting the integrity of the entire ecosystem, and therefore affect the survival and abundance of many other species in the same ecosystem.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Large organic debris**

Also called large woody debris. Entire trees, or large pieces of trees, found on the forest floor or within stream channels. Large organic debris in stream channels typically have a diameter greater than ten centimetres and longer than one metre, and provide channel stability and/or create fish habitat diversity.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Managed forest land**

Forest land that is being managed under a forest management plan utilizing the science of forestry.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

In British Columbia, private land classified as “managed forest land” under the *Assessment Act* is given favourable tax treatment to encourage private landowners to manage their lands for long-term forest production. To maintain the classification, management of the land must meet the requirements under the *Private Managed Forest Land Act*.

(Private Managed Forest Land Council, Managed Forest Program.

<http://www.pmfic.ca/program.html>)

**Merchantable**

A tree or stand of trees is considered to be merchantable once it has reached a size, quality, volume, or a combination of these that permits harvesting and processing. Merchantability is independent of economic factors, such as road accessibility or logging feasibility.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Mixed forest/other wooded land**

Forest/other wooded land on which neither coniferous nor broadleaved trees account for more than 75% of the tree volume (or number of stems in young forest).

(Adapted from the definition used for temperate and boreal forest in: United Nations. 2001. The Global Forest Resources Assessment 2000.

<http://www.fao.org/docrep/004/y1997e/y1997e1m.htm#bm58>)

**Natural disturbance**

A change in forest structure and composition caused by fire, insects, wind, landslides and other natural processes.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Natural regeneration**

The renewal of a forest stand by natural seeding (on-site or from adjacent stands; seeds may be deposited by wind, birds or mammals), sprouting, suckering, or layering.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

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**Non-timber forest products**

Botanical and mycological products and associated services of the forest other than timber, pulpwood, shakes or other wood products. Examples include wild mushrooms, floral greenery, craft products, herbs, ethnobotanical teaching and forest tourism.

(Royal Roads University, Centre for Non-Timber Resources, 2006.

<http://www.royalroads.ca/programs/faculties-schools-centres/non-timber-resources/ntfp/>)

**Not satisfactorily restocked**

Productive forest land that has been denuded and has failed, partially or completely, to regenerate either naturally or by planting or seeding to the specified or desired free growing standards for the site.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Old growth**

Old growth is a forest that contains live and dead trees of various sizes, species, composition, and age class structure. Old-growth forests, as part of a slowly changing but dynamic ecosystem, include climax forests but not sub-climax or mid-seral forests. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

The following working definition based on location, species and age information available from forest cover inventories is used for quantitative analysis in this and other publications:

Old growth is defined as all Coast region forests more than 250 years old, Interior forests dominated by lodgepole pine or deciduous species more than 120 years old, and all other Interior forests more than 140 years old.

**Other wooded land**

Land with tree crown cover of 5–10% of trees able to reach a height of 5 m at maturity, or with tree crown cover of more than 10% of trees not able to reach a height of 5 m at maturity and shrub or bush cover.

(Adapted from the definition used for temperate and boreal forest in: United Nations. 2001.

The Global Forest Resources Assessment 2000.

<http://www.fao.org/docrep/004/y1997e/y1997e1m.htm#bm58>)

**Partial cutting**

Refers generically to stand entries, under any of the several silvicultural systems, to cut selected trees and leave desirable trees for various stand objectives. Partial cutting includes harvest methods used for seed tree, shelterwood, selection, and clearcutting with reserves systems.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Planting**

Establishing a forest by setting out seedlings, transplants or cuttings in an area.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Predominant species**

Tree species or species group with the greatest volume per hectare (or number of stems in young forests).

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**Protected area**

The protected areas network of British Columbia includes national and provincial parks, ecological reserves and other areas designated by statute to protect natural and cultural heritage. Proposed protection areas identified in the preliminary land use plan for the Central Coast are also included. Regional parks, municipal parks, wildlife management areas and private conservation lands are not included.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Provenance**

The geographical area and environment to which the parent trees and associated vegetation are native, and within which their genetic constitution has been developed through natural selection.

(Adapted from MFR, Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Provincial forest**

Forest land designated under Section 4 of the *Forest Act*. The Lieutenant Governor in Council may designate any forest land as a provincial forest. The uses of provincial forests include timber production, forage production, forest recreation, and water, fisheries and wildlife resource purposes.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Pruning**

The manual removal, close to or flush with the stem, of side branches, live or dead, and of multiple leaders from standing, generally plantation-grown trees. Pruning is carried out to improve the market value of the final wood product by producing knot-free wood for the improvement of the tree or its timber.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Ranking**

Ranking is the process of assigning a risk of extinction “score” (i.e., rank) to each species. The purpose is to identify species most at risk, as well as to establish baseline ranks for each. (MoE, Species Ranking in British Columbia.

