

CHAPTER 12 - Glossary

ACCESSIBLE FOREST LAND: Land that is within sampled area (the population of interest), is accessible and can safely be visited, and meets at least one of the two following criteria:

- (a) The condition is at least 10-percent stocked by trees of any size (appendix 3) or has been at least 10-percent stocked in the past. Additionally, the condition is not subject to nonforest use(s) that prevent normal tree regeneration and succession such as regular mowing, grazing, or recreation activities, or
- b) in several western woodland types where stocking cannot be determined, and the condition has at least 5 percent crown cover by trees of any size, or has had at least 5 percent cover in the past. Additionally, the condition is not subject to nonforest use that prevents normal regeneration and succession such as regular mowing, grazing, or recreation activities.

ACTUAL LENGTH*: For trees with broken or missing tops. The actual length of the tree is recorded to the nearest 1.0 ft from ground level to the highest remaining portion of the tree still present and attached to the bole. If the top is intact, actual length equals total length. Forked trees should be treated the same as unforked trees.

AGRICULTURAL LAND: Land managed for crops, pasture, or other agricultural use. Evidence includes geometric field and road patterns, fencing, and the traces produced by livestock or mechanized equipment. The area must be at least 1.0 ac in size and 120.0 ft. wide at the point of occurrence.

ALLUVIAL FAN: A fan-shaped deposit of unconsolidated material and debris, forming at the point where a stream emerges from a narrow valley onto a broader, less sloping valley floor.

ANNULAR PLOT*: A circular, fixed area plot, centered on the subplot center, with a radius of 59.0 feet. Annular plots may be used for sample intensification or for sampling relatively rare events.

ALPINE: The zone of low arctic-type vegetation above tree line.

ARTIFICIAL REGENERATION SPECIES: Indicates the predominant species that is planted or seeded in an artificially regenerated condition.

AZIMUTH: The horizontal angle or bearing of a point, measured clockwise from north. Note: The azimuth plus or minus 180 degrees is termed the back azimuth.

- BAJADA:** A broad, gently inclined slope formed by the lateral blending of a series of alluvial fans, and having a broadly undulating profile.
- BASAL AREA (BA):** The cross-sectional area of a tree stem at the point where diameter (DBH/DRC) is measured, inclusive of bark; BA is expressed in square feet. The BA per acre is often used to represent tree stocking.
- BASAL AREA FACTOR (BAF):** The basal area factor is an index for the sampling angle used in variable-radius plot tree cruising. The BAF is the amount of basal area each tally tree on a sample point represents per acre.
- BASELINE:** A reference line of sight, located and measured on both the aerial photo and the ground.
- BENCH:** A nearly level to gently inclined surface developed on resistant strata in areas where valleys are cut, and forming a shelf above the level of the valley bottom.
- BH:** Breast height: 4.5 feet above the ground. BH is in reference to the place of diameter measurement for timber species.
- BLIND CHECK:** A re-installation done by a qualified inspection crew without production crew data on hand; a full re-installation of the plot for the purpose of obtaining a measure of data quality. The two data sets are maintained separately. Discrepancies between the two sets of data are not reconciled. Blind checks are done on production plots only.
- BOLE:** The main stem of a timber species tree. For estimating tree cull, use the merchantable bole -- the section of the tree between a 1-foot stump and a 4-inch top diameter outside bark (DOB).
Note: Small trees (e.g., seedlings, saplings) are often characterized as having stems; for field use, a tree stem is equivalent to a tree bole.
- BOUNDARY*:** The distinct intersection of two or more conditions. Each boundary occurring on a subplot or microplot is described by recording the azimuth and horizontal distance from the subplot or microplot center to the left and right points of where the boundary intersects the perimeter of the subplot or microplot. An azimuth and distance to a corner point may also be described, if one exists. If multiple boundaries exist at a subplot, they are recorded in the order of their occurrence on the subplot, starting from north and proceeding around the compass. Boundaries occurring between subplots are not mapped.
- BUREAU OF LAND MANAGEMENT LANDS:** Public lands administered by the Bureau of Land Management (BLM), U.S. Department of the Interior.

