

# FIA Glossary

May 2006

Term <sup>2</sup>	Source <sup>1</sup>	Definition <sup>2</sup>
<p><i>These are terms defined as FIA uses them, and therefore may, on occasion, differ from other known definitions. They have been compiled and agreed upon by the Analysis Band. Other terms may be added once agreement is reached on their definitions. This list of terms is primarily for use in FIA reports, manuals, and techniques documentation. See footnote 2 below for additional rationale for terms and definitions.</i></p>		
Actual Length	DAB &1	The length of the tree is recorded to the nearest 1.0 ft (30.5 cm) from ground level to the end of remaining portion of the tree still present and attached to the bole.
Afforestation	SB	The establishment of a forest or stand in an area where the preceding vegetation or land use was not forest in the recent past.
Bioindicator Species	IAB &2	A tree, woody shrub, or non-woody herb species that responds to ambient levels of ozone pollution with distinct visible foliar symptoms that are easy to diagnose.
Biomass	SB	The above ground weight of wood and bark in live trees 1.0 inch (2.5 cm) DBH and larger from the ground to the tip of the tree, excluding all foliage. The weight of wood and bark in lateral limbs, secondary limbs, and twigs under 0.5 inch (1.3 cm) in diameter at the point of occurrence on sapling-size trees is included but is excluded on poletimber and sawtimber-size trees. Biomass is typically expressed as green or oven-dry weight and the units are tons.
Blind Check	IAB &1	A re-installation done by a qualified inspection crew without production crew data on hand; a full re-installation of the plot is recommended for the purpose of obtaining a measure of data quality. If a full plot re-installation is not possible, then it is strongly recommended that at least two full sub-plots be completely re-measured along with all the plot level information. 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. This procedure provides a Quality Assessment and Evaluation Function. The Statistics Band recommends a random subset of plots be chosen for re-measurement.
Bole	AB	Trunk or main stem of a tree.
Bulk Density	&2	The mass of soil per unit volume. A measure of the ratio of pore space to solid materials in a given soil. Expressed in units of grams per cubic cm of oven dry soil.
Census Water	&16	Permanent areas of water equal to or greater than 4.5 acres (1.8 ha) or equal to or greater than 200 feet (61.0 m) wide.
Certification Plot	&1	A plot installed by a certification candidate. It may be a training plot or a production plot. The candidate working alone installs the plot.
Coarse Woody Debris (CWD)		CWD includes downed, dead tree and shrub boles, large limbs, and other woody pieces that are severed from their original source of growth and on the ground. CWD also includes dead trees (either self-supported by roots, severed from roots, or uprooted) that are leaning > 45 degrees from vertical.
Codominant Tree	&1	Trees with crowns at the general level of the crown canopy. Crowns receive full light from above but little direct sunlight penetrates the sides. Co-dominants usually have medium-sized crowns and are somewhat crowded from the sides. In stagnated stands, co-dominant trees have

Cold Check	&1	<p>small-sized crowns and are crowded on the sides. See crown class.</p> <p>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.</p>
Compacted Area	&2	Type of compaction measured as part of the soil indicator. Examples include the junction areas of skid trails, landing areas, work areas, etc.
Compacted Live Crown Ratio	SB	The percent of the total length of the tree which supports a full, live crown. For trees that have uneven length crowns, ocularly transfer lower branches to fill holes in the upper portions of the crown, until a full, even crown is created.
Components of Change	&20 AB	<p>The different subdivisions (types) of changes that can occur to a tree between measurements, such as growth, mortality, and removal. Components of change are usually expressed in terms of growing-stock or all-live merchantable volume. These components can be expressed as average annual values by dividing the component by the number of years in the measurement cycle. Components of change include: Survivor growth, Ingrowth, Growth on ingrowth, Reversion, Reversion growth, Mortality, Mortality growth, Cut, Cut growth, Diversion, and Diversion growth.</p> <p>The following components of change may be used to further quantify changes in growing-stock (but not all-live) volume: Cull increment, Cull increment growth, Cull decrement, Cull decrement growth.</p>
Condition Class	&20	The combination of discrete attributes that describe the area associated with a plot. These attributes include condition status (land use), forest type, stand origin, stand size, owner group, reserve status, and stand density, as well as other ancillary and computed attributes.
Crown	&6	The part of a tree or woody plant bearing live branches or foliage.
Crown Class	&1	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 classes recognized by Forest Inventory and Analysis include: Open Grown, Dominant Trees, Codominant Trees, Intermediate Trees, and Overtopped.
Crown Cover	SB	Percentage of the ground surface covered by a vertical projection of crowns from above.
Crown density	IAB	The amount of crown stem, branches, twigs, shoots, buds, foliage and reproductive structures that block light penetration through the visible crown. Dead branches and dead tops are part of the crown. Live and dead branches below the live crown base are excluded. Broken or missing tops are visually reconstructed when forming this crown outline by comparing outlines of adjacent healthy trees of the same species and dbh/drc
Crown Dieback	IAB	This is recent mortality of branches with fine twigs, which begins at the terminal portion of a branch and proceeds toward the trunk. Dieback is only considered when it occurs in the upper and outer portions of the tree. When whole branches are dead in the upper crown, without obvious signs of damage such as breaks or animal injury, assume that the branches died from the terminal portion of the branch. Dead branches in the lower portion of the live crown are assumed to have died from competition and shading. Dead branches in the lower live crown are not considered as part of crown dieback, unless there is continuous dieback from the upper and outer crown down to those branches.
Crown light	IAB	Measures the amount of direct sunlight a tree is receiving when the sun

