

Forestry Terms for Mississippi Landowners

You are a member of an important group. Together, the private, nonindustrial timberland owners control a most of our state's timber resources. You and other timberland owners hold the key to the future of Mississippi's forest economy.

As you begin or continue to manage your timber, you will come in contact with foresters who may use terms with which you are unfamiliar. This publication will help you better understand special terms and abbreviations commonly used in forestry. This publication will aid you in making decisions about the productive management of your forest.

Types of Foresters

Acquisition Forester - A forester whose main job is to find forestland his or her company or organization may buy.

Area or County Forester - A forester of the Mississippi Forestry Commission (MFC) who helps landowners in a one- or two- county area.

Consulting Forester - A self-employed forester who, for a fee, helps private landowners with forest management practices. Some consultants provide general assistance; others specialize. You can get a directory of consulting foresters from the Mississippi State University Extension Service or MFC.

District Forester (of the Mississippi Forestry Commission) - An administrative forester who brings together the agency's operations for a certain area of

the state. The state is divided into seven districts for MFC administrative purposes.

Extension Forester - A Mississippi State University forester who works for the Extension Service to develop and provide technical information for state forestry interests. An Extension forester's main job is group education, including preparing materials for local and regional educational activities. This forester works through county Extension workers and uses local facilities.

Forest Ranger - A U.S. Forest Service forester in charge of part of a national forest referred to as a district. Forest rangers, or district rangers, supervise the management activities of their districts, including fire control, tree planting, recreational activities, and thinning and harvesting. District rangers do not assist private landowners.

Forest Supervisor - A U.S. Forest Service employee who coordinates all activities in a particular national forest but mainly supervises personnel and administers programs in the forest.

Industrial Forester - A forester employed by a forest-based industry. This individual may manage company-owned woodlands to produce forest products, work with private landowners to buy forest products for the company, or both. Some industrial foresters work with individual landowners to help promote approved forest management practices.

Procurement Forester - An industrial forester who buys timber from private and public landowners.

Professional Forester - Usually this refers to a person who has been graduated from a professionally accepted, 4-year college forestry curriculum.

Registered Forester - Any person who has been registered and licensed by the Mississippi Board of Registration for Foresters created by the Forester's Registration Act of 1977. Qualifications for registration may be met by education and/or practical experience as well as by passing a written exam. Any person selling services as a "forester" to the public in Mississippi must be registered.

Urban Forester - A professionally trained forester who creates and maintains healthy trees and forests in cities. As such, greater attention is given to individual trees because of their high value.

Forestry Terms

A

Absentee Landowners - Landowners who do not live in the county where their land is located.

Acid Soils - Soils with a pH value below 7.0. Pines grow well in acid soils, but hardwoods do not.

Acre - An area of land containing 43,560 square feet or 10 square chains. A square acre would be about 209 feet by 209 feet. A circular acre would have a radius of 117.75 feet.

Ad Valorem Tax - Annual taxes based on land value.

Aesthetics - The pleasant feelings, mental and physical, humans may experience as a result of certain environmental resources.

All-aged Stand - A forest stand with trees of different ages and sizes. All-aged or uneven-aged contrasts with "even-aged."

All-aged or Uneven-aged Management - Managing a forest by periodically removing individual trees or groups of trees from the stand while keeping its natural appearance. This type of management is common in hardwood forests. See Selection Method and All-aged Stand.

Allowable Cut - The volume of wood that can be cut from a forest during a given period without exceeding the forest's net growth during that same time period.

Amortization - A method of recovering (deducting) capital costs over a set period of time. Special rules for amortization of reforestation or afforestation costs can be used to recover all or part of the expense preparing forestland for regeneration and planting or seeding within 8 tax years.

Artificial Regeneration - Establishing a new forest by planting or direct seeding.

B

Bare Root Seedling - A seedling lifted from a nursery bed with its roots freed from the soil in which it had been grown.

Basal Area - a) Of a tree: the cross-sectional area (in square feet) of the trunk at breast height (4 1/2 feet above the ground). For example, the basal area of a tree 14 inches in diameter at breast height is about 1 square foot. Basal area for an individual tree = $0.005454 \times \text{diameter squared}$. b) Of an acre of forest: the sum of basal areas of the individual trees on the area. For example, a well stocked pine stand might contain 80 to 120 square feet of basal area per acre.

