

Appendix L.
Glossary Of Terms

Access trails - Temporary, unpaved roads which do not provide all weather access within the unit. They are not designed for long term and repeated use by heavy equipment. These corridors were originally constructed for the seasonal removal of forest products by skidding to landings or other staging areas. Constructed according to best management practices, these trails may be used to support other management objectives such as recreational access corridors. Maintenance is limited to activities which minimally support seasonal access objectives. (T)

Aesthetics - Forest value, rooted in beauty and visual appreciation and providing a distinct visual quality. (L)

Age Class - Trees of a similar size originating from a single natural event or regeneration activity. *see cohort.* (H)

All-Aged - A condition of a forest or stand that contains trees of all or almost all age classes. (D)

Allowable Cut - The amount of timber considered as available for cutting during a specified planned period of operation. (F)

Basal Area - The cross sectional area, measured in square feet, of a single stem, including the bark, measured at breast height (4.5 ft above the ground). (H)

Basal Area/Acre - A measure of forest density, the sum total of the basal areas of all trees on one acre. (L)

Best Management Practices - A practice or a combination of practices that are designed for the protection of water bodies and riparian areas, and determined to be the most effective and practicable means of controlling point and non-point source water pollutants. (H)

Biomass - the weight of organic matter in a tree, stand, or forest, in units such as living or dead weight, wet or dry weight, etc. (H)

Biological Diversity (Biodiversity) - The variety of life on earth. The variety of things and the variability found within and among them. Biodiversity also encompasses processes –both ecological and evolutionary that allow organisms to keep adapting and evolving. Includes genetic diversity (unique combinations of genes found within and among organisms), species diversity (numbers of species in an area), ecological diversity (organization of species into natural communities and the interplay of these communities with the physical environment – interactions among organisms and between organisms and their environment is the key here), Landscape diversity (refers to the geography of different ecosystems across large areas and the connections between them. (R)

Blowdown - Tree or trees felled or broken off by wind. (H)

Browse - Portions of woody plants including twigs, shoots, and leaves consumed by animals such as deer. (L)

Buffer Zone / Buffer Area - A strip of land where little disturbance occurs. (H)

Cavity Tree / Den Tree - A tree containing an excavation sufficiently large for nesting, dens or shelter; tree may be alive or dead. (L)

Clear Cut - A harvesting and regeneration technique that removes all the trees, regardless of size, on an area in one operation. This practice is done in preparation of the re-establishment of a new forest through reforestation, stump sprouting, or changing habitats, i.e., from forest to brush or grass cover. (A) (L)

Climax Forest - An ecological community that represents the culminating stage of a natural forest succession for its locality / environment. (H)

Coarse Woody Debris (CWD)- Any piece(s) of dead woody material on the ground in forest stands or in streams. (H)

Cohort - A population of trees that originate after some type of disturbance. The disturbance makes growing space available. (L)

Community - An assemblage of plants and animals interacting with one another, occupying a habitat, and often modifying the habitat; a variable assemblage of plant and animal populations sharing a common environment and occurring repeatedly in the landscape. (M)

Conversion - A change from one silvicultural system to another or from one tree species to another. (H)

Coppice - Stems originating primarily from vegetative reproduction; e.g. the production of new stems from stumps, roots or branches. *see* low forest. (H)

Corridor - A linear strip of land identified for the present or future location of a designed use within its' boundaries. *Examples:* recreational trails, transportation or utility rights-of-way. When referring to wildlife, a corridor may be a defined tract of land connecting two or more areas of similar management or habitat type through which a species can travel from one area to another to fulfill any variety of life-sustaining needs. (H)

Cover type - The plant species forming a majority of composition across a given area. (H)

Crown - the part of a tree or woody plant bearing live branches and foliage. (H)

Crown Class - A category of tree based on its crown position relative to those of adjacent trees.