exposure		is directly overhead. This is done by dividing the tree crown into 5 sections, four equal vertical quarters (i.e., faces) and the top.
Crown position	IAB	The relative position of an individual crown in relation to the overstory canopy zone. This crown indicator provides information regarding stand structure, and competition. If there is no overstory canopy zone, the stand is coded as an open canopy.
Cull Tree	FSH	Live trees that are unsuitable for the production of some roundwood products, now or prospectively. Cull trees can include those with decay (rotten cull) or poor form, limbiness, or splits (rough cull). Rough cull is suitable for pulpwood and other fiber products.
Cycle	&20	One sequential and complete set of panels.
Decay Class	IAB	Qualitative assessment of stage of decay (5 classes) of coarse woody debris based on visual assessments of color of wood, presence/absence of twigs and branches, texture of rotten portions, and structural integrity.
Diameter At Breast Height (DBH)	FSH	The diameter for tree stem, located at 4.5 feet (1.37 m) above the ground (breast height) on the uphill side of a tree. The point of diameter measurement may vary on abnormally formed trees.
Diameter At Root Collar (DRC)	&1 AB	The diameter of a tree (usually a woodland species), measured outside of the bark at the ground line or stem root collar.
Diameter Class	FSH	A classification of trees based on diameter outside bark, measured at breast height 4.5 feet (DBH) (1.37 m) above the ground or at root collar (DRC). Note: Diameter classes are commonly in 2-inch (5 cm) increments, beginning with 2-inches (5 cm). Each class provides a range of values with the class name being the approximate mid-point. For example, the 6-inch class (15-cm class) includes trees 5.0 through 6.9 inches (12.7 cm through 17.5 cm) DBH, inclusive.
Diameter Outside Bark (DOB)	SB	Diameter measured at any point on a tree or log that includes the bark.
Dominant tree	&1	Trees with crown extending above the general level of the crown canopy and receiving full light from above and partly from the sides. Dominants are taller than the average trees in the stand and have well developed crowns, but can be somewhat crowded on the sides. Also, trees whose crowns have received full light from above and from all sides during early development and most of their life, and crown form or shape appears to be free of influence from neighboring trees. See crown class.
Double Sampling For Stratification	&20	A sampling method whereby a large sample of plots are stratified in Phase 1, then a subsample are measured for all attributes in Phase 2. When the strata are homogeneous with respect to the attribute, then the estimators are more accurate versus simple random sampling.
Down Woody Material (DWM)	&2	DWM is dead material on the ground in various stages of decay. It includes coarse and fine woody material. Previous named down woody debris (DWD). The depth of duff layer, litter layer, and overall fuelbed; fuel loading on the microplot; and residue piles are also measured as part of the DWM indicator for FIA.
Dry Weight Duff	SB IAB	The oven-dry weight of biomass. A soil layer dominated by organic material derived from the decomposition of plant and animal litter and deposited on either an organic or a mineral surface. This layer is distinguished from the litter layer in that the original organic material has undergone sufficient decomposition that the source of this material (e.g., individual plant parts) can no longer be identified.
Effective Cation Exchange Capacity (ECEC)	IAB	The sum of cations that a soil can adsorb in its natural pH. Expressed in units of centimoles of positive charge per kilogram of soil.
Erosion	IAB	The wearing away of the land surface by running water, wind, ice or