Basis, Adjusted - The original basis, or investment cost, plus capital additions minus capital recoveries. Examples of capital additions include improvements not recovered by deductions, special treatment, or depreciation. Reforestation costs not recovered through the federal investment tax credit and accelerated amortization are capitalized, that is, added to the appropriate capital account. Casualty losses, depreciation, and cost recovery allowances such as depletion allowances are capital recoveries.

Basis, Original - The original capital investment in property such as land or timber. For purchases, original basis is the purchase price plus acquisition costs. For inherited property, basis is the fair market value of property at the time of the decedent's death or at alternative evaluation date. For gifted property, the basis is the donor's basis.

Basis, Timber - The original capital investment in timber plus capital additions (reforestation costs not recaptured under special tax treatment, certain fertilizer and herbicide treatments, precommercial timber treatment, and capitalized carrying charges) minus capital recoveries (basis recovered through depletion or loss).

Bedding - Mechanical site preparation creating raised planting beds. This is commonly used in wetland sites to improve drainage.

Best Management Practices (BMP's) - Voluntary practices designated by a state or designated planning agency to control point and non-point source pollution to meet environmental quality goals.

Biodiversity - The variety of organisms, either plant or animal, in a region or habitat.

Board Foot - A unit of wood equaling 144 cubic inches. The term is commonly used to measure and express the amount of wood in trees, sawlogs, veneer logs, or lumber. Board feet in a piece of wood is determined by [length in feet x width in inches x thickness in inches] divided by 12.

Bole - The main trunk of a tree.

Bolt - A short log or section cut from a log less than 8 feet long. A pulpwood bolt measures 5 feet 3 inches.

Breast Height - 4 1/2 feet above ground level. See Diameter Breast Height (DBH).

Browse - Leaves, buds, and twigs of shrubs and trees that wildlife (especially deer) eat.

Buffer - A designated zone or strip of land of a certain width along the border of an area. Buffer strips of standing trees may be used to shield an area from view, or buffer strips of felled trees may be used to prevent the spread of forest pests. See Stream-Side Management Zone (SMZ).

C

Cambium Layer - A thin layer of cells between the inner bark and the woody part of a tree. The cambium is responsible for diameter growth of trees.

Canopy - The layer of tree crowns in a forest.

Canopy Class - The relative position of a tree in an even-aged stand. Positions are dominant, co-dominant, suppressed, and dead.

Capital Expenses - Cost of capital improvements the taxpayer makes to the property. Capital improvements have a long life and are usually recovered when the property is sold or by depreciation over the useful life of the improvement.

Capital Gain (Long Term) - Gain from the sale or exchange of a capital asset held for more than one year, if and to the extent that such gain is taken into account in computing taxable income. Capital gains are taxed at the capital gain rates, which are lower

than the ordinary income rates. They are not subject to the self-employment tax.

Capitalization - Adding capital costs or expenses to a capital account. Taxpayers recover the capitalized costs by depreciation, depletion, amortization, or disposal of property through sale or exchange. An example would be adding the costs of nitrogen fertilization to the timber account. These expenses are depreciated over the expected life of the improvement, generally 5/7 years. Reforestation costs not recovered through accelerated amortization are recovered by capitalization.

Carrying Charges - Expenses such as property taxes, interest expense, insurance costs, or other costs related to developing and operating the forestry property. These expenses may be wholly or partially deducted each year as long as the expenses are incurred to produce a profit from the property either currently or at some time in the future. Carrying charges may be capitalized rather than expensed (deducted annually) by adding them to the timber or land account.

Chain - A unit of measure foresters and surveyors use. 1 chain = 66 ft.; 10 sq. chains = 1 acre.

Chip-n-saw - A machine that makes small logs into cants, converting part of the outside of the log directly to chips, with the inner cant made into lumber.

Clearcut - A harvesting and regeneration method that removes all merchantable trees on an area. Clearcutting is most used with species such as pine that require full sunlight to reproduce and grow well. Clearcutting produces an even-aged forest stand.

Climax Forest - The final stage of plant succession in which species composition remains fairly stable. The climax forest for most of Mississippi would be the oak-hickory forest type. Pine is an intermediate species before the climax forest.

Co-dominant - Trees with medium-sized crowns forming the general level of the crown cover. They receive full light from above but are crowded on the sides, so they receive less light from the sides. See Canopy Class.

Competition - The struggle among neighboring trees and other plants for growth requirements such as sunlight, nutrients, water, and growing space. Competition goes on among both the roots and crowns of trees in the same stand.