Examples:

dominant - a tree whose crown extends above the general level of the main canopy and receives full light from above and partial to full light from the sides.

co-dominant - a tree whose crown helps to form the general level of the main canopy and receives full light from above and comparatively little from the sides.

intermediate - a tree whose crown extends into the lower portion of the main canopy and receives little direct light from above and none from the sides

suppressed/overtopped - a tree whose crown is completely overtopped by the crowns of one or more neighboring trees and receives little or no direct sunlight. (H)

Crown Closure - The point at which the vertical projections of crown perimeters within a canopy touch. (H)

Cull - Any item of production, e.g., trees, logs, lumber, or seedlings, rejected because it does not meet certain specifications of usability or grade. (H)

Cultural Resources - Significant historical or archaeological assets on sites as a result of past human activity which are distinguishable from natural resources. (L)

Cutting Interval - The number of years between harvest or regeneration cuts in a stand. (L)

Deciduous - Tree and shrub species that lose their foliage in autumn. (L)

Defoliation - The partial or complete loss of foliage, usually caused by an insect, disease, or drought.(L)

Diameter Breast Height (DBH) - The diameter of the stem of a tree (outside bark) measured at breast height (4.5 ft) from the ground. (H)

Diameter-Limit Cut - A timber harvesting treatment in which all trees over a specified diameter may be cut. Diameter-limit cuts often result in high-grading. (A)

Disturbance - An event that causes significant change from the normal pattern in an ecosystem. A disturbance can be endogenous, or part of the developmental process that weakens, for example, a tree, making it susceptible to physical or biological forces. Disturbance can also be exogenous, or external to the developmental process, such as intense winds or fires. (B) (C)

Disturbance Regime - Describes a repeating pattern of disturbance in a community or across a landscape, such as seasonal flooding, daily tidal flooding, insect outbreaks, periodic fires, windthrow, erosion, and ice scouring/ice storms. (B) ©)

Early Successional Wildlife Species - Animal species which require early vegetative stages such as grass, shrubs or aspen. (L)

Ecosystem - A spatially explicit, relatively homogeneous unit of the earth that includes all interacting organisms and components of the abiotic environment within its boundaries - *note* an ecosystem can be of any size, e.g., a log, pond, field, forest or the earth's biosphere. (H)

Ecosystem Management - The appropriate integration of ecological, economic, and social factors in order to maintain and enhance the quality of the environment to best meet our current and future needs. Means keeping natural communities of plants, animals, and their environments healthy and productive so people can benefit from them year to year. (G)

Edge - The more or less well-defined boundary between two or more elements of the environment, e.g., a field adjacent to a woodland or the boundary of different silvicultural treatments. (H)

Endangered Species - Any species of plant or animal defined through the Endangered Species Act of 1976 as being in danger of extinction throughout all or a significant portion of its range, and published in the Federal Register. (H)

Even-Aged - A class of forest or stand composed of trees of about the same age. The maximum age difference is generally 10-20 years. (U)

Even-Aged System - A program of forest management directed to the establishment and maintenance of stands of trees having relatively little (10-20 yrs) variation in ages. The guidelines to be applied in using this system at all stages of tree development are uniquely different from the uneven-aged system. (L)

Exotic - Any species that is not native to a particular geographic region or ecosystem. (V)

Flood Plain - The level or nearly level land with alluvial soils on either or both sides of a stream or river that is subject to overflow flooding during periods of high water level. (H)

Forest - An assemblage of trees and associate organisms on sites capable of maintaining at least 60% crown closure at maturity. (L)

Forestry - The profession embracing the science, art, and practice of creating, managing, using, and conserving forests and associated resources for human benefit and in a sustainable manner to meet desired goals, needs, and values. (H)

Forest Management - The application of business methods and technical forestry principles to the operation of a forest property. (B) (Q)

Forest Succession - The gradual replacement of one community of plants by another.

***Example:* an area of open grass becoming shrub which then becomes shade intolerant trees (pioneer species) and finally climax forest of mostly shade tolerant trees. (L)**

Forest Type - A group of stands of similar character as regards composition and development due to given physical and biological factors, by which they may be differentiated from other groups of stands. (B) (Q)

Forested Wetland - An area characterized by woody vegetation where soil is periodically saturated with or covered by water. (L)

Fragipan - A dense and brittle layer of soil. Its hardness results mainly from extreme density or compactness rather than from high clay content. The material may be dense enough to restrict root, nutrient, and water penetration. (L)

