

Glossary of Common Forestry Terms

Acre A unit of land measurement of 43,560 square feet; a square parcel of land approximately 208.5 feet on each side. A parcel of land 1 mile on each side contains 40 acres.

Aspect Direction towards which a slope faces; orientation of a slope face.

Available Water Capacity The capacity of a soil to hold water in a form available to plants.

Basal Area Area in square feet of the cross section of a tree trunk at breast height most commonly used as an indicator of stand density and expressed as square feet per acre. A tree with a 14" diameter has a basal area of just over one square foot.

Best Management Practices (BMPs) Guidelines for the reduction of erosion and sedimentation of water bodies (*streams, ponds, lakes, rivers, etc.*) from logging activities. A practice or combination of practices determined to be the most effective and practicable means of preventing negative impacts of silvicultural activities. Usually associated with erosion control measures and water quality practices.

Blaze To remove a spot of bark from a tree, usually with an axe, to make a semi-permanent mark. Commonly painted to indicate boundary lines.

Board Foot A unit of measure 1 foot long, 1 foot wide, and 1 inch

thick. Usually used for sawlog material only. A common symbol is MBF, which designates one thousand board feet. The average conversion commonly used is 2 cords = one thousand board feet.

Browse Leaves, buds and woody stems used as food by woodland mammals such as deer, moose and snowshoe hare.

Buffer Strip Vegetation left along a stream, lake, or wetland to protect aquatic life and water quality. Buffer strips filter sediment, provide food, maintain cool water temperatures and may increase diversity within a landscape.

Canopy The cover of branches and foliage formed by the tree crown. The size varies from species to species and covers a much larger area of the forest floor than basal area.

Clearcut A forest harvesting practice in which most or all trees are removed from a site. Clearcuts are used for immediate commercial purposes and for regeneration of future forests.

Coniferous Commonly called softwoods or evergreens. Although there are exceptions, most coniferous trees have cones and keep their needles through the winter.

Commercial Thinning Harvests which are aimed primarily at controlling the growth of stands through adjustment in stand density. Trees removed are useful and of value for some purpose. Income from the sale or use of products produced exceeds all costs associated with harvesting and removing timber.

Cord A unit of volume used in measuring wood products. A standard cord occupies 128 cubic feet of space and contains approximately 85 cubic feet of wood. It is commonly described as a close piled stack of wood 4 feet high, 8 feet long, with sticks 4 feet in length.

Crop Tree Those trees in a stand destined to form the final crop, usually the highest quality and value of all the trees in a stand. Crop trees may be selected from an immature stand and carried through until the final harvest.

Crown Upper portion of a tree which includes the limbs, branches, buds and leaves.

Cruise An organized survey of forest land to locate timber and estimate quantity by species, products, or other information; the estimate obtained in such a survey.

Deciduous Commonly referred to as hardwoods or broadleaved trees. In most cases they lose their leaves in the fall.

Density A measurement of a stand in terms of square feet of basal area, number of trees, or volume per acres. It reflects the degree of crowding of the stems within the stand. Expressed as basal area, it is a measure of the portion of an area occupied by trees. Expressed as a percentage of crown closure, it is an estimate of the extent the site is occupied.

Diameter Breast Height (DBH) The diameter of a tree (*outside bark*) at a point 4 feet above the ground.

Dominant Trees with crowns extending above the general level of the crown cover and receiving full light from above and partly from the side. Dominant trees are generally larger than average trees in the stand, with crowns well developed and partially crowded on the sides.

Even-aged Management

Managing a forest or forest stand to produce a forest of trees of the same relative age. Even-aged management techniques include intermediate treatments, clearcuts, patch clearcuts and shelterwood cuts.

Even-aged Stand A stand of trees in which relatively small age differences exist. A stand is considered even-aged if the difference in age between the oldest and the youngest trees do not exceed twenty percent of the length of the rotation. Stands stocked with two distinct age classes are considered even-aged.

Forest Ecosystem All the plants, animals and chemical and physical processes which interact to sustain the forest. Trees and other organisms interact with each other and with the chemical and physical environment in complex ways.

Forest Management The application of sound forestry principles and practices to the operation of the woodlands.

Forest Type A group of trees, occupying a specific area and uniform in composition, species, age arrangement and condition, as to be distinguished from other adjoining forested areas.

Forester A person who has been professionally educated in forestry and in some states required to possess a license in order to practice. Licensing is required in Maine.