CENSUS WATER: Rivers, streams, sloughs, estuaries, and canals, more than 200 feet wide and 4.5 acres and larger in size; only portions of rivers and streams meeting the definition criteria are considered census water. Other census water includes lakes, reservoirs, and ponds 4.5 acres and larger in size. Portions of braided streams meeting the census water definition criteria and more than 50 percent water at normal high-water level are considered census water. Ephemeral and intermittent streams are classified as land.

CHAINING (woodland treatment method): A mechanical method of land clearing (or possible type conversion) to reduce or eliminate undesirable vegetation (e.g., reduce the number of juniper trees to enhance herbage production for livestock use). With this method, a heavy chain is dragged between two tractors for the purpose of uprooting the undesirable vegetation.

CIRQUE: A semicircular, concave, bowl-like area with a steep face, primarily resulting from erosive activity of a mountain glacier. A glacial cirque appears as an amphitheater-like carving in the mountainside, with steep slopes providing headwaters for drainage.

CLIFF: A high, very steep to perpendicular or overhanging face of rock or earth.

COLD CHECK: An inspection done either as part of the training process, or as part of the ongoing QC program. Normally the installation crew is not present at the time of inspection. The inspector has the completed data in-hand at the time of inspection. The inspection can include the whole plot or a subset of the plot. Data errors are corrected. Cold checks are done on production plots only.

CONDITION: An area of relatively uniform ground cover, such as a homogeneous vegetation cover.

CONDITION CLASS*: The combination of discrete landscape and forest attributes that identify and define different strata on the plot. Condition defining attributes include condition status, reserved status, owner group, forest type, stand size, regeneration status, and density.

CONTRASTING CONDITION CLASS: Any qualifying condition class that is different than a previously assigned class based on the defining attributes.

CONK: The fruiting body of a wood-destroying fungus that projects from the bole, roots, or other tree parts. The size, shape, and color of conks will vary depending on the fungus species.

- CORD:** A stack of wood equivalent to 128 cubic feet of wood and air space, having standard dimensions of 4 by 4 by 8 feet.
- CROOK:** An abrupt curvature or bend in a tree bole.
- CROPLAND:** Land under cultivation within the past 24 months, including orchards and land in soil improving crops, but excluding land cultivated in developing improved pasture.
- CROWN CLASS:** A classification of trees based on dominance in relation to adjacent trees in the stand as indicated by crown development and amount of light received from above and the sides.
- CROWN COVER:** The ground area covered by a plant crown, as defined by the vertical projection of its outermost perimeter. The field location Crown Cover only includes trees 1.0-inch DBH/DRC and larger.
- CROWN RATIO:** The portion of tree bole supporting live, healthy foliage, expressed as a percent of either total tree height (Uncompacted) or total tree length (Compacted).
- CUBIC-FOOT CULL:** An assessment of the rotten, missing, or otherwise defective portions of a tree bole that are unsuitable for industrial wood products. Cubic-foot cull is expressed as a percentage of the entire bole.
- CULL:** Portions of a tree that are unusable for wood products due to cubic-foot volume loss (e.g., rotten/missing bole sections, dead material bole sections) or severe form-defect volume loss (e.g., severe crook, sweep, forking).
- CULL TREE:** A live timber species that fails to meet the specifications for a sound tree now or prospectively (see Rotten Tree and Rough Tree).
- DBH (DIAMETER AT BREAST HEIGHT):** The diameter for timber species, located at 4.5 feet above the ground (breast height) on the uphill side of a tree. The point of diameter measurement may vary on abnormally formed trees.
- DEAD VOLUME:** That part of a tree's merchantable portion, consisting of sound dead wood (expressed as a percent).
- DIAMETER CLASS:** A grouping of tree diameters (DBH or DRC). For the current inventory, 2-inch diameter classes are used, with the even-inch the appropriate mid-point for a class. For example, the 6-inch class includes trees 5.0- to 6.9-inches DBH inclusive.
- DIB:** Diameter inside bark.

DOB: Diameter outside bark.

DOWNED TREE: For single-stemmed trees -- a tree 1.0-inch in diameter or larger, lying along the ground and usually with a portion of the stem or bole resting on the ground. For multi-stemmed trees -- a tree 1.0-inch DRC or larger, with more than 2/3 of the present volume no longer attached or upright; do not consider cut and removed volume.

