# APPENDIX

**APPENDIX**

# Glossary of Terms

Baling—The process of compressing pieces of wood into a dense package or bale,

Best opening face (BOF)—A computer program, developed at the U.S. Forest Products Laboratory, that determines the optimum sawing pattern to use on a log to maximize its lumber yields.

Biomass—The total mass, at a given time, of living organisms of all species in a natural community. In this report, biomass is used to describe the total mass of woody plants, unless otherwise specified.

Bleaching—The chemical treatment of pulp to increase its brightness.

Bristol—cardboard with a smooth surface suitable for writing or printing.

Bucked log—A log that has been cut into smaller lengths.

Burst strength—A measure of the ability of a sheet to resist rupture when pressure is applied by a specified instrument under specific conditions.

Cellulose—The major chemical constituent of plant cell walls; a long chain polymer formed from glucose units.

Chemical pulping—The process of obtaining pulp by cooking wood chips in acids, alkaline, or neutral salt solutions under pressure and high temperatures. This process breaks down the wood structure and dissolves some or most of the lignin and hemicellulose contents.

Chips—Small pieces of wood used to make pulp. The chips are made either from wood waste in a sawmill or plywood plant, or from pulpwood specifically cut for this purpose.

Coated paper—Printing paper that has been coated with materials that improve its printability and photo reproduction.

Cogeneration—The combined production of electricity and useful thermal energy in one process.

Commercial forestland–All forestland capable of growing 20 $ft^3$ of industrial roundwood per acre annually in a natural stand that has not been withdrawn from timber harvesting by statute or administrative action. This designation does not necessarily imply that the land is currently being used for commercial timber production.

Corn-ply-Flat plywood-like panels or lumber-like pieces with particleboard cores and wood veneer faces.

Composite lumber–Lumber made from small wood pieces, usually chips or veneers glued together.

Converted paper products—Paper that has been converted to product form, such as envelopes, tissues, boxes, cartons, and printing and writing papers.

Coppice system–A silvicultural system in which timber crops originate from cutover stumps from which shoots develop into mature timber. Coppice harvesting and growth cycles can be repeated as long as the supporting root system remains sufficiently productive.

Cover crop—A subsidiary crop of low plants introduced in the earlier stages of planting to protect the land from erosion and to suppress weeds.

Cull trees—Individual trees which, because of certain defects, fail to meet standards for commercial exploitation.

Disking—Cultivating with an implement (such as that used in farming] that turns and loosens the soil with a series of disks.

Edge, glue, and rip (EGAR)—A sawing and gluing technique that reduces wood loss during milling and permits use of low quality raw materials to make high-quality lumber-like products.

Feller-buncher tree processors—A self-propelled machine used to cut trees by shearing them off near the ground, then move bundles of logs across the ground surface using a hydraulic apparatus.

Fiberboard—Panels composed of wood fibers, usually glued together. They have extremely flat and smooth surfaces and edges.

Flakeboard—Particleboard with surfaces composed of flakes or composed entirely of flakes.

Forage—Edible vegetation available for livestock or wildlife grazing,

Fuelwood—Wood removed directly from the forests primarily to burn as fuel (firewood) for residential heating. Fuelwood is one type of “wood fuel”.

Groundwood pulp—Pulp produced by grinding wood between stone surfaces or between sets of metallic bars in a refiner.

Growing stock—The net volume of live sawtimber and poletimber trees from the stump to a minimum four inch top of the central stem or to the point where the central stem breaks into limbs.

This definition includes most wood used by the forest products industry; however some timber supplies are derived from nongrowing stock sources such as salvageable dead trees.

Hardboard—Flat panels made of individual wood fibers, usually glued together. They are graded according to density.

Hardwood—One of two broad classes of timber, usually characterized in the tree by broad leaves that fall off each year. Examples include oak, elm, and ash.

Harrowing—Cultivating with an implement set with spikes, spring teeth or disks used primarily for pulverizing and smoothing the soil.