Cone - The fruit of the tree in the pine family with overlapping scales containing several seeds.

Conifer - Trees of the pine family with needle-like or scale-like foliage and cone-like fruits. They are usually evergreen and often are called softwoods. (Bald cypress is a deciduous conifer.)

Conservation - The protection, improvement, and wise use of natural resources and economic value for the present and future.

Containerized Seedling - A seedling grown in a container instead of a nursery bed.

Controlled Burning - See Prescribed Burning.

Coppice - A forest stand originating primarily from sprouts; the coppice method refers to the way these forests are regenerated.

Cord - A stack of round or split wood containing 128 cubic feet including wood, bark, and air space. A standard cord measures 4 feet by 4 feet by 8 feet. A face cord or short cord is 4 feet by 8 feet of any length wood less than 4 feet.

Crop Tree - A tree identified to be grown to maturity and for final harvest cut. It is usually selected on the basis of its location to other trees and its quality and species.

Crown - The branches and foliage of a tree.

Conservation Reserve Program (CRP) - A federal program administered by the USDA to convert highly erodible land to longterm vegetative cover. In the South, many CRP acres have been planted to trees.

Cruise - A survey of forestland to locate timber and estimate its quantity by species, products, size, quality, or other characteristics; the estimate in such a survey. Several different sampling techniques can be used in a cruise.

Cubic Foot - A wood volume measurement containing 1,728 cubic inches, such as a piece of wood measuring 1 foot on a side. A cubic foot of wood contains about 6 to 10 usable board feet of lumber rather than 12 board feet because some wood is lost as sawdust and shavings in processing.

Cull - A tree or log of merchantable size made useless for all but firewood or wildlife because of shape, disease, insect infestation, or injury.

Cunit - A pulpwood measurement meaning 100 cubic feet of solid wood. A cunit is not a legal measurement for buying or selling pulpwood in Mississippi; however, timber companies may use it for record keeping.

Cutting Cycle - The planned time interval between major harvesting operations in the same stand, usually in uneven-aged stands. For example, a cutting cycle of 10 years in a hardwood stand means a harvest every 10 years.

Cutting Contract - A written, legally binding document used in the sale of standing timber. The contract includes various arrangements covering the expectations and desires of both the buyer and seller.

D

DBH - Abbreviation for tree diameter at breast height (4 1/2 feet above the ground). DBH is usually measured in inches.

Deciduous Tree - A tree that loses all its leaves at some time in the year. These are mainly hardwoods such as oak, hickory, ash, and sweetgum, but magnolia and American holly are evergreen hardwoods.

Deck, log - a) A pile of logs ready for loading onto a truck or a train; b) an area in the forest where cut trees are loaded onto trucks.

Defect - A portion of a tree or log unusable for the intended product and, therefore, not measured. Defects include such things as rot, crookedness, cavities, and too many limbs.

Delivered Price - Price per cord or thousand board feet at the first point of concentration or the wood yard. Price includes expenses of labor, transportation, and cost of standing trees.

Depletion - Reduction in the book value of an asset as it is used or liquidated. How basis is recovered for timber and other natural resource assets. Similar to depreciation of depreciable assets such as heavy equipment or buildings.

Dendrology - The study of the identification, habits, and distribution of trees.

Diameter - The length of a straight line passing through the center of a tree, or a portion of a tree, and the bark. Tree diameter is usually measured 4 1/2 feet above ground level (see DBH), but log diameter is measured at the small end.

Diameter Limit Cutting - A selection method of harvesting whereby all merchantable trees above a specified diameter are harvested. In some cases minimum diameter may be the stump diameter. This cutting method is a form of high grading and is not recommended for hardwood stands. It should be used only in rare situations for pine.

DIB (or d.i.b.) - Abbreviation for diameter inside the bark. It usually refers to the scaling diameter (the diameter inside the bark of the small end) of a log rather than a standing tree.

Dibble (bar) - Also called a planting bar. A tool for hand planting bare-rooted seedlings. About 4 1/2 feet in length with a 10-inch blade.

Direct Seeding - Artificial regeneration where tree seeds are sown on the surface of a prepared site.

DOB (or d.o.b.) - Abbreviation for diameter outside the bark. Used in estimating a standing tree's volume. For example, when counting the number of 16-foot sawlogs in a standing tree, the cruiser knows the merchantability limit is 6 inches d.o.b. (or 4 inches, or 8 inches).