DRC (DIAMETER AT ROOT COLLAR): The diameter for woodland trees, taken at the root collar or at the point nearest the natural ground line (whichever is higher) that represents the basal area of the tree stem or stems. The place of diameter measurement may vary for woodland trees with stems that are abnormally formed.

EPHEMERAL STREAM: See "Stream, Ephemeral."

ESTABLISHED SEEDLING: A live tree smaller than 1.0-inch DBH/DRC, having a root system in mineral soil, and at least 6.0-inches tall for softwoods (e.g., pines, firs, spruces, pinyon, juniper), or 12.0-inches tall for hardwoods (e.g., aspen, cottonwood, oak, maple, mountain-mahogany). A seedling is not considered established if it will not survive due to form defects, insect infestation, or disease.

FACE: A section of the tree surface (usually within the butt sixteen feet) that is 1/4 of the circumference of the tree and extending the full length of the log.

FEDERAL INFORMATION PROCESSING STANDARD (FIPS): A unique code identifying U.S. States and counties (or units in Alaska).

FIELD LOCATION: A reference to the sample site; an area containing the field location center and all sample points, distributed over an area approximately 2.5 acres in size. A field location consists of four fixed-radius subplots for sampling trees and understory vegetation and 4 microplots for sampling seedlings and saplings.

FIXED-RADIUS PLOT: A circular sample plot of a specified horizontal radius:

Microplot:	1/300 acre = 6.8-foot radius
Subplot:	1/24 acre = 24.0-foot radius
Annular Plot:	1/4 acre = 58.9-foot radius

FLAT PLAIN: A level or nearly level area of land marked by little or no relief.

FLOOD PLAIN: The nearly level plain that borders a stream and is subject to inundation under flood stage conditions.

FOREST INDUSTRY LAND: Land owned by a company or an individual(s) operating a primary wood-processing plant.

FOREST LAND: Land that is at least 10 percent stocked by forest trees of any size (or 5 percent crown cover where stocking cannot be determined), or land formerly having such tree cover, and is not currently developed for a nonforest use. The minimum area for classification as forest land is one acre. Roadside, stream-side, and shelterbelt strips of timber must be at least 120 feet wide to qualify as forest land. Unimproved roads and trails or natural clearings in forested areas shall be classified as forest, if less than 120 feet in width or an acre in size. Streams and other bodies of water within forest will be considered forest land if they are less than 1 acre and 30-feet wide. Grazed woodlands, reverting fields, and pastures that are not actively maintained are included if the above qualifications are satisfied. (Also see definitions of nonforest land, idle farmland and improved/maintained pasture.)

Note: In some instances, areas previously stocked with woodland species that have had some type of treatment (e.g., chaining or other mechanical treatment) are classified as nonforest land.

FOREST TYPE: A classification of forest land based upon and named for the tree species that forms the majority of live-tree stocking. A Forest type classification for a field location indicates the predominant live-tree species cover for the field location; hardwoods and softwoods are first grouped to determine predominant group, and Forest Type is selected from the predominant group. For nonstocked forest land, forest type is based on an estimate of the predominant tree species of the previous stand.

GEOGRAPHIC TREE CENTER: The physical center of a single stemmed tree or the physical center of all the stems of a multistemmed woodland tree (defined as the center of a polygon scribed by connecting the centers of the outermost stems in the tree at the DRC point; stems of any diameter are to be used).

GLACIAL MORaine: An accumulation of rock material built chiefly by the direct action of glacial ice, glacial drift, or by running water emanating from the glacier. Moraines may be classified as lateral or terminal depending on their relationship to the movement of the ice mass.

Lateral Moraine -- A ridge-like moraine carried on and deposited at the side margin of a valley glacier, composed chiefly of rock fragments derived from valley walls.

Terminal Moraine -- A moraine produced at the front end of an actively flowing glacier. This moraine marks the glacier's farthest advance, and usually has the form of a massive curved ridge or complex of ridges.

GPS*: Global Positioning System. Information from this system is collected and used to determine the UTM coordinates and elevation latitude of each plot.

HARD DEAD TREE: A standing dead tally tree, 1.0-inch DBH/DRC or larger, that has a minimum of 1/3 of the original merchantable volume sound (less than 2/3 rotten and/or missing). Formerly called "salvable". Also, a down dead tally tree, 1.0-inch DBH/DRC or larger, with a minimum of 1/3 of the original merchantable volume sound and intact.