Erosion, Rill	IAB	other geological agents. Type of water erosion. An erosion process in which numerous small channels of only several centimeters are formed.
Erosion, Sheet	IAB	Type of water erosion. The removal of a fairly uniform layer of soil from the land surface by runoff water.
Federal Land	&32	An ownership class of public lands owned by the U.S. Government.
Fine Woody Debris (FWD)	IAB	Downed, dead branches, twigs, and small tree or shrub boles <3" (7.4 cm) in diameter not attached to a living or standing dead source.
Fixed-Radius Plot	AB	A circular sampled area with a specified radius in which all trees of a given size, shrubs, or other items are tallied.
Foliage transparency	IAB	The amount of skylight visible through micro-holes in the live portion of the crown, i.e. where you see foliage, normal or damaged, or remnants of its recent presence. Recently defoliated branches are included in foliage transparency measurements. Macro-holes are excluded unless they are the result of recent defoliation. Dieback and dead branches are always excluded from the estimate. Foliage transparency is different from crown density because it emphasizes foliage and ignores stems, branches, fruits and holes in the crown.
Forb	&2 Webster	A broad-leaved herbaceous plant as distinguished from grasses, shrubs, and trees.
Forest Floor	IAB	The entire thickness of organic material overlying the mineral soil, consisting of the litter and the duff (humus).
Forest Industry Land	FSH	An ownership class of private lands owned by a company or an individual(s) operating a primary wood-processing plant.
Forest Land	&20 &32	Land that is at least 10 percent stocked by forest trees of any size, or land formerly having such tree cover, and 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, streams and other bodies of water, or natural clearings in forested areas are classified as forest, if less than 120 feet in width or one acre in size. Grazed woodlands, reverting fields, and pastures that are not actively maintained are included if the above qualifications are satisfied. Forest land includes three sub-categories: timberland, reserved forest land, and other forest land.
Forest Type	DAB &32	A classification of forest land based upon and named for the tree species that forms the plurality 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.
Forest Type Group	AB	A combination of forest types that share closely associated species or site requirements.
Fuelbed	IAB	Down woody material fuel complex measured from top of duff layer to the highest piece of woody debris found at the transect point
Growing Stock Trees	AB	All live trees 5.0 inches (12.7 cm) DBH or larger that meet (now or prospectively) regional merchantability requirements in terms of saw-log length, grade, and cull deductions. Excludes rough and rotten cull trees.
Hardwood	FSH	Tree species belonging to the botanical subdivision Angiospermae, class Dicotyledonous, usually broad-leaved and deciduous.
Hot Check	&1	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.
Humus	IAB	A soil layer dominated by organic material derived from the