Fragmentation - A biophysical process of breaking forests into dispersed blocks separated by non forest, or in some areas, dispersed blocks of mature forest separated by young forest. (N)

Gaps - Communities, habitats, successional stages, or organisms which have been identified as **lacking in the landscape. (L)**

Geocaching - A high-tech, hide and seek, outdoor activity for utilizing the Global Positioning System (GPS) where an item is “cached” on the landscape. (L)

Grassland - Land on which the vegetation is dominated by grasses, grasslike plants, or forbs. (H)

Green Tree Retention - The practice of retaining live trees after a release cut. This practice creates higher levels of structural diversity providing varied wildlife habitat and future downed wood. The residual overstory trees also moderate the microclimate of the site and provide continuity of habitat for plant and animal species between uncut forest areas. These residual trees are left through the next rotation. (L)

Habitat - The geographically defined area where environmental conditions (e.g., climate, topography, etc.) meet the life needs (e.g., food, shelter, etc.) of an organism, population, or community. (A)

Harvest /Cut/ Logging - Altering a forest by removing trees and other plants so as to control the composition and form of forest stands. (O)

Haul roads - Permanent, unpaved roads which are not designed for all weather travel, but may have hardened or improved surfaces with artificial drainage. They are constructed according to best management practices primarily for the removal of forest products, providing limited access within the unit by log trucks and other heavy equipment. These roads may or may not be open for public motor vehicle use, depending on management priorities and objectives. They may serve as recreational access corridors, but are not maintained according to specific standards or schedules. The design standards for these roads are below those of the Class B access roads as provided in the Unpaved Forest Road Handbook. (S) (T)

Header - See Log Landing.

Herbicide - A chemical used for killing or controlling the growth of plants. (H)

High Forest - A forest originating mainly from natural reproduction. (O)

High-Grading - The removal of the most commercially valuable trees (high-grade trees), often leaving a residual stand composed of trees of poor condition or species composition. (H)

Improvement Cut - The removal of less desirable trees of any species in a stand of poles or larger trees, primarily to improve composition and quality. (H)

Indicator Species - Species with such specialized ecological needs that they can be used for assessing the quality, condition, or extent of an ecosystem on the basis of their presence and density, or the accumulation and effect of materials in their tissues. (A)

Intermediate Treatment - Any silvicultural treatment designed to enhance growth, quality, vigor, and composition of the stand after establishment or regeneration and prior to final harvest. (H)

Invasive - Species that, after they have been moved from their native habitat to a new location, or following disturbance in their native habitat, spread on their own, displacing other species, and sometimes causing environmental damage. (B)

Large Poles - Trees 9-11 inches diameter at breast height. (L)

Large Sawtimber - Trees 18 inches or greater diameter at breast height. (L)

Log Landing / Log Deck - A cleared area in the forest to which logs are skidded and are temporarily stored before being loaded onto trucks for transport. (L)

Low Forest - A forest produced primarily from vegetative regeneration, i.e. coppice. (H)

Mast - All fruits of trees and shrubs used as food for wildlife. Hard mast includes nut-like fruits such as acorns, beechnuts, and chestnuts. Soft mast includes the fleshy fruits of black cherry, dogwood and serviceberry. (A)

Mature Stand - Pertaining to an even-aged stand that has attained most of its potential height growth, or has reached merchantability standards -*note* within uneven-aged stands, individual trees may become mature but the stand itself consists of trees of diverse ages and stages of development. (H)

Medium Sawtimber - Trees 15-17 inches diameter at breast height. (L)

Mesic - Of sites or habitats characterized by intermediate moisture conditions, i.e., neither decidedly wet nor dry. (H)

Multiple Use - A strategy of land management fulfilling two or more objectives, e.g. forest products removal and recreation. (L)

Multiple Use Area - Lands acquired pursuant to Article 15, Section 15.01 (b) of the Parks and Recreation Land Acquisition Bond Act. Multiple Use Areas are acquired to provide additional opportunities for outdoor recreation, including public camping, fishing, hunting, boating, winter sports, and, wherever possible, to also serve multiple purposes involving the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry and reforestation. (L)

Native - Species believed to have existed in a particular geographic region or ecosystem of the Northeast prior to European settlement and subsequent large-scale alteration of the landscape. The state reference for native species is Mitchell. 1997 Revised Checklist of New York State Plants. (B)