Dominant Tree - Having a crown higher than the general level of the crown cover and receiving full light from above and partly from the side; larger than the average trees in the stand, with well developed crown but may be a little crowded on the sides. See Canopy Class.

E

Easement - An interest or right to limited use of land given by the owner to someone else.

Ecology - The relationships between plants and animals and their environment.

Entomology, Forest - Insects in relation to forests and forest products.

Environment - The condition of the surroundings that results from a combination of climate, soil, topography, and other plants and animals. An organism's environment influences its form and survival.

Even-aged Forest - A forest of trees about the same age (usually within 10 years). An even-aged forest may be a natural or an artificially regenerated stand.

Even-aged Forest Management - Periodic harvesting of all trees on part of the forest at one time or in several cuttings over a short time to produce stands with trees all the same or nearly the same age. This type of management is commonly used

Evergreen Tree - A tree that keeps some or all of its leaves throughout the year.

F

F.I.P. (Forest Incentive Program) - A federal cost-sharing program from the Farm Services Agency (FSA) that pays landowners who complete certain approved forest management practices such as tree site preparation and planting.

Firebreak/Fire Lane - A natural or man-made barrier usually created by removing brush, trees, leaves, and other vegetation. Used to prevent the spread of fire.

Fire Danger Rating - Number rating the measurement of weather and fuel factors. Results indicate how easily a fire will start and how fast it will spread. Rating is from 1 to 5; 1 = low and 5 = high.

Forest - A plant community dominated by trees and woody plants. From a management standpoint, a forest is a collection of stands treated as a unit.

Forestland - Land currently producing (or, in some cases, able to produce) a forest.

Forest Management - a) Giving the forest proper care so it stays healthy and lively and provides the products and values the landowner desires. b) Technical definition: Applying technical forestry principles, and practices, and business techniques (such as accounting and benefit-cost analysis) to forest management.

Forest Management Plan - Usually a written document with overall guidelines and recommended practices for current and future management to meet the owner's goals.

Forest Type - Groups of tree species commonly found growing in the same stand because their environmental requirements are similar. Examples of forest types in Mississippi are oak-hickory type, longleaf-slash pine type, elm-ash-cottonwood type, and oak-gum-cypress type.

Forestry - The science, art, and practice of managing and using trees, forests, and their resources for human benefit.

Forty - A land tract of 40 acres, usually 1/4 mile square.

F.R.D.P. (Forest Resource Development Plan) - A Mississippi cost sharing program administered by the MFC for approved forest management practices by private landowners. Incentive payments are similar to those from F.I.P.

G

Genetically Improved Seedlings - Seedlings selectively bred to increase growth potential or other desirable characteristics.

Girdling - A man-made cut or animal, insect, or disease damage completely encircling the tree trunk, going through the bark and cambium and penetrating the sapwood. Girdling usually kills the tree by stopping the flow of nutrients between the roots and crown.

Grading - Evaluating and sorting trees, logs, or lumber by quality.

Group Selection - See Selection Method.

Growing Stock - All live trees (except rough and rotten trees) in a forest or stand, including sawtimber, pole timber, saplings, and seedlings.

H

Habitat - The natural environment of a certain plant or animal. An area with all the needed resources for the plant or animal to live, grow, and reproduce.

Hardwood - Broadleaf, usually deciduous, trees such as oaks, maples, ashes, and elms. The term does not necessarily refer to the hardness of the wood. Some hardwoods (such as live oak and American holly) are evergreen.

Harvest - a) In general use, removing some or all the trees on an area. b) Technical definition: Removing trees on an area to 1) obtain income; 2) develop the environment necessary to regenerate the forest; and on occasion, 3) achieve some special goals such as the development of special wildlife habitat needs.

Harvesting Methods - See Clearcut, Seed Tree Method, Selection Method, and Shelterwood Harvest.

Head - The moving portion of a fire.

Height, Breast - See DBH

Height, Merchantable - The height (length) of a usable tree trunk. It is measured up to the point on the trunk where the diameter is too small to get a particular product. The product being cut determines the merchantable height. For example, if the minimum usable diameter of a pulpwood stick is 4 inches, the merchantable height of a pine tree would be its height up to a trunk diameter of 4 inches, inside or outside the bark.

Height, Total - Tree height from ground level to the top of the crown (the tip of the terminal bud).

Herbicides - Chemicals that kill plants but do not harm wildlife or humans.