		decomposition of plant and animal litter and deposited on either an organic or a mineral surface. This layer is distinguished from the litter layer in that the original organic material has undergone sufficient decomposition that the source of this material (e.g., individual plant parts) can no longer be identified.
Inclusion	&1	An area that would generally would be recognized as a separate condition, except that it is not large enough to qualify. For example, a ½ acre (0.2 ha) pond within a forested stand.
Industrial Wood Ingrowth Volume	&1 &20	All roundwood products, except firewood. the volume of trees at the time that they grow across the minimum d.b.h. threshold between time t and time t+1. The estimate is based on the size of trees at the d.b.h. threshold (which is 1.0-inch for all-live trees and 5.0-inches for growing-stock trees). This term also includes trees that subsequently die (i.e., ingrowth mortality), are cut (i.e., ingrowth cut), or diverted to nonforest (i.e., ingrowth diversion); as well as trees that achieve the minimum threshold after an area reverts to a forest land use (i.e., reversion ingrowth)
Intermediate Tree	&1	Trees that are shorter than dominants and co-dominant, but with crowns that extend into the canopy of co-dominant and dominant trees. Intermediates receive little direct light from above and none from the sides, so usually have small crowns and are very crowded from the sides. See crown class.
Land	FSH	The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains.
Land Cover	&8	The dominant vegetation or other kind of material that covers the land surface. A given land cover may have many land uses.
Land use	&8	The purpose of human activity on the land; it is usually, but not always, related to land cover.
Lichen	IAB	An organism generally appearing to be a single small leafy, tufted or crust-like plant that consists of a fungus and an alga or cyanobacterium living in symbiotic association.
Lichen Community Indicator	&31	The set of macrolichen species collected on an FIA lichen plot using standard protocols, which serves as an indicator of ecological condition (e.g., air quality or climate ) of the plot.
Lichen Plot	&31	The FIA lichen plot is a circular area, total 0.935 acre (0.4 ha), with a 120 foot (36.6 m) radius centered on subplot 1, and excluding the 4 subplots.
Litter	IAB	Undecomposed or only partially decomposed organic material that can be readily identified (e.g., plant leaves, twigs, etc.).
Live Tree	AB	All living trees. All size classes, all tree classes, and both commercial and noncommercial species are included. See FIA tree species list in the field manual.
Log	DAB	Eight foot (2.4 m) or longer tree segment. Length of tree suitable for processing into lumber, veneer, or other wood products.
Logging Residues	FSH	The unused portions of trees cut or destroyed during harvest and left in the woods.
Macrolichen	&31	Lichen which is leafy, tufted, or hanging, and which can be separated from its substrate.
Macroplot	&20	A circular area with a fixed horizontal radius of 58.9 feet (1/4 acre). Macroplot centers are co-located with subplot centers. Macroplots are used in the optional tri-areal design, primarily for sampling relatively rare events such as large trees or mortality.
Measurement Quality Objective (MQO)	IAB &1	A data user's estimate of the precision, bias, and completeness of data necessary to satisfy a prescribed application (e.g., Resource Planning Act (RPA), assessments by State Foresters, Forest Planning, forest health analyses). 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. Measurement quality objectives can only be assigned where standard methods of sampling or field measurements exist, or where experience has established upper or lower bounds on precision or bias. Measurement quality objectives can be set for measured data elements, observed data elements, and derived data elements.
Microplot	IAB &20	A circular, fixed-radius plot with a radius of 6.8 feet (2.1 m) (1/300 acre (0.001 ha)) that is used to sample trees less than 5.0 inches (12.7 cm) at DBH/DRC, as well as other vegetation. Point center is 90 degrees and 12 feet (3.7 m) offset from point center of each subplot.
Mineral Soil	IAB	A soil consisting predominantly of products derived from the weathering of rocks (e.g., sands, silts, and clays).
Nonforest Land	&32	Land that does not support or has never supported, forests, and lands formerly forested where use for timber management is precluded by development for other uses. Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining rights-of-way, power line clearings of any width, and noncensus water. If intermingled in forest areas, unimproved roads and nonforest strips must be more than 120 feet (36.6m) wide, and clearings, etc., more than one acre (0.4 ha) in size, to qualify as nonforest land.
Open Grown Trees	&1	Trees with crowns that received full light from above and from all sides throughout most of its life, particularly during its early developmental period. See crown class.
Organic Soil	IAB	Soils within organic horizon that is greater than 8 inches (20.3 cm) in thickness. These soils are prevalent in wetland areas such as bogs and marshes and may be frequently encountered in certain regions of the country.
Other Forest Land	&20	Forest land other than timberland and reserved forest land. It includes available and reserved low-productivity forest land, which is incapable of producing 20 cubic feet of growing stock per acre annually under natural conditions because of adverse site conditions such as sterile soil, dry climate, poor drainage, high elevation, steepness, or rockiness.
Other Removals	FSH	Unutilized volume that is cut or otherwise killed during cultural operations, such as timber-stand improvements, or during forest land clearing operations.
Overtopped	&1	Trees with crowns entirely below the general level of the crown canopy that receive no direct sunlight either from above or the sides. See crown class.
Ownership	IAB &32	A legal entity having an ownership interest in land, regardless of the number of people involved. An ownership may be an individual; a combination of persons; a legal entity such as corporation, partnership, club, or trust; or a public agency. An ownership has control of a parcel or group of parcels of land.
Ozone	&29	O <sub>3</sub> . A regional, gaseous air pollutant produced primarily through sunlight-driven chemical reactions of NO <sub>2</sub> and hydrocarbons in the atmosphere and causing foliar injury to deciduous trees, conifers, shrubs, and herbaceous species.
Ozone Bioindicator Site	IAB &2	An open area used for ozone injury evaluations on ozone-sensitive species. The area must meet certain site selection guidelines regarding size, condition, and plant counts to be used for ozone injury evaluations in FIA.
Phase 1 (P1)	&20	FIA activities related to remote-sensing, the primary purpose of which is to label plots and obtain stratum weights for population estimates.
Phase 2 (P2)	&20	FIA activities conducted on the network of ground plots. The primary purpose is to obtain field data that enable classification and summarization of area, tree, and other attributes associated with forest