Industrial roundwood—Wood harvested for use as an industrial raw material rather than as fuel. Note: Residues derived from industrial roundwood are often used as wood fuels.

Intensive forest management—A general term used to distinguish active versus passive treatment of specific forest sites. As used in this report it refers to application of planned treatments to forestland to enhance the quality and/or quantity of industrial timber. Management intensity varies from simple procedures such as thinning of stands for improved growth to complex use of genetic and chemical technologies. Costs of intensive management vary accordingly. The technologies used are further described in chapter V.

Kraft—A strong paper or board made from woodpulp derived from chips boiled in an alkaline solution containing sodium sulfate,

Lathing—The process of peeling logs to yield veneer for plywood.

Lignin—The noncarbohydrate, structural component of wood that encrusts the cell walls and cements the cells together. Its exact composition is unknown.

Linerboard—Stiff, durable, thick paper made primarily from bleached sulfate kraft pulp and used as a facing sheet on corrugated box material or in material for solid fiber containers.

Log—Any section of the trunk or of the thicker branches of a felled tree after trimming.

Lumber–Beams, planks or boards produced by sawing logs and used primarily for construction.

Mechanical pulping—The process of producing pulp by use of a machine known as a defibrator in which wood chips from debarked logs are physically ground or are passed through a mill.

Millwork and molding—Units of wood completely manufactured and assembled ready for putting in place; doors, window frames, etc.

Multiple use—Any forest management policy which seeks to simultaneously fulfill several distinct objectives. In the case of National Forest System and Bureau of Land Management lands, these objectives are mandated by law and include recreation, timber, wildlife, and watershed management.

Multispan logging—A type of skyline logging where the cable is stretched between several posts or trees.

Naval stores—A wide variety of chemical products extracted from wood, including pitch, rosin, turpentine, and pine oils. The term dates back to the days when wooden vessels were caulked with pine tar and pitch.

Newsprint—A coarse textured paper of low strength and limited durability which is made from mechanical or semimechanical pulp, which uses either hardwoods or softwoods.

Nondeclining even flow-The harvest policy on National Forest lands which seeks to ensure sustained yield in perpetuity without diminishing harvest levels; however temporary departures from this policy are permitted under certain circumstances.

Oriented strand board—Flat plywood-like panels made with alined strand or ribbon shaped pieces of wood, sometimes crossbanded (strands in different layers oriented perpendicular to adjacent layers), sometimes veneered.

Pallet—A low wooden platform, sturdy and portable, on which material is stacked to facilitate handling and shipping.

Panel product—Any composite wood sheet including plywood, particleboard, fiberboard, and veneer.

Paper and paperboard—All primary and converted paper products including newsprint, printing and writing paper, and paperboard. This term does not include waste paper and waste paperboard unless otherwise specified.

Paperboard—A pulp product which is typically stiffer and thicker than paper; it includes linerboard and corrugated boxes,

Parallel laminated veneer (PLV)—A composite product made of layers of veneer laid with the grain going in the same direction and united with an adhesive or mechanical fastener.

Particleboard-A general term for flat panels manufactured from wood particles which are bonded together with synthetic resin or other suitable binder under heat.

Planing mills—Mills which plane or smooth the surface of sawn timber.

Platform frame—The traditional American 2 x 4 method of building a house.

Plenum system—An underfloor wood construction

heating/cooling system in which air pressure is built up under the house, pushing air into the rooms of the house without using ducts.

Plywood—Flat panels, usually 4 ft by 8 ft and less than 1.5-in. thick, consisting of laminated hardwood or softwood veneers. The grain direction of each ply or layer is usually at right angles to the ones adjacent to it. The veneer sheets are joined, under pressure, by a bonding agent.

Press drying–A new papermaking technology which both reduces the amount of energy required in the papermaking process and enables the greater utilization of some hardwood species.

Primary paper products—All paper and paperboard except converted products; includes linerboard, newsprint, etc.