Natural Area - These areas are not managed for the production of wood products. A physical and biological area left in a natural condition, usually without direct human intervention, to attain and sustain a climax condition, the final stage of succession. (H) (L)

Natural Regeneration - The establishment of a forest stand from natural seeding, sprouting, suckering or layering. (H)

Non-Commercial Forest - Areas of a forest permanently inoperable due to conditions such as inaccessibility, altitude and poor growing conditions. Meyer, Arthur H. and Others. 1961. Forest Management. New York: Ronald Press. (B)

Neo-Tropical Migratory Birds - Bird species which migrate between the Northern and Southern hemispheres. These species represent more than 50% (340 of the 600 species) of North American birds. (L)

Northern Hardwood Forest Type - A forest type usually made up of sugar and red maple, American beech, yellow birch, and to a lesser extent black cherry and white ash. This type represents about 70 percent of all forests in New York State. (A)

Old Growth Forest - The definition of "Old Growth Forest" involves a convergence of many different, yet interrelated criteria. Each of these criteria can occur individually in an area that is not old growth, however, it is the presence of all of these factors that combine to differentiate "Old Growth Forest." from other forested ecosystems. These factors include: An abundance of late successional tree species, at least 180 - 200 years of age in a contiguous forested landscape that has evolved and reproduced itself naturally, with the capacity for self perpetuation, arranged in a stratified forest structure consisting of multiple growth layers throughout the canopy and forest floor, featuring (1) canopy gaps formed by natural disturbances creating an uneven canopy, and (2) a conspicuous absence of multiple stemmed trees and coppices. Old growth forest sites typically (1) are characterized by an irregular forest floor containing an abundance of coarse woody materials which are often covered by mosses and lichens; (2) show limited signs of human disturbance since European settlement; and (3) have distinct soil horizons that include definite organic, mineral, illuvial accumulation, and unconsolidated layers. The understory displays well developed and diverse surface herbaceous layers. (B)

Overstory - That portion of the trees in a forest forming the upper or uppermost canopy layer. (H)

Parcelization - The subdivision of land into smaller ownership blocks. This intrudes new features and activities into the forest and changes its character but does not necessarily fragment it in biophysical terms. Richards, N.A., Forest Resources of Central NY, NY Forest Owner 9/93 (B)

Pioneer - A plant capable of invading bare sites (newly exposed soil) and persisting there or colonizing them until supplanted by successional species. (H)

Plantation - A stand composed primarily of trees established by planting or artificial seeding - a plantation may have tree or understory components that have resulted from natural regeneration. (H)

Poletimber - Trees that are generally 6-11 inches diameter at breast height. (L)

Protection Area- Land excluded from most active management including wood product management, oil and gas exploration and development, and some recreational activities to protect sensitive sites. (L)

Public Forest Access Roads - Permanent, unpaved roads which may be designed for all-weather use depending upon their location, surfacing and drainage. These roads provide primary access for administration and public use within the unit. The design standards for these roads are those of the Class A and Class B access roads as provided in the Unpaved Forest Road Handbook (8/74). As a general guideline, sufficient access is typically achieved when 1 mile of PFAR is developed for each 500 acres of state land, and no position within the unit lies more than 1 half mile from a PFAR or public highway. (S) (T)

Public Roads - Permanent, paved or unpaved roads primarily designed for motor vehicle travel which are maintained by federal, state or local government. These roads may. Or may not provide year round access. (T)

Pulpwood - Low grade or small diameter logs used to make paper products, wood chips, etc. (L)

Recreational Trail - Unpaved recreational corridors which do not provide all weather access within a unit, and are designed to achieve specific recreational access objectives. Constructed according to best management practices, and following accepted regional standards for design, these trails may be used to support multiple types of seasonal recreation access. Maintenance is limited to activities which minimally support the access objectives and design. (T)

Reforestation - The re-establishment of forest cover by natural or artificial means. (A)

Regeneration - Seedlings or saplings of any origin. The Society of American Foresters. 1958. Forest Terminology, 3rd edition. Washington, DC. (B)