		land uses.
Phase 3 (P3)	&20	A subset of Phase 2 plots where additional attributes related to forest health are measured.
Plant Byproducts	FSH	Plant residues that are recovered and recycled during the manufacturing process into useful products, such as pulp chips, bark mulch, fuel, etc.
Plant Residues	FSH	Wood materials produced incidental to the production of the principal product of primary and secondary wood-using plants. Examples are slabs, edgings, trimmings, miscuts, sawdust, shavings, veneer cores and clippings, pulp screenings, and bark.
Private Land	&32	An ownership group that includes all Forest Industry, Nonindustrial Private, and Native American lands.
Productivity Class	&32	A classification of forest land in terms of potential annual cubic-foot (cubic meter) volume growth per acre (hectare) at culmination of mean annual increment (MIA) in fully stocked natural stands.
Public Land	&32	An ownership group that includes all Federal, State, County, and Municipal lands.
Quadrat	IAB	The basic 1-meter square sampling unit for the P3 Vegetation Indicator.
Quality Assurance (QA)	FSH	The total integrated program for ensuring that the uncertainties inherent in FIA data are known and do not exceed acceptable magnitudes, within a stated of confidence. Quality assurance encompasses the plans, specifications, and policies affecting the collection, processing, and reporting of data. It is the system of activities designed to provide program managers and project leaders with independent assurance that total system quality control is being effectively implemented.
Quality Control (QC)	FSH	The routine application of prescribed field and laboratory procedures (e.g., random check cruising, periodic calibration, instrument maintenance, use of certified standards, etc.) in order to reduce random and systematic errors and ensure that data are generated within known and acceptable performance limits. Quality control also ensures the use of qualified personnel; reliable equipment and supplies; training of personnel; good field and laboratory practices; and strict adherence to standard operating procedures.
Reference Plot	IAB	Regionally representative single plots established with known target values for FIA measurements. These plots are generally used during training to assist in certification of crew members. They are measured by multiple crews and the results used to assess crew accuracy under known conditions, as well as to provide a measure of between crew comparability. Reference plots can also be used to evaluate crew performance following the field season. This procedure is not considered "blind" to the crews in that they know they are being evaluated and can tend to be more careful during measurements.
Reserved Forest Land	&20	Land permanently reserved from wood products utilization through statute or administrative designation. Examples include National Forest wilderness areas and National Parks and Monuments.
Revised Universal Soil Loss Equation (RUSLE)	IAB	An empirical model developed by the USDA ARS used to model soil loss resulting from erosion.
Roundwood Products	FSH	Logs, bolts, or other roundtimber generated from harvesting trees for industrial or consumer uses. Includes sawlogs; veneer and cooperage logs and bolts; pulpwood; fuelwood; piling; poles; posts; hewn ties; mine timbers; and various other round, split or hewn products.
Sapling	&1	Live trees 1.0 to 4.9 inches (2.5 - 12.5 cm) in diameter (DBH/DRC).
Seedling	AB	Live trees smaller than 1.0 inch (2.5 cm) DBH/DRC that are at least 6 inches (15.2 cm) in height for softwoods and 12- inches (30.5 cm) in height for hardwoods.
Site Index	&20	The average total height that dominant and co-dominant trees in fully-