HARDWOODS: Trees that are usually broad-leaved and deciduous (leaves that fall off or shed at specific seasons).

HERBACEOUS: Of or relating to a seed-producing annual, biennial, or perennial plant that does not develop persistent woody tissue, and dies down at the end of a growing season.

HOT CHECK: An inspection normally done as part of the training process. The inspector is present on the plot with the trainee and provides immediate feedback regarding data quality. Data errors are corrected. Hot checks can be done on training plots or production plots.

IDLE FARMLAND: Former cropland or pasture that has not been tended within the last 2 years and that has less than 10 percent stocking with live trees (or 5% crown cover where stocking cannot be determined).

IMPROVED PASTURE: Land currently improved for grazing use as a result of cultivation, seeding, irrigation, clearing of trees or brush. These areas are generally extensively managed or maintained, unlike natural herbaceous/grass cover. Small areas are often fenced.

IMPROVED ROAD: All roads graded or otherwise regularly maintained for long-term continuing use. These roads are generally paved or graveled, and may have culverts; however, some temporary logging roads appear as improved roads; reference field maps.

INCLUSION: An area that would generally be recognized as a separate condition, except that it is not large enough to qualify. For example, a ½ acre pond within a forested stand.

INDUSTRIAL WOOD: All roundwood products, except firewood.

INHIBITING VEGETATION: Includes all vegetation considered to repress the natural establishment of tree seedlings.

INTERMITTENT STREAM: See "Stream, Intermittent."

LAND: This includes (1) areas of dry ground and ground temporarily or partly covered by water, such as marshes, swamps, and river flood plains, (2) streams, sloughs, estuaries, and canals less than 30 feet in width, and (3) lakes, reservoirs, and ponds smaller than 1 acre in size.

LAND AREA: As defined by the Bureau of the Census: The area of dry land and land temporarily or partially covered by water such as marshes, swamps, and river flood plains (omitting tidal flats below mean tide); streams, sloughs, estuaries and canals less than 200 feet in width, and ponds less than 4.5 acres in area. Noncensus water is included in Land Area.

LAND USE: The classification of a land condition class by use or type.

LIMBS: That part of a tree above the stump which does not meet the requirements for sawlog and upper-stem portions, including all live, sound branches to a minimum of 4 inches DOB at the knot collar.

LIMITING DISTANCE: The maximum horizontal distance a tree can be from the plot center and still be considered for tally. In reference to fixed-area plots, limiting distance is determined by the size of the sample; for a 1/24-acre sample, the limiting distance to the geographic center of the tree at the base is 24 feet; for a 1/300-acre sample, the limiting distance is 6.8 feet. In reference to variable-radius plot sampling, limiting distance is a function of the selected basal area factor (e.g., 20 or 40) and the diameter of the tree; the distance is measured from the plot center to the center of a single-stemmed tree (to the face of the tree if table is used) at the diameter point or to the geographic center of a multistemmed woodland tree at the average diameter height. A tally tree is one that is at or within its limiting distance from the point stake.

LITTER: The uppermost layer of organic debris on a forest floor; that is, essentially the freshly fallen, or only slightly decomposed material, mainly foliage, but also bark fragments, twigs, flowers, fruits, and so forth. For the ground cover transect, litter also includes any dead organic material including carcasses, feces, etc. Note: Litter and humus together are often termed duff.

LOCATION CENTER (LC): The LC is the intersection of map grid lines as established on the ground; it becomes the center point of the field location, and the center of subplot 1 on the location layout. On previously established locations, the LC is either point 1 of a 5-point "timberland"

location layout, or the center of the 1/10-acre or 1/20-acre fixed-radius "woodland" location layout.

LOGGING: The felling and extraction of timber.

MAIN PLOT (OLD PLOT DESIGN): For previously sampled "timberland" field location sample points, the main plot is the variable-radius plot. For previously sampled "woodland" field locations, the main plot is the quadrant area sample on a 1/10-acre or 1/20-acre fixed-radius plot. The quadrant area is synonymous with the term "point."

MAINTAINED ROAD: Any road, hard topped or other surfaces, that is plowed or graded periodically and capable of use by a large vehicle. Rights-of-way that are cut or treated to limit herbaceous growth are included in this area.