High Grading - Removing only the biggest and best trees from a stand during a harvest operation and leaving only the poorest, lowest quality culls to dominate the site.

I

Improvement Cut - An intermediate cut to improve the remaining stand. See TSI and Intermediate Cut.

Increment Borer - A hollow auger-like instrument used to bore into the tree trunk to remove a wood core that shows the tree's growth rings.

Intermediate Cut - Removing immature trees from the forest sometime between reproduction and maturity to improve the quality of the remaining forest stand. An intermediate cut may or may not generate income. See Thinning.

Intermediate Trees - Trees shorter than dominant and co-dominant trees but with crowns extending into the crown cover formed by the dominant and co-dominant trees. These trees receive little light from above and none from the sides. They usually have small crowns that are quite crowded on the sides. See Crown Class.

Inventory - See Cruise.

L

Log - a) A piece of the woody stem (trunk or limb) of a tree. b) The trunk portion of a tree. c) In the East, a tree section exactly 16.3 feet in length, including trim allowance.

Logger - An individual whose job is harvesting timber. He usually is in business for himself, owns his

own equipment, and has one or more employees.

Logging - Harvesting timber.

Log Sale - See Sale, Log.

Log - To chop or saw branches, tops, or small trees after felling, leaving the slash on the ground.

Log Rule - A table that gives the board foot contents for logs of different diameters and lengths. The Doyle Rule is most frequently used in Mississippi.

Log Yard - See Yard.

Lump Sum Sale - See Sale, Lump Sum.

M

Management - See Forest Management.

Market - See Timber Market.

Marketing - See Timber Marketing.

Mast - Fruit produced by trees and eaten by wildlife. Soft mast includes trees such as persimmon, cherry, and dogwood. Hard mast includes trees such as oaks, hickories, and beech.

Mature Tree - A tree that has reached the desired size or age for its intended use. Size or age will differ depending on the species and intended use.

MBF - Thousand board feet. A unit of measure for tree volume or sawed lumber.

Mensuration - Traditionally, the measurement of present and future volume, growth, and development of individual trees and stands and their timber products; also measurement of forestlands.

Merchandising - Selling and using timber for the highest value product possible.

Merchantable Height - See Height, Merchantable.

Merchantable Timber - A stand in which trees are the right size and volume per acre to provide a commercial cut.

Mill Sale - See Sale, Mill.

Mineral Rights - Ownership of minerals such as coal, oil, and gas, under a given surface and the legal right to enter that area and mine and remove them. Includes the right to use as much of the land surface as may be

reasonably necessary for mining.

Mississippi Forestry Commission - A public service agency created by the Mississippi Legislature. In compliance with all applicable laws and regulations, their mission is to provide leadership in forest protection, forest management, and information about the forests of Mississippi through a fully informed, well-trained work force and support staff, reflecting the needs of the public and employees.

Mortality - The number or volume of growing stock trees dying from natural causes in a certain time.

Multiple Use - Land management for more than one purpose, such as wood production, water, wildlife, recreation, forage, aesthetics, or clean air.

N

Natural Stand - A stand of trees resulting from natural seed fall or sprouting.

National Park - Public lands administered and managed by the National Park Service to preserve the scenery, flora, and any natural and historic objects within its boundaries for the long-term benefit of present and future generations.

National Forests - Public lands administered and managed by the U.S. Forest Service. These are dedicated to the long-term benefit of present and future generations. Mississippi has six national forests totaling more than a million acres.

Net Growth - The net increase in volume of timber for a certain area of land for a certain time. This includes the gross increase in volume of trees from beginning to end of the time period, plus the volume of trees that become merchantable, minus the volume of trees that die or become rough or rotten.

O

Ordinary Operating Expenses - Ordinary and necessary expenses associated with day-to-day management of forestland. These expenses must be profit related, although the property may not be currently providing income. Timing of expenses and their purpose determine whether expenses are operating expenses or other types of expense. For example, a timber cruise performed before land purchase to determine the appropriate purchase price is an acquisition and should be capitalized as part of the land/timber basis. A timber cruise performed to determine management practices is an operating expense. A timber cruise performed as part of a timber sale operation is a timber sale expense and is deducted from the

sales receipts to determine net gain or loss on the sale.

Overtopped Trees - Suppressed trees. These trees have crowns entirely below the general level of the crown cover and receive no direct light either from above or from the sides, often resulting in tree mortality. See Canopy Class.