Softwoods	&32	stocked, even-aged stands will obtain at key ages (usually 25 or 50 years). Coniferous trees, usually evergreen having needles or scale-like leaves.
Soil Bulk Density	IAB	The mass of soil per unit volume. A measure of the ratio of pore space to solid materials in a given soil. Expressed in units of grams per cubic cm of oven dry soil.
Soil Compaction	IAB	A reduction in soil pore space caused by heavy equipment or by repeated passes of light equipment that compress the soil and break down soil aggregates. Compaction disturbs the soil structure and can cause decreased tree growth, increased water runoff, and soil erosion.
Soil Texture	IAB	The relative proportion of sand, silt, and clay in a soil.
Species Group	AB	A collection of species used for reporting purposes.
Stand	&36	Vegetation or a group of plants occupying a specific area and sufficiently uniform in species composition, age arrangement, structure and condition as to be distinguished from the vegetation on adjoining areas.
Stand Age	&1	A stand descriptor that indicates the average age of the live dominant and codominant trees in the predominant stand size-class of a condition.
State Land	&32	An ownership class of public lands owned by State or lands leased by States for more than 50 years.
Stocking	&20	1) At the tree level, stocking is the density value assigned to a sampled tree (usually in terms of numbers of trees or basal area per acre), expressed as a percent of the total tree density required to fully utilize the growth potential of the land. 2) At the stand level, stocking refers to the sum of the stocking values of all trees sampled.
Stratification.	&20	A statistical tool used to reduce the variance of the attributes of interest by partitioning the population into homogenous strata. It may also involve partitioning a highly variable but small portion of the population.
Sub-Panel	SB	A systematic subset of a panel.
Subplot	&20	A circular area with a fixed horizontal radius of 24.0 feet (7.3 m) (1/24 acre (0.02 ha)), primarily used to sample trees at least 5.0 inches (12.7 cm) at DBH/DRC.
Survivor growth	SB	The growth on trees tallied at time t that survive until time t+1, where t is the initial inventory of a measurement cycle and t+1 is the terminal inventory. This is a component of change that is usually expressed in terms of growing-stock or all-live volume. It may also be expressed as an average annual value by dividing by the number of years in the measurement cycle. See Components of Change.
Survivor Tree	SB	A sample tree alive at both the current and previous inventories.
Timberland	AB	Forest land that is producing or capable of producing in excess of 20 cubic feet per acre (1.4 cubic meters per ha) per year of wood at culmination of mean annual increment (MAI). Timberland excludes reserved forest lands.
Total Length	&1	The total length of the tree, recorded to the nearest 1.0 ft (30.5 cm) 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.
Tree	&6	A woody perennial plant, typically large, with a single well-defined stem carrying a more or less definite crown; sometimes defined as attaining a minimum diameter of 3 inches (7.6 cm) and a minimum height of 15 ft (4.6 m) at maturity. For FIA, any plant on the tree list in the current field manual is measured as a tree.



Uncompacted live crown ratio	IAB	The portion of a tree that supports live foliage relative to total tree height. Dead tops are excluded from tree height. Likewise, dead lower branches are not included as part of the live crown. The ratio is determined by dividing the uncompacted live crown height by the total tree height to the live crown top, then multiplying by 100 and expressing the ratio as a percentage.
Water Erosion Prediction Project. (WEPP)	IAB	A model used to predict erosion losses on forested lands.

<sup>1</sup>Source Abbreviations:

Code	Source
&1	USDA Forest Service. 2005. Forest Inventory and Analysis National Core Field Guide. Volume I: Field Data collection procedures for Phase 2 plots, Version 3.0.
&2	USDA Forest Service. 2005. Forest Inventory and Analysis National Core Field Guide. Volume II: Field Data collection procedures for Phase 3 plots, Version 3.0.
&6	Dictionary of Forestry, John A. Helms, editor, 1998.
&8	USDA Natural Resource Conservation Service. 2002 and 2003 National Resources Inventory Glossary. <a href="http://www.nrcs.usda.gov/TECHNICAL/land/nri02/glossary.html">http://www.nrcs.usda.gov/TECHNICAL/land/nri02/glossary.html</a>
&20	Bechtold, W.A. and Patterson, P.L. 2005. The enhanced forest inventory and analysis program – national sampling design and estimation procedures. Gen. Tech Rep. GTR-SRS-80. . Asheville, NC: U.S. Department of Agriculture, Forest Service. 85 p.
&29	Recognition of Air Pollution Injury to Vegetation: A Pictorial Atlas, 2 <sup>nd</sup> Edition. Section 2.0 - Ozone. 1998, Air and Waste Management Association, Pittsburgh, PA.
&31	Dr. Susan Will-Wolf, University of Wisconsin, Madison, WI
&32	Smith, W.B.; Miles, P.D.; Vissage, J.S.; Pugh, S.A. 2004. Forest Resources of the United States, 2002. Gen. Tech. Rep. GTR-NC-241. St. Paul, MN: U.S. Department of Agriculture, Forest Service. 137 p.
&36	U.S.F.S. National Vegetation Protocol Team
AB	Analysis Band
DAB	Data Acquisition Band
FSH	FSH 4809.11; Forest Survey Handbook; Washington, DC; April 1975 [1967 revised]
IAB	Indicator Advisor Band
IMB	Information Management Band
RSB	Remote Sensing Band
SB	Statistic Band
Webster	<a href="http://www.m-w.com/">http://www.m-w.com/</a>