Hardwood Used to designate all broadleaved or deciduous trees as a class. This would include maples, birches, ashes, oaks, aspens, cherries, beech and other broadleaved trees.

Hardwood Type A forest in which hardwood tree species comprise at least 75% of the stand.

Height Class Used in defining a stand of trees. Height classes are usually divided into trees of less than 35 feet in height, trees from 35 feet to 64 feet and trees greater than 65 feet in height.

Highgrading Selective removal of the most economically valuable trees without improvements in the remaining forest.

Intolerance The inability of a tree to develop and grow in the shade of and in competition with other trees.

Landing A place where logs and pulp are assembled for loading and transportation to a mill

Mast Any nut, seed, or fruit produced by woody plants and consumed by wildlife.

Merchantable Refers to forest products which can be harvested and sold; trees of commercial value.

Natural Regeneration Seedlings from natural seeding or sprouts and other plants representing vegetative reproduction.

Patch Cut/ Patch Clearcut

Removal of all trees within designated small areas in the harvest area. Areas are larger than those cut in a group selection method harvest. An even-aged management technique.

Pole Size A DBH size class representing trees that are usually more than 4 inches in DBH and less than 10 inches DBH; generally over 20 feet in height.

Precommercial Thinning

Cuttings which are aimed primarily at controlling the growth of stands through adjustments in stand density. Income from the sale or use of products produced do not exceed costs associated with harvesting and removing timber.

Pulpwood Wood cut primarily for the manufacture of paper, usually the lower quality portions of a tree.

Residual Stand Those trees remaining uncut (*and hopefully undamaged*) following a cutting operation.

Release The process by which young stands of desirable trees, not past the sapling stage, are freed from the competition of undesirable trees that threaten to suppress them.

Rotation Age The age at which the timber stand is considered ready for harvesting under the approved plan of management.

Sanitation Cut Removal of diseased, damaged, overmature, or undesirable stems from a stand.

Sapling A young tree less than 4 inches DBH. The minimum size of saplings is usually placed at 1 inch DBH. Saplings are generally 3 to 20 feet tall.

Sawlog/ Sawtimber A log large enough to permit production of lumber or other products by sawing. Size and cull percent permitted must be specified in any contract and will vary with local practice. Usually greater than 10 inches DBH for softwoods and 12 inches DBH for hardwoods.

Seed Tree Harvest Removing trees in a mature stand so as to effect permanent opening of its canopy and so provide conditions for securing regeneration from the seed of trees retained for that purpose. An even-aged management technique.

Seedling Trees that are less than 3 feet tall.

Selection Harvest The removal of trees either as single scattered individuals or in small groups, at relatively short intervals repeated indefinitely so that the continuous establishment of regeneration is encouraged and an uneven-aged stand is maintained.

Shelterwood A system of management requiring the removal of the mature timber in a series of cuttings over a period of time which establishes essentially even-aged regeneration under the partial shelter of seed trees.

Silviculture The theory and practice of controlling forest establishment, composition and growth.

Site Index A measure of site quality (*productivity*) for a given tree species or group of tree species. The site index is the average height of a tree species or group of species at a standard age (*usually 50 years*).

Snags Dead standing trees, often with tops broken off, which serve as perches, lookouts, foraging and home sites for wildlife.

Softwood Used to designate all coniferous (*cone bearing*) species as a class. This would include spruces, pines, balsam fir, hemlock, cedar, larch or hackmatack and other cone bearing species.

Softwood Type A forest in which softwood tree species comprise at least 75% of the stocking.

Stand See Forest Type

Stocking Density of tree growth in the stand (*forest*), expressed in terms of trees per acre, basal area per acre, volume per acre, or percent crown closure.

Stumpage Value of standing, uncut trees.

Timber Stand Improvement (TSI) Precommercial or non-commercial activity designed to improve tree and stand quality and/or release the potential crop trees in a stand. May include thinning, weeding and pruning.

Thinning Removal of some trees in a stand to increase growing space thereby improving growth rate and/or quality in the remaining trees.

Uneven-aged Management Managing a forest or forest stand to produce three or more distinct age classes of trees.

Uneven-aged Stand A forest or stand composed of intermingling trees that differ markedly in age.

Vernal Pool An ephemeral body of water that fills in the spring, holds water for at least 10 days and dries up by fall some or all years and that does not contain fish.

Wildlife Habitat Four basic components of habitat are food, water, cover and space. Specific requirements for each of these components will vary with species, season of year and the age and sex of the animal.

Windfirm The ability of the root system of a tree to withstand wind pressure and keep the tree upright.