P

Pay-As-Cut Sale - See Sale, Pay-as-Cut.

Pathology, Forest - Diseases of forest trees, stands, and products.

Pesticides - Chemicals, including herbicides and insecticides, used to kill pests such as weeds, insects, and unwanted trees.

Photogrammetry - Taking measurements by using aerial photographs.

Plantation - An artificially forested area established by planting or direct seeding. It is usually made up of one specie.

Pole - Roundwood forest products used mainly as utility poles. For marketing, poles are grouped into one of ten classes based on length, minimum top circumference, and minimum circumference 6 feet from the butt end.

Pole Timber - Trees with diameters from 5-10 inches.

Precommercial Thinning - See Thinning.

Prescribed Burn/Fire - Controlled use of fire to achieve forest management goals. Prescribed fire can reduce harmful fuel levels, control unwanted vegetation, improve visibility, and improve wildlife habitat.

Prescription, Stand - Usually a document written by a forester prescribing present and future treatments for a forest stand (smallest unit of management) aimed at accomplishing certain forest management objectives and long-term goals.

Preservation - a) As applied to wood, treating wood products with chemicals to prevent damage by insects or decay organisms. b) With respect to land, maintaining a natural environment undisturbed by human influence or activities.

Pruning - Removing live or dead branches from standing trees. With forest trees, pruning is generally done along the trunk to remove the side branches (which cause knots in the wood) to produce a higher quality wood (knot free). Some natural self-pruning

occurs as lower limbs are shaded out by the forest canopy.

Pulpwood - Wood cut mainly to be made into wood pulp for paper, fiberboard, or other wood fiber products. Pulpwood sized trees are usually a minimum of 5 inches DBH.

R

Reforestation - Reestablishing a forest by planting or seeding an area where forest vegetation has been removed.

Regeneration - See Reproduction.

Regeneration Cut - A cutting operation to remove the old trees and leave environmental conditions favorable for reproduction.

Release Cutting - Cutting to regulate the species composition and improve the quality of very young stands.

Remote Sensing - A method of learning information using airborne equipment and techniques to determine the characteristics of an area. Aerial photographs from aircraft and satellite are the most common form of remote sensing.

Reproduction - a) Young trees that will grow to become the older trees of the future forest. b) Forest replacement or renewal. This may be done artificially by planting seedlings or seed or naturally by sprouting or natural seeding.

Right-of-way - The legal right of passage over another person's land. This is important in timber harvesting operations when access is limited.

Roots - The part of the tree generally underground where nutrient absorption, anchorage, and storage of food and waste products take place.

Rotation - The number of years required to establish and grow trees to a specified size, product, or condition of maturity.

Roundwood - Wood products that are round, such as pulpwood, posts, piling, poles, firewood, and timber.

S

Sales, Bid - Prospective buyers are invited to submit price bids on the timber offered for sale. Bid sales may be either lump sum sales or per unit, pay-as-cut sales. The bidder with the top price is usually selected

to buy the timber. Both timber offered as a lump sum or per unit sale can be offered for bids.

Sale, Log - The sale of sawlogs or sawtimber site trees.

Sales, Lump-Sum - A certain volume of standing trees sold for a cash price before cutting. The trees may be marked or tallied or the whole tract cruised and the volume computed. Lump-sum sales may be bid sales or negotiated sales.

Sale, Mill - Sale paying the landowner for the volume of lumber produced at the sawmill.

Sales, Negotiated - The timber owner and timber buyer negotiate on an acceptable price. Buyers do not compete with each other over price directly, as in a bid sale. Sales may be negotiated for lump-sum or per-unit basis.

Sales, Per-Unit or Pay-as-Cut - Standing timber is sold to the buyer by the unit, ton, cord, or MBF. The landowner keeps the title until the timber is measured to determine volume cut. Payment is made according to volume cut and measured. Per-unit sales may be bid or negotiated.

Salvage Cut - Harvesting dead trees or those in danger of being killed (by insect, disease, or flooding) to save their economic value.

Sampling - Taking detailed measurements of selected small parts of a forest to learn about the whole forest.

Sanitation Cut - Harvesting or killing trees that are infected or are highly prone to insects or diseases to protect the rest of the forest stand.

Sapling - A small tree, usually between 2 and 4 inches DBH.

Sawlog - A log large enough to be carved into lumber, usually at least 10 to 12 inches in diameter.