<sup>2</sup>Rationale for Glossary Terms:

The Analysis Band started with a simple but powerful vision for determining whether to keep a term in the glossary: the term must be “inherently” FIA and FIA “relevant.” Although somewhat vague, this vision was instrumental in helping to weed out many variables of questionable importance. A philosophy of “shorter is better than longer” underlies this vision. Some more specific rules associated with this vision statement were:

1) Delete terms that simply don’t fit the vision--the “straight-face test,” i.e. “blow down,” “remote sensing glossary,” or “beaver ponds.”

2) If the term is better defined or more relevant to another existing glossary or dictionary, it does not belong in the FIA glossary, i.e. “clinometer,” “global positioning system,” or “tree cambium.” It is recognized that while some terms may be defined in other glossaries or dictionaries, some terms should still be retained in the FIA glossary because they are so fundamental, i.e. “tree.”

3) The term should be kept if it is of significant interest to all Bands or of major interest to one or two Bands. An example of the former is “forest land.” An example of the latter is “down woody material.” Recognizing that level of interest is not always clear, the AB used an auxiliary rule that evaluated how many of the core FIA publications, manuals, and other documents the term would be needed for. For example, the glossary should not include all of the terms contained in the FIA-DB or Statistics Band documentation; however, crosscutting terms such as “diameter at breast height” should be kept.

4) A slightly higher weight was assigned to the Indicator Adviser Band (IAB) terms because they are so new to FIA customers and to ensure important terms weren’t deleted (as was the case in an earlier version of the glossary when all of the Owner Indicator Adviser’s terms were deleted). The IAB terms will likely be revisited prior to completion of the glossary. An even higher weight was given to QA/QC terms because the core tables for this indicator are still being developed and it’s a new concept for our reporting scheme--we want to make sure our clients understand our QA/QC concepts.

5) The FIA glossary is intended for use with the national annual inventory system. Archaic or outdated terms were deleted, i.e. “timber removals.” The need to maintain links to old terms such as “commercial forest land” was recognized; however, it was also recognized that a full tracking of terms back through time is beyond the scope of the current glossary.

6) Duplicate terms describing the same phenomena were resolved with the most modern term being kept.

7) New terms that showed up during the glossary process that didn’t receive enough inter-band discussion were deleted. Some terms seemed to appear in the glossary as an attempt to circumvent the change management process, i.e. “enhanced prescribed optional variable.”

8) Terms describing regional variables that are not of national interest were deleted, i.e. “tree grade.”

9) Terms contained as row, column or fill values and footnotes in the core tables were kept, i.e. “stand size class.”

10) Stray terms were deleted. The current version of the glossary contains many “stray” terms that should have been deleted previously. In dealing with stray terms, it was assumed that the strays should be deleted because an earlier decision was made to delete the strays’ companion. The following are two examples of stray terms:

Simple strays: “latitude” without the associated “longitude” term.

Hierarchical strays: in some cases a term such as “physiographic class” was deleted without the lower-level terms, such as “hydric,” “mesic,” and “xeric.”

11) In general, “class” variables were deleted if the continuous variable is already defined. For example, “stand age” was kept, but “age class” was deleted. There were a few exceptions to this rule based on the other rules. The most obvious is “stand size class.”

12) In the case of “components of change,” it was felt that putting all the components under the heading “components of change” would go a long way in helping our clients understand this complicated concept. Scattering all those terms throughout the glossary makes it very difficult to understand how these terms relate to each other.

13) Once it was determined that a term should be kept, its definition was evaluated. If the Analysis Band felt that the definition was incorrect, poorly written, conflicted with other terms, or was too controversial to resolve; it was placed on the “modify” list. These “modify” terms will be added to the Glossary when their definition is rewritten, reviewed and agreed upon.