Release - 1.) A treatment designed to free trees from undesirable, usually overtopping, competing vegetation. (H) 2.) A treatment designed to free young trees not past the sapling stage from undesirable competing vegetation that overtops or closely surrounds them. (K)

Residual Stand - A stand composed of trees remaining after any type of intermediate harvest. (H)

Rights-Of-Way - Permanent, paved or unpaved roads which allow the Department access to state Forest properties while crossing private land, or, corridors across state Forests allowing access to private in-holdings. (T)

Riparian zone - Areas of transition between terrestrial and aquatic ecological systems. They are characterized as having soils and vegetation analogous to floodplains, or areas transitional to upland zones. These areas help protect the water by removing or buffering the effects of excessive nutrients, sediments, organic matter, pesticides, or pollutants. (A)

Rotation - The period of years between stand establishment and timber harvest as designated by economic or natural decisions. (B)

Salvage Cutting - Recovery of the values represented by damaged trees or stands. Smith, David M.. 1962, The Practice Of Silviculture. New York: John Wiley & Sons. (B)

Sapling - A small tree, usually defined as being between 1 and 5 inches diameter at breast height. (L)

Sawtimber - Trees that are generally 12 inches and larger diameter at breast height. (L)

Second Growth - The forests re-established following removal of previously unharvested or old growth stands. Most northeastern forests are either second or third growth. (A)

Seedling - A young tree originating from seed that is less than 4 feet tall. (A)

Seedling/Sapling - Trees less than 6 inches diameter at breast height. (L)

Seed Tree Cut/Method - The removal of the mature timber in one cutting, except for a small number of trees left singly, or in small groups, as a source of seed for natural regeneration. (O)

Significant Natural Community - Communities that are either rare in New York State or are determined by New York Natural Heritage Program staff to be outstanding examples of more common natural communities. (B)

Selective Cut - High Grade (Replaces Selective Thinning) - A type of exploitation cutting that removes only certain species (a) above a certain size, (b) of high value; Known silvicultural requirements and/or sustained yields being wholly or largely ignored or found impossible to fulfill. Society of American Foresters. Ford-Robertson, F. C., editor. 1971. Terminology of Forest Science, Technology, Practice and Products. Cambridge: England. (B)

Shade Tolerance - The ability of a tree species to germinate and grow at various levels of shade.

Shade tolerant: having the capacity to compete for survival under shaded conditions.

Shade intolerant: having the capacity to compete for survival only under direct sunlight conditions; light demanding species. (H) (L)

Shelterwood Cut/Method - A regeneration action designed to stimulate reproduction by implementing a series of cuts over several years that will gradually remove the overstory trees. Gradual reduction of stand density protects understory trees and provides a seed source for stand regeneration. (A)

Shrub (replaces Brush) - Shrubs and stands of scrubby tree species that do not reach a merchantable size. The Society of American Foresters. 1958. Forest Terminology, 3rd edition. Washington, DC. (B)

Silviculture - The application of art, science and practice to influence long term forest development.

Even aged Silviculture - A system for maintaining and regenerating forest stands in which trees are approximately the same age (cohort). This system favors shade intolerant species such as aspen, white ash and black cherry.

Uneven aged Silviculture - A system for maintaining and regenerating forest stands with at least three distinct age classes (cohorts). this system favors shade intolerant species such as sugar maple, hemlock and beech. Uneven aged silviculture creates a stratified stand structure with trees of different heights represented in all levels of the forest canopy. (B)

Site - The area in which a plant or forest stand grows, considered in terms of its environment, particularly as this determines the type and quality of the vegetation the area can support. (H)

Site Index - A species-specific measure of actual or potential forest productivity, expressed in terms of the average height of trees included in a specified stand component at a specified age. (H)

Site Preparation - Hand or mechanized manipulation of a site, designed to enhance the success of regeneration. (H)

Site Quality - The sum of soil and topographic factors of a particular place for growth of a particular species. (B)

Skid Trail - A temporary or permanent trail used to skid or forward felled trees from the stumps to the log landing. (L)

Small Poles - Trees 6-8 inches diameter at breast height. (L)

Small Sawtimber - Trees 12-14 inches diameter at breast height. (L)