<http://wlapwww.gov.bc.ca/wld/documents/ranking.pdf>)

In British Columbia, the Conservation Data Centre ranks species into three lists:

RED = extirpated, endangered or threatened in B.C. (red-listed species and sub-species have, or are candidates for, official Extirpated, Endangered or Threatened Status in B.C.),

BLUE = special concern,

YELLOW = not at risk.

<http://www.env.gov.bc.ca/atrisk/red-blue.htm#purpose>

**Resilience**

The ability of an ecosystem to recover and maintain the desired condition of diversity, integrity, and ecological processes following disturbances.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Riparian area**

An area of land adjacent to a stream, river, lake or wetland that contains vegetation that, due to the presence of water, is distinctly different from the vegetation of adjacent upland areas.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

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### **Second-growth forest**

Relatively young forests that have developed following a disturbance (e.g., wholesale cutting, extensive fire, insect attack) of the previous stand of old-growth forest. Restricted in application to those parts of the world where clearly discernible, old-growth forests still exist or did exist not long ago.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

### **Seed planning unit (SPU)**

Seed planning units are geographically distinct areas that form the basis for gene resource management, including: tree improvement (breeding, orchard crop production), seed transfer (areas of use), monitoring and gene conservation. SPUs are based on species, ecological zone, elevation and, in some cases, latitude band.

(Adapted from MFR, Tree Improvement Branch.

<http://www.for.gov.bc.ca/hti/speciesplan/index.htm>)

### **Select seed**

Seed that exhibits a higher level of one or more desired genetic traits (such as growth rate, form, wood density, and resistance to insects and disease) than wild seed collected from an average natural stand. This includes seed from tested parents growing in seed orchards and seed collected from natural stand superior provenances. Vegetative material for propagation, from production facilities using tested parents and from superior provenances, is included in the term select seed.

### **Silvicultural system**

A planned program of treatments throughout the life of the stand to achieve stand structural objectives based on integrated resource management goals. A silvicultural system includes harvesting, regeneration and stand-tending methods or phases. It covers all activities for the entire length of a rotation or cutting cycle.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### **Silviculture**

The art and science of controlling the establishment, growth, composition, health and quality of forests and woodlands. Silviculture entails the manipulation of forest and woodland vegetation in stands and on landscapes to meet the diverse needs and values of landowners and society on a sustainable basis.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### **Site preparation**

Any action, related to reforestation, to create an environment favourable for survival of suitable trees during the first growing season. It may alter the ground cover, soil or microsite conditions, using biological, mechanical, or manual clearing, prescribed burns, herbicides, or a combination of methods. Both natural regeneration and planting may be improved through site preparation.

(Adapted from Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

### **Spacing**

The removal of undesirable trees within a young stand to control stocking, to maintain or improve growth, to increase wood quality and value, or to achieve other resource management objectives.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

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### Special management zones

A land use designation used to identify areas where enhanced levels of management are required to address sensitive values such as fish and wildlife habitat, visual quality, recreation and cultural heritage features, etc. The management intent is to maintain or enhance these values while allowing compatible human use and development.

(Adapted from the Glossary definition for "special management area" in the Ft. St. John Land and Resource Management Plan.

<http://ilmbwww.gov.bc.ca/lup/lrmp/northern/ftstjohn/plan/appc.htm#r>

### Species

A singular or plural term for a population or series of populations of organisms that are capable of interbreeding freely with each other but not with members of other species.

Includes a number of cases:

**endemic species:** a species originating in, or belonging to, a particular region. Both "endemic" and "indigenous" are preferred over "native."

**exotic species:** a species introduced accidentally or intentionally to a region beyond its natural range. "Exotic" is preferred over "alien," "foreign" and "non-native."

**subspecies:** a subdivision of a species. A population or series of populations occupying a discrete range and differing genetically from other subspecies of the same species.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

The species counts in the Species diversity indicator are for naturally occurring species and subspecies found in B.C. or now presumed extirpated in B.C. Extinct species are counted separately. Distinct populations are not counted as separate species. The species counts are generally consistent with COSEWIC's use of the term "wildlife species", limited to B.C.:

*"A species, subspecies, variety or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus, that is wild by nature and is either native to Canada or has extended its range into Canada without human intervention and has been present in Canada for at least 50 years."*

(COSEWIC. [http://www.cosewic.gc.ca/eng/sct0/assessment\\_process\\_e.cfm#tbl5](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl5))

### Species diversity

An assessment of the number of species present, their relative abundance in an area, and the distribution of individuals among the species.

(Adapted from Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

### Stand

A community of trees sufficiently uniform in species composition, age, arrangement, and condition to be distinguishable as a group from the forest or other growth on the adjoining area, and thus forming a silvicultural or management entity.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

### Tenure

The relationships established among humans regarding their various rights to own, use, and control land, or the resources on that land.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

The holding, particularly as to manner or term (i.e., period of time), of a property. Land tenure may be broadly categorized into private lands, federal lands, and provincial Crown lands. The *Forest Act* defines a number of forestry tenures by which the cutting of timber and other user rights to provincial Crown land are assigned.