Sawtimber Stand - A group of trees with individual trees large enough to be sawed into lumber.

Scale, Log - The volume of roundwood products such as logs expressed in board feet, cubic feet, etc.

Scale, Mill - The volume of sawed wood products such as lumber. Sometimes called mill tally.

Scale, Stick - A flat stick, similar to a yardstick, calibrated so the log volume may be read directly when the stick is placed on the small end of a log of known length.

Scale, Weight - The measurement of wood by a unit of

weight, usually tons, instead of by volume measures such as board feet or cord.

Second Growth - Forests that reproduce naturally after the original forest is removed by cutting, fire, or other cause.

Section - A legal unit of land containing 640 acres; one square mile or 16-forties.

Seed Tree Method - Removing all trees from the harvest area at one time except for a few scattered trees left to provide seed to establish a new forest stand.

Seedling - a) A tree, usually less than 2 inches in DBH, which has grown from a seed (in contrast to a sprout). b) A nursery-grown tree that has not been lifted and replanted in the nursery. See Transplant. c) Super tree or superior seedling genetically improved to have increased growth rates over regular seedlings.

Seed Year - A year in which a given species produces (over a large area) an ample seed crop. Some species of trees have irregular or infrequent seed production.

Selection Method - Harvesting individual trees or small groups of trees at periods of about 5 to 15 years based on their physical condition or degree of maturity. This produces an uneven-aged stand. Trees are usually marked and tallied.

Severance Tax - A tax on forest products after they are cut. It is usually paid by the first processor. In Mississippi, standing timber is not taxed for ad valorem purposes until it is cut.

Shade Tolerance - A tree's ability to develop and grow in the shade of and in competition with other trees.

Shelterwood Harvest - Removing trees on the harvest area in a series of two or more cuttings so new seedlings can become established from the seed of older trees. This method produces an even-aged forest.

Shrub - A low-growing perennial plant with a woody stem and a low branching habit.

Silviculture - Establishing, tending, and reproducing forest stands of desired characteristics. It is based on knowledge of species traits and environmental needs.

Site - a) A tract of land with similar soil and climatic factors. b) An area that can produce a particular forest or other vegetation because of biological, climatic, and soil factors.

Site Index - A measure of forest site quality based on the height (in feet) of the dominant and co-dominant trees at a specified age (usually 50 years for natural stands and 25 for planted stands). A site index of 95 means the expected height of the dominant trees at an index age of 50 years would be 95 feet on a particular area of land.

Site Preparation - Preparing an area of land for planting, direct seeding, or natural reproduction by clearing, chemical vegetation control, burning, discing, bedding, windrowing, or raking.

Skidding - Pulling logs by machine or animal from the stump to the skidway, landing, or mill.

Slash - Tree tops, branches, bark, or other residue left on the ground after logging, pruning, or other forest operations.

Softwoods - A tree belonging to the order Coniferales, usually evergreen, cone bearing, and with needles or scale-like leaves such as pine, spruces, firs, and cedars; often called "softwoods."

Soil Texture - The "feel" or composition of a soil based on the proportion of sand, silt, and clay in the soil.

Species - A group of related organisms having common qualities; organisms able to inbreed and biologically classified into the same category. Loblolly pine and slash pine are the common names of two different species.

Sprout - A tree growing from the base, stump, or root of another tree.

Stands, Timber - A group of trees set apart from others based on species composition, age structure, quality, or geography.

Stocking - The number of trees in a forest stand. Often stocking level is compared to the desirable number of trees for best growth and management, such as understocked, well stocked, or over stocked.

Streamside Management Zone (SMZ) - A strip of land next to a stream or river managed to meet water quality (BMP) and productivity goals.

Stumpage - The value or volume of a tree or group of trees as they stand in the woods uncut (on-the-stump).

Succession - Replacing one plant community with another until ecological stability (climax forest) is achieved. For example, an abandoned farm, if left to nature, would gradually go through different states of vegetative cover and finally reach the climax forest stage after 100 or more years.

Sucker - See Sprout.

Super Trees - See Seedlings.

Superior Trees - See Seedlings.

Suppressed - See Overtopped Trees.

Sustainability - How well a forest can maintain its health, productivity, diversity, and overall integrity in the long term.

Sustained Yield - Managing forestland to produce a fairly constant amount of timber and/or revenue.

Sustainable Forestry - Practicing land stewardship to combine reforestation, management, and harvesting of trees for useful products with the conservation of soil, air, and water quality, wildlife habitat, and beauty for this and future generations.