Snags - Standing, dead trees, with or without cavities; function as perches, foraging sites and/or a source of cavities for dens, roosting and/or nesting for wildlife. (L)

Species Richness - The number of different species present within an area. (B) (Q)

Stand - A contiguous group of trees sufficiently uniform in species composition, arrangement of age classes, and condition to be a homogeneous and distinguishable unit. (O) (B)

Stand Structure - The horizontal and vertical distribution of components of a forest stand including the height, diameter, crown layers, and stems of trees, shrubs, herbaceous understory, snags, and down woody debris. (H)

Stand Treatment - Work done in a stand which is directed towards the management of the stand. (L)

State Forest - The collective term applied to lands administered by the Division of Lands and Forests which are located outside the forest preserves. State forests include acreage acquired and classified as Reforestation Areas, Multiple Use Areas and Unique Areas. (L)

State Reforestation Area - Lands acquired by the Department pursuant to Title 3 Article 9-0501 of the Environmental Conservation Law. Reforestation Areas are adapted for reforestation and for the establishment and maintenance thereon of forests for watershed protection, the production of timber and other forest products, and for recreation and kindred purposes. (L)

Stocking - The number of trees per unit area in relation to the desired number for optimum growth and management. Guides and tables have been developed that illustrate the optimum number of trees per acre based on the average diameter. (L)

Succession - The natural series of replacements of one plant community (and the associated fauna) by another over time and in the absence of disturbance. (A)

Sustainable Forest Management - Management that maintains and enhances the long-term health of forest ecosystems for the benefit of all living things, while providing environmental, economic, social and cultural opportunities for present and future generations. (A)

Sustained Yield - The achievement and maintenance in perpetuity of a reasonable regular periodic output of the various renewable resources without impairment of the land's productivity. (E)

Temporary Revocable Permit - A Department permit which authorizes the use of state land for a specific purpose for a prescribed length of time. (L)

Thinning - Intermediate cuttings that are aimed primarily at controlling the growth of stands through adjustments in stand density. (O) (B)

Threatened Species - A species likely to become endangered in the foreseeable future, throughout all or a significant portion of its range, unless protected. (A)

Timber Stand Improvement (TSI) - Pre-commercial silvicultural treatments, intended to regulate stand density and species composition while improving wood product quality and fostering individual tree health and vigor, through the removal of undesirable trees. (L)

Understory - The smaller vegetation (shrubs, seedlings, saplings, small trees) within a forest stand, occupying the vertical zone between the overstory and the herbaceous plants of the forest floor. (A)

Uneven-Aged Group Selection - A type of uneven-aged forest management used to create openings in the forest canopy. Trees are removed and new age classes are established in small groups. (L)

Uneven-Aged System - A planned sequence of treatments designed to maintain and regenerate a stand with three or more age classes. (H)

Uneven-Aged Stand/Forest - A stand with trees of three or more distinct age classes, either intimately mixed or in small groups. (H)

Unique Area - Lands acquired pursuant to Sections 45-0101, 51-0701, 51-0705, 54-0303, 56-0307 & 49-0203 of the Environmental Conservation Law. (L)

Watershed - A region or area defined by a network of stream drainage. A watershed includes all the land from which a particular stream or river is supplied. (L)

Water Quality Classes - A system of classification in ECL Article 17 which presents a ranked listing of the state's surface waters by the letters AA, A, B, C or D according to certain quality standards and specifications. AA is the highest quality rank and has the greatest suitability for human usage. (L)

Wetland - A transitional area between aquatic and terrestrial ecosystems that is inundated or saturated for periods long enough to produce hydric soils and support hydrophytic vegetation. (H)

Wetland Classes - A system of classification set forth in ECL Article 24, section 664.5 which ranks wetland I through IV based upon wetland functions and benefits, I being the highest rank. (L)

Wildlife Management Areas - Lands acquired by the Department pursuant to Title 21 Section 11-2103 of the Environmental Conservation Law. Wildlife Management Areas are managed by the Division of Fish, Wildlife and Marine Resources for the purpose of establishing and maintaining public hunting, trapping and fishing grounds. (L)

Windthrow - Trees that have been broken, uprooted, or felled by strong winds. (L)