(MFR Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

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**Terrestrial vertebrate**

A member of the subphylum Vertebrata, a primary division of the phylum Chordata that includes fishes, amphibians, reptiles, birds, and mammals, all of which are characterized by a segmented spinal column and a distinct well-differentiated head, whose primary habitat for growth, reproduction, and survival is on or in the land.

(Adapted from "Terrestrial" in: Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Threatened**

A wildlife species likely to become endangered if limiting factors are not reversed.

(COSEWIC. [http://www.cosewic.gc.ca/eng/sct0/assessment\\_process\\_e.cfm#tbl5](http://www.cosewic.gc.ca/eng/sct0/assessment_process_e.cfm#tbl5))

**Timber Harvest Land Base (THLB)**

The portion of the total area of a management unit considered to contribute to, and be available for, long-term timber supply. The harvesting land base is defined by reducing the total land base

according to specified management assumptions.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Timber supply area (TSA)**

An area of public (provincial Crown) land designated under the *Forest Act* that is managed for sustainable timber harvest, as determined by an allowable cut. TSAs were originally defined by an established pattern of wood flow from management units to the primary timber-using industries.

(Adapted from MFR, Annual report 2003/04.

[http://www.for.gov.bc.ca/hfd/pubs/docs/mr/annual/ar\\_2003-04/for.pdf](http://www.for.gov.bc.ca/hfd/pubs/docs/mr/annual/ar_2003-04/for.pdf) and

MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Traditional ecological knowledge**

Indigenous peoples' knowledge of their environment, its processes, and interrelationships.

(Clayoquot Sound Scientific Panel. 1995. Report 3: First Nations' Perspectives Relating to Forest Practices Standards in Clayoquot Sound. p. 11)

**Traditional use**

A use of land or water that is associated with the beliefs, customs and practices passed down through the generations of a community of indigenous people. Traditional use is usually identified with a site. The site may lack physical evidence of human-made artefacts or structures, yet maintain cultural significance to a living community of people, for example:

- A location associated with traditional beliefs of an aboriginal group about its origins, cultural history or world view;
- The location of a trail, sacred site or resource gathering site such as berry grounds;
- A location where a community has traditionally carried out economic, artistic or other cultural pursuits important to maintaining its identity; or
- The traditional home of a particular cultural group.

(Adapted from Ministry of Forests. 1996. Traditional Use Study Program: Funding Proposal Instructions.)

**Tree farm licence (TFL)**

An agreement under the *Forest Act* that describes an area to be managed, under general supervision of the Forest Service, for a sustainable timber harvest as determined by an allowable annual cut. TFLs typically combine public (provincial Crown) land with private land and timber licences. A TFL has a term of 25 years.

(Adapted from: MFR Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

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**Variable retention**

A relatively new silvicultural system that follows nature's model by always retaining part of the forest after harvesting. Standing trees are left in a dispersed or aggregated form to meet objectives such as retaining old growth structure, habitat protection and visual quality. Variable retention retains structural features (snags, large woody debris, live trees of varying sizes and canopy levels) as habitat for a host of forest organisms. There are two types of variable retention:

- Dispersed retention - retains individual trees scattered throughout a cutblock,
- Aggregate (group) retention - retains trees in clumps or clusters.

The main objectives of variable retention are to retain the natural range of stand and forest structure and forest functions. With retention systems, forest areas to be retained are determined before deciding which areas will be cut. This system offers a range of retention levels. The system also provides for permanent retention of trees and other structures after regeneration is established. Variable retention can be implemented with a range of harvesting systems and can be combined with traditional silvicultural systems such as shelterwood or selection.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Vascular plant**

Plants having well-developed vascular components (xylem and phloem) capable of transporting water, sugars, nutrients, and minerals between the absorbing tissue in the roots and the photosynthesizing tissue in the leaves.

(Dunster, Julian A. 1996. Dictionary of natural resource management. UBC Press: Vancouver)

**Wildlife tree**

A tree or group of trees that are identified in an operational plan to provide present or future wildlife habitat. A wildlife tree is a standing live or dead tree with special characteristics that provide valuable habitat for the conservation or enhancement of wildlife. Characteristics include large diameter and height for the site, current use by wildlife, declining or dead condition, value as a species, valuable location and relative scarcity.

(MFR, Glossary of Forestry Terms. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)

**Woodlot licence**

An agreement under the *Forest Act* that describes an area to be managed, under general supervision of the Forest Service, for a sustainable timber harvest as determined by an allowable annual cut. It is similar to a tree farm licence, but on a smaller scale, and typically combines public (provincial Crown) land with private land. A woodlot licence has a term not exceeding 20 years.

(Adapted from: MFR Glossary of Forestry Terms.

<http://www.for.gov.bc.ca/hfd/library/documents/glossary/>)