MARSH: Low, wet areas characterized by heavy growth of weeds and grasses and an absence of trees.

MEASUREMENT QUALITY OBJECTIVE (MQO): Describes the acceptable tolerance for each data element. MQOs consist of two parts: a statement of the tolerance and a percentage of time when the collected data are required to be within tolerance.

MERCHANTABLE BOLE: On timber species 5.0-inches DBH and larger: the portion of a tree bole between a 1-foot stump and a 4.0-inch top (DOB).

MERCHANTABLE BOLT: On timber species 5.0-inches DBH and larger: a solid 8-foot section of tree bole with a large-end diameter of at least 5.0 inches and a small-end diameter of at least 4.0 inches.

MERCHANTABLE PORTION (woodland species): For woodland trees, the merchantable portion includes all qualifying segments above the place(s) of diameter measurement for any tree with at least one 3.0-inch stem; sections below the place(s) of diameter measurement are not included. Qualifying segments are stems or branches that are a minimum of 1 foot in length and at least 1.5 inches in diameter; portions of stems or branches smaller than 1.5 inches in diameter, such as branch tips, are not included in the merchantable portion of the tree.

MESA: A broad, nearly flat-topped, and usually isolated land formation with steep sides.

MICROPLOT: The 1/300 acre fixed-radius plot (6.8-foot radius), located at an azimuth of 90 degrees and distance of 12 feet from subplot center, used to sample seedling and sapling trees.

MORTALITY TREE: A standing or downed tree, 1.0-inch DBH/DRC and larger, that was live within the past 5 years or at the last inventory.

NATIONAL FOREST LANDS: Public lands administered by the Forest Service, U.S. Department of Agriculture, such as National Forests, National Grasslands, and some National Recreation Areas.

NATIONAL PARK LANDS: Public lands administered by the Park Service, U.S. Department of the Interior, such as National Parks, National Monuments, National Historic Sites (such as National Memorials and National Battlefields), and some National Recreation Areas.

NATIVE AMERICAN (INDIAN) LAND: Tribal lands held in fee, or trust, by the Federal government but administered for Indian tribal groups and Indian trust allotments. This land is considered "Private Lands", Owner Group 40.

NET VOLUME: Gross volume less deductions for rot, sweep, or other defect affecting use for timber products.

NFS: An abbreviation for "National Forest System."

NONCENSUS WATER: Portions of rivers, streams, sloughs, estuaries, and canals that are 30 to 200 feet wide and at least 1 acre in size; and lakes, reservoirs, and ponds 1 to 4.5 acres in size. Portions of rivers and streams not meeting the criteria for census water, but at least 30 feet wide and 1 acre in size, are considered noncensus water. Portions of braided streams not meeting the criteria for census water, but at least 30 feet in width and 1 acre in size and more than 50 percent water at normal high-water level are considered noncensus water. Ephemeral and intermittent streams are classified as land.

NONFOREST LAND: This is land that (1) has never supported forests (e.g., barren, alpine tundra), or (2) was formerly tree land, but has been converted to a non-tree land status (e.g., cropland, improved pasture).

Other examples of non-tree land are improved roads of any width, graded or otherwise regularly maintained for long-term continuing use, and rights-of-way of all powerlines, pipelines, other transmission lines, and operating railroads. If intermingled in forest areas, unimproved roads and nonforest strips must be at least 120-foot wide and 1 acre in size to qualify as non-tree land.

This category also includes formerly stocked woodland areas if they are currently nonstocked due to a treatment (e.g., chaining, other land clearing). These areas are treated to eliminate woodland trees for the

purpose of enhancing or providing for non-wood commodities or uses (e.g., increasing herbage production). Chained woodland areas remain nonforest until they meet stocking with new reproduction.

NONSTOCKABLE: Inclusions within forest land not capable of supporting trees because of the presence of rock, water, roads, and so forth.

NONSTOCKED FOREST LAND: Formerly stocked forest land that currently has less than 10 percent stocking (as represented in the field by 5 percent crown cover or adequate reproduction) but has the potential to again become 10 percent stocked. For example, recently harvested, burned, or windthrow-damaged areas.