Productive deferred forestland—Land that has been temporarily withdrawn from timber utilization pending government action,

Productive reserved forestland—Productive public forestland withdrawn from timber utilization through statute or administrative action.

Pulp—A processed wood fiber in which varying amounts of lignin have been removed in preparation for making paper.

Pulping liquors—A general term which refers to the different chemicals used in the pulping process. "White Liquor" is the original sodium sulfide and sodium hydroxide solution. "Black Liquor" is the liquid rich in lignin salts and other organics removed from wood in the pulping process. The salts remaining after the water is removed and the remaining viscous solution is burned in a recovery furnace (mostly sulfides and carbonate of soda) form a molten stream known as smelt and are recombined with water to form "Green Liquor. "

Rayon—A synthetic fiber made primarily from wood by the viscose process using pure cellulose produced by the dissolving pulp process. Its properties are similar to those of cotton.

Roadless area review and evaluation (RARE)–An administrative review of national forests to identify potential wilderness areas for congressional consideration. There have been two such reviews, RARE I and RARE II.

Roundwood—Logs, bolts, or other round sections cut from trees.

Saw, dry, rip (SDR)—A process which allows greater use of hardwoods for lumber manufacture by reducing their tendency to warp and deform.

Sawlines—The lines or cuts that a saw follows through the wood.

Sheathing—A wooden covering laid over the exterior framework of a structure for attachment of roofing and external wall coverings; often consists of particleboard and plywood.

Silviculture—The science and art of cultivating forest trees by tending, harvesting, and replacing them in a way which results in the planned production of tree crops.

Skidding–A loose term for hauling timber by sliding it along the ground,

Skyline logging–A method of power cable logging in which a heavy cable is stretched between upright supports, the whole functioning as an overhead track for a log carrying trolley.

Softwood—One of the two broad classes of timber, usually characterized in the tree by needlelike or scalelike leaves that persist year after year. Examples include Douglas fir, hemlock, pine, and spruce.

Solid wood products–All wood products except pulp, paper, paperboard, and derived products.

Stand regeneration—The establishment of a new timber crop. The three major regeneration methods are planting, seeding, and natural regeneration.

Stocking—The extent to which forestland is occupied by trees of specified classes. Classification of forestland and forest types are based on stocking of all live trees. Classification of condition classes are based on stocking of desirable trees.

Stumpage—Uncut standing timber.

Sustained yield management—Silvicultural systems designed to achieve perpetually a continuing balance between forest growth and harvest.

Tariffs—An official schedule of taxes imposed on imported and less commonly exported goods, either in the form of a percentage of their value or as an amount per unit of measure.

Tensile strength—The capacity of a body to sustain equal and opposite forces tending to lengthen it in that direction. In wood, tensile strength is high along the grain and low across it,

Thermomechanical pulping—In this process wood chips are continuously fed into a steam heated chamber with mechanical separation of the fibers taking place at high temperatures.

Traditional quotas—Formal quantitative limits placed on imports.

Truss framing—A method of homebuilding based on braced framing designed to transfer structural loads to the supports.

Veneer—A thin sheet of wood of uniform thickness, produced by rotary cutting, slicing, or sawing.

**Waferboard-Flat panels made with wafers or large chips of wood glued and pressed together; generally used in structural sheathing.**

**Waste paper—Paper or paperboard collected for reuse either as raw material for new paper and paperboard or as a fuel,**

**Wilderness—Federal lands designated by Congress under The Wilderness Act of 1964** and subsequent legislation for protection and management to preserve natural conditions. wilderness areas generally show little evidence of human activity, provide outstanding opportunities for primitive and unconfined recreation, are at least 5,000 acres or more, and have important scientific, educational, scenic, or historic values.

Wood fuel—Any wood or wood derived source of fuel including fuelwood (firewood), byproducts of wood processing and manufacturing subsequently used as fuel, and specially processed wood products specifically made for use in energy production.

Woodpulp—pulp manufactured from either softwood or hardwood trees either by mechanical means, chemical means or both,