Sustainable Forestry (SFI) - A thorough system of Initiative (SFI) principles, objectives, and performance that uses the constant harvesting and growing of trees to protect soil, wildlife, plants, and water quality on both industrial and privately owned land. SFI is supported by the American Forests and Paper Association and its member companies.

T

Tally - To keep a record of selected forest or tree measurements. It usually refers to recording certain tree measurements such as height and diameter or number of trees.

Tax Credit - Dollar-for-dollar reduction in the amount of tax owed. Congress creates tax credits for social or economic objectives. The Federal Investment Tax Credit for forestry allows landowners to avoid paying up to \$1,000 per year (10% of a maximum of \$10,000 in qualified expenses) in federal taxes owed when they have expenses for reforestation or afforestation. This Mississippi Reforestation Tax Credit allows landowners to avoid paying up to \$10,000 of qualified reforestation or afforestation costs.

Thinning - Generally a cutting in an immature stand to reduce the number of trees per acre so that the remaining trees will grow faster and increase in volume.

Timber - a) Growing trees that can be used for wood products. b) A large, dressed piece of lumber used in forming part of a structure such as bridge timber.

Timber Deed - A legal document showing transfer of property interest in timber.

Timber Market - The price, demand, and supply of timber.

Timber Marketing - Activities aimed at getting a fair market price for timber.

Timber Marking - Designating trees to be cut or not to be cut. This is usually done by spraying a spot of brightly colored paint at the base of the tree and another spot at eye level.

Timber Sales - The exchange of timber for money.

Timber Sales, 631(a) - Timber is cut by the owner and used in his/her business. The owner elects 631(a) treatment and then treats the sale in two parts: selling the timber to himself and obtaining capital gains on the income from the timber sale or converting the timber into products for sale to generate ordinary income.

Timber Sales, 631 (b) - Timber is sold using a written or verbal contract that specifies payment by the unit of timber cut and measured. Also known as a pay-as-cut sale. The landowner or timber owner keeps an economic interest in the timber until it is cut and measured for payment. Timber cut in this way is eligible for capital gains treatment as long as the timber is owned for the required period of time, generally at least a year.

Timber Sale Expense - Costs associated with the sale of timber. They are deducted from sale proceeds along with the adjusted basis to determine net gain. The net gain is taxable as ordinary income or capital gains.

TSI (Timber Stand Improvement) - Improving the quality of a forest stand by removing cull trees and brush, leaving a stand of good quality trees. Cull trees may be removed by chemicals, fire, girdling, or cutting.

Tolerance - See Shade Tolerance.

Topography - The physical and natural features of an area of land. It usually refers to the elevation, slope, and configuration of the surface of the area.

Tract - A parcel of land considered separately from adjoining land because of differences in ownership, timber type, management objective, or other characteristics.

Transplant - A seedling lifted from the seedbed and replanted at least once in the nursery.

Tree - A woody plant having a well-defined stem, a more or less definitely formed crown, and usually a height of at least 10 feet.

Tree Farm - A privately owned forest (woodland) where producing timber crops is a major management goal. Additionally it may be recognized as a "Tree Farm" by the American Tree Farm System, an organization sponsored by the American Forest Institute, Washington, D.C. Interested landowners need to contact the Mississippi Forestry Association to have their land classified as a Tree Farm.

Tree Injectors - Tools or equipment specially designed to inject chemicals into a tree trunk. Most common injectors can be hand operated.

U

Uneven-aged Forest - A forest with many ages of trees present (technically, more than two age classes) and considerable differences in the ages.

Uneven-aged Forest Management - See All-Aged Forest Management.

V

Volume Table - A table estimating the volume of wood in a standing tree based on measurements of the tree. It is most commonly based on the DBH and merchantable height.

W

Windthrow; Windfall (Blowdown) - An area or group of trees blown over by high wind.

Wolf Tree - A tree taking up more space than it is worth. It is usually an old, large, low-quality tree with a wide, spreading crown.

Wood Pulp - Mechanically ground or chemically

digested wood (composed primarily of wood fiber)
used to make paper or fiberboard.

Woodland - See Forestland.

Y

Yard - A place where logs, sections of logs, pulpwood bolts, and such are collected and stored before being processed or transported to the mill.

Yield Table - A tabulation of volume, basal area, number of trees, and such per acre found in full stands on specified sites at certain ages.