OTHER FEDERAL LANDS: Federal land other than National Forests. These include lands administered by the USDI Bureau of Land Management, USDI National Park Service, USDI Fish and Wildlife Service, Department of Defense, Department of Energy, Army Corps of Engineers, and military bases.

OUTCROP: Surface exposure of a significant geologic strata.

OVERGROWN KNOT: The scar left in the bark by a limb that has been completely overgrown, but still outlined by the circular configuration in the bark.

OWNER CLASS: A variable that classifies land into fine categories of ownership.

OWNER GROUP: A DEFINING variable that classifies land into broad categories of ownership; Forest Service, Other Federal Agency, State and Local Government, and Private. Differing categories of Owner Group on a plot require different condition classification.

PATHOGEN: An organism capable of causing disease.

PERENNIAL STREAM: See "Stream, Perennial."

PHASE 1 (P1): FIA activities done as part of remote-sensing and/or aerial photography.

PHASE 2 (P2): FIA activities done on the network of ground plots formerly known as FIA plots. Includes prefield classifications.

PHASE 3 (P3): FIA activities done on a subset of Phase 2 plots formerly known as Forest Health Monitoring plots. Additional ecological indicator information is collected from Phase 3 plots.

PLOT: A cluster of four subplots that samples approximately 1/6 acre. The subplots are established so that subplot 1 is centered within the sample and the centers of subplots 2, 3, and 4 are located 120 feet from the center of subplot 1 at azimuths of 360, 120, and 240 degrees, respectively. Each subplot has an associated microplot and annular plot.

POLETIMBER TREES: See "Tree Size Class."

POST (FENCE): Juniper and oak species are evaluated for fence post potential using the following criteria:

Line Post: 7-foot minimum length, 5.0 to 7.0 inches diameter at the butt (large end), 2.5-inches minimum small-end diameter, and reasonably straight and solid.

Corner Post: 8-foot minimum length, 7.0 to 9.0 inches diameter at the butt (large end), 2.5-inches minimum small-end diameter, and reasonably straight and solid.

PRIMARY WOOD-PROCESSING PLANT: An industrial plant that processes roundwood products such as sawlogs, pulpwood bolts, or veneer logs.

PRIVATE OWNER INDUSTRIAL STATUS: Indicates whether Private land owners own and operate a wood processing plant.

REFERENCE POINT (RP): A landmark readily identifiable on both ground and aerial photographs. Examples include the following: a prominent tree or rock; a sharp bend in a road or drainage ditch; a fence corner. The RP for field locations should be either a tree not likely to die, or a landmark not likely to be removed, within the next 10-15 years, and if possible, located at least 100 feet from the location center.

REGENERATION STATUS: A stand descriptor that indicates whether a stand has been naturally or artificially regenerated.

REMEASUREMENT FIELD LOCATION: A field location originally established and measured in a previous inventory.

RESERVED LAND: Land reserved from wood products utilization through statute or administrative designation. Reserved land is withdrawn through administrative designation, based on a written document(s), which carries the weight of legal authority, prohibiting the management of land for the production of wood products (not merely controlling wood harvesting methods). Such authority is usually vested in a public agency, department, etc., and supersedes rights of ownership. The prohibition against

management for wood products cannot be changed through decision of the land manager (management agency) or through a change in land management personnel, but is rather permanent in nature. Examples include Wilderness areas and National Parks and Monuments (refer to State Supplement).

RESERVED STATUS: An indication of whether the land in a condition has been reserved.

ROTATION: The period of years between establishment of a stand of timber and the time when it is considered ready for cutting and regeneration.

ROTATION AGE: The age of a stand when it is considered ready for harvesting. Rotation age is 80 years for aspen and paper birch, and 120 years for all other timber species.

ROTTEN TREE: A live timber species, 5.0-inch DBH and larger, with 2/3 (67 percent) or more of the merchantable volume cull, and more than half of this cull due to rotten and/or missing cubic-foot volume loss.

ROTTEN/MISSING VOLUME: The part of a tree's merchantable portion that is rotten and/or missing (expressed as a percent). This does NOT include missing volume from a broken or missing top.

ROUGH TREE: A live timber species, 5.0-inch DBH and larger, with 2/3 (67 percent) or more of the merchantable volume cull, and more than half of this cull due to sound dead wood cubic-foot volume loss or severe form-defect volume loss (e.g., severe sweep and crook, forks, extreme form reduction). Also, a live timber species sapling (1.0- to 4.9-inches DBH) that is not expected to become a sound tree with good form and vigor due to defect, or a timber species (5.0-inches DBH and larger) that does not now, nor prospectively, have at least one solid 8-foot section, reasonably free of form defect, on the merchantable bole.

ROUNDWOOD PRODUCTS – Logs, bolts or other round sections cut from trees for industrial or consumer uses. (Note: includes sawlogs veneer logs and bolts; cooperage logs and bolts; pulpwood, fuelwood; pilings; poles; posts; hewn ties; mine timbers; and various other round, split, or hewn products.)

SAPLING: Live trees 1.0 to 4.9 inches DBH/DRC.

SEEDLING: Live trees less than 1.0 DBH/DRC that are at least 6-inches tall for softwoods and 12-inches tall for hardwoods.

SITE TREE: A tree used to provide an index of site quality.

- SLASH:** Unmerchantable tree residue on the ground from logging activities or from natural breakup of trees caused by insects, disease, weather, etc. Slash includes logs, stems, heavier branch wood, stumps, etc.
- SOD:** A continuous cover of grass and/or herbaceous plants.
- SOFT DEAD TREE:** A standing dead tally tree, 1.0-inch DBH/DRC or larger, that has less than 1/3 of the original merchantable volume sound (more than 2/3 rotten/missing). Also, a down dead tree, 1.0-inch DBH/DRC or larger, with less than 1/3 of the original merchantable bole sound and intact. Formerly called "nonsalvable".
- SOFTWOODS:** Coniferous trees that are usually evergreen (retain leaves year-round), and having needle- or scale-like leaves.
- SOUND TREE:** Formerly called "growing-stock tree." A live timber species, 5.0-inches DBH or larger, that has less than 2/3 (67 percent) of the merchantable volume cull, and contains at least one solid 8-foot section, reasonably free of form defect, on the merchantable bole. Also, a live timber-species sapling (1.0- to 4.9-inches DBH) that is expected to become a sound live tree with good form and vigor, 5.0-inches DBH or larger.
- STAND AGE:** A stand descriptor that indicates the average age of the live trees not overtopped in the predominant stand size-class of a condition.
- STAND DENSITY (DEFINING):** A stand descriptor that indicates the relative tree density of a condition class. The classification is based on the number of stems/unit area, basal area, tree cover, or stocking of all live trees in the condition which are not overtopped, compared to any previously defined condition class tree density.
- STAND SIZE (DEFINING):** A stand descriptor that indicates which size-class of trees that are not overtopped constitutes the majority of stocking in the stand.
- STATE, COUNTY AND MUNICIPAL LANDS:** Lands administered by States, counties, and local public agencies or municipalities, or lands leased to these governmental units for 50 years or more.
- STOCKING:** An expression of the extent to which growing space is effectively utilized by trees. The relative degree of occupancy land by trees, measured as basal area or the number of trees in a stand by size or age and spacing, compared to the basal area or number of trees required to fully utilize the growth potential of the land; that is, the stocking standard.

STREAM: A body of running water. Note: For purposes of this inventory, ephemeral and intermittent streams are classified as land.

Ephemeral: A stream that flows only in direct response to precipitation or surface run-off.

Intermittent: A stream that flows for protracted periods only when it receives ground water discharge or long-continued contributions from melting snow or other surface and shallow subsurface sources.

Perennial: A stream that flows year-round.

STREAM BOTTOM: A gently sloping stream pathway subject to frequent flooding.

STREAM TERRACE: A nearly level strip of land with a more or less abrupt descent along the margin of a river or stream, but not subject to frequent flooding.

STUMP HEIGHT: For purposes of this inventory, stump height for timber species is the height on a tree from ground level to the top of a 1.0-foot stump.

SOUND KNOT OR LIMB – Knots or limbs that are intergrown, or encased, with the surrounding wood, and that show no signs of decay. Bark may not be present on the limbs.

SUBPLOT: The 1/24-acre fixed-radius area (24-foot horizontal radius) used to sample trees 5.0-inches DBH/DRC and larger and understory vegetation.

SUPPRESSION: The process whereby certain trees, shrubs, etc., in a community become weakened and/or stunted, essentially due to competition by surrounding trees, shrubs, etc., in the immediate environment (natural suppression). Suppression may also be the result of human intervention (e.g., selective lopping, girdling, cutting back) or selective browsing by animals (artificial suppression).

SWEEP: A curve in a tree bole, not an abrupt bend (crook).

TALLY TREE: Tree species listed in this manual (chapter 10) as timber or woodland trees and measured for volume, growth, and mortality.

TALUS: The accumulated mass of loose, broken rock fragment derived from and lying at the base of a cliff or steep rock slope.

TIMBERLAND: In previous inventories, this was forest land (including areas with mixtures of timber species and woodland trees) where timber species have 5 percent or more crown cover, or forest land with sufficient timber species

reproduction (minimum of 40 saplings and/or established seedlings per acre). The timberland designation required the establishment of a 5-point variable-radius tree sample.

TIMBER SPECIES: Tally tree species measured at breast height; these include all species of conifers, except pinyon, or juniper. In addition, hardwoods included in this category are aspen, paper birch, cottonwood (*Populus* spp.), and boxelder. Western juniper is measured as a timber species, though measured for age and radial growth using woodland species rules.

TIMBER STAND IMPROVEMENT: A term comprising all intermediate cuttings or treatments made to improve the composition, health, and growth of the remaining trees (TSI) in the stand. Trees removed are often smaller than sawtimber size.

TOTAL HEIGHT: The vertical distance between ground level to the tip of the apical meristem (tree) or to the highest tip of other vegetation. In contrast to length, height is reduced with increasing angle of lean.

TOTAL LENGTH: The total length of the tree, recorded to the nearest 1.0 ft from ground level to the tip of the apical meristem. For trees growing on a slope, measure on the uphill side of the tree. If the tree has a broken or missing top, the total length is estimated to what the length would be if there were no missing or broken top. Forked trees should be treated the same as unforked trees

TRAIL: A pathway consistently used by wildlife, domestic animals, or humans.

improved trail: used for human recreation/travel, maintained through tree removal and brush clearing, often with posted signs at a trailhead or fork, and documented on forest/recreation maps.

unimproved trail: used for human recreation/travel, sometimes documented on a forest/recreation map, but rarely cleared or posted.

wildlife/animal trail: not cleared, maintained, posted, or documented for human use.

TRANSITION ZONE: An area where a distinct boundary between two or more different conditions cannot be determined.

TREE CLASS: A classification system based on a tree's physical characteristics, and used to classify all live timber species as sound, rough, or rotten trees, and dead timber and dead woodland species as either hard or soft.

UNIMPROVED ROAD: A road not regularly maintained for long-term continuing use, such as a jeep trail, old logging road, etc. These may or may not be posted with road signs.

UPPER STEM PORTION: The part of the bole of sawtimber trees above the sawlog top to a minimum top diameter of 4.0 inches DOB, or to the point where the central stem breaks into limbs.

URBAN AREAS: Nonsampled tree land or non-tree land within the legal boundaries of cities and towns (e.g., school yards, cemeteries, airports, golf courses).

VARIABLE-RADIUS PLOT: A plot, used in previous inventories, where a predetermined critical angle is projected from a central point and swept in a full circle to determine the basal area (tree count) and volume per unit of area. The radius of this plot is a function of an individual tree's size and distance from the point center.

WATER: In terms of a Ground Cover Classification, water is defined as streams, sloughs, estuaries, and canals more than 30 feet in width; and lakes, reservoirs, and ponds more than 1 acre in size.

For use in determining the "water proximity" or "water type" nearest the field location center, water implies any reliable source of water for wildlife, livestock, recreators, etc.

WILDERNESS: An area of undeveloped land currently included in the Wilderness System, managed so as to preserve its current conditions and retain its natural character and influence.

WOODLAND: In previous inventories, this was forest land with 10 percent or more crown cover in (1) woodland trees, or (2) timber species and woodland trees, but less than 5 percent crown cover in timber species; or forest land with sufficient woodland species reproduction (minimum of 40 saplings and/or established seedlings per acre).

WOODLAND SPECIES: Tally tree species measured at ground level (DRC); these include pinyon, juniper (except Western juniper), oak, mesquite, mountain-mahogany, and bigtooth maple.

* Indicates a National definition that has been edited or modified.