## APPENDIX B-GLOSSARY

**Abdomen.** The hindmost of the three main body divisions of an insect.

Acidic. Soil with a pH of less than 7.0.

**Adaption.** An adjustment to a specified use or situation.

**Alkaline.** Soil with a pH of more than 7.0.

**Alternate.** An unpaired leaf arrangement. Alternate leaves are located singley on a stem.

**Angiosperm.** Plants with seeds born in an ovary.

**Annual ring.** One year's wood growth, as viewed in the cross section of a tree trunk.

**Artificial regeneration.** The practice of planting seedlings or direct seeding for reestablishing a forest.

**Backfire.** A slow-moving fire that burns into the wind.

**Bark.** Protective covering over branches and stem that arises from the cork cambium.

**Basal Area.** The cross-sectional area of the tree 4.5 feet above the ground.

**Biltmore Stick.** A yardstick-like device for estimating tree diameter and merchantable height.

**Blackline.** An area where forest fuels between the main fire and a fireline are burned out.

**Board Foot.** A unit of volume measurement for sawtimber equal to a board that is  $12" \times 12" \times 1"$ .

**Cambium.** See cork cambium, vascular cambium.

**Canopy Analysis.** The determination of percent canopy cover over a selected area by use of aerial photos.

**Cellulose.** The material in a wood cell wall that is extracted in the papermaking process.

Chain. See Gunther's chain.

**Chlorophyll.** The green substance in plants which acts as a catalyst in the photosynthesis process.

**Chlorosis.** The uniform yellowing of the leaves resulting from a decrease in the normal amount of chlorophyll present in the leaves.

**Clear Cut.** The practice of removing all timber from a stand in one cutting.

**Climax stage.** A relatively stable stage of succession. Plant communities remain in the climax stage until some disturbance begins succession anew.

**Co-dominant.** A tree with its crown in the upper level of the canopy of surrounding trees, and receiving direct sunlight from above and comparatively little sunlight from the sides.

**Compaction.** Solidly united or packed together. This refers to compacted soils which are poorly drained and contain little oxygen.

**Compound.** A tree leaf that contains more than one leaflet per petiole.

**Control Line (fireline).** A strip of ground where all flammable forest fuels have been removed to suppress a wildfire.

**Coppice (coppicing)**. Relying on stump sprouts or root suckers for regeneration.

**Cord.** A stack of wood 4'x 4'x 8', or a unit of volume measurement equal to 90 cubic feet of solid wood.

**Cork cambium.** The zone of bark development. Cells in the cork cambium divide to become bark.

**Counterfiring.** Deliberately setting fire to forest fuels with the intention of stopping a wildfire.

Crown. The above ground portion of the tree excluding the trunk.

**Cut(s).** A land grade change in which soil is removed.

Deciduous. Trees or shrubs that shed all of their leaves each year.

**Dendrology.** The science of tree identification.

**Diameter Breast Hieght (DBH).** The diameter of a tree measured at a point 4.5 feet above the soil surface.

**Diameter Limit Cut.** The practice of removing trees of a certain diameter and larger.

**Dioecious.** Trees that have male and female flowers on separate trees. (See *monecious*.)

**Direct Seeding.** The application of spreading tree seed in an area pre-pared for tree planting.

**Dominant.** The tallest, broadest trees of a forest that get the most sunlight.

**Drip line.** The outermost edge of a tree crown.

**Earlywood (springwood).** The wood (xylem) that develops in the spring during periods of rapid growth. It is the lighter colored band of an annual ring.

**Ecosystem.** A system of interrelated organisms and their physical-chemical environment.

**Ecotone.** Edge area between two vegetation types.

**Entomologist.** A person who studies insects.

**Entomology.** The study of insects.

**Evapotranspiration.** The process by which a tree releases water vapor to the atmosphere.

**Evergreen.** Green all year, not shedding all of its leaves at one time.

Fasicles. The bundles of two or more needles on pine twigs.

**Feeder roots.** Roots at or near the soil surface, located from taproot outward to the drip line. These roots absorb the bulk of the water and nutrients required by the tree.

**Fill(s).** A land grade change in which soil is added.

**Fireline (control line).** A strip of ground where all flammable forest fuels have been removed to suppress a wildfire.

**Flatwoods.** Flat, wet, sandy forestlands with soils of low pH, typically occupied by slash pine, saw palmetto, and gallberry.

**Forest Community.** A group of tree species that occur together in a particular habitat. Many forest communities may exist within an ecosystem.

**Forest Management Plan.** A written document containing a description of the forest and a plan of action to be implemented.

**Forest Pathology.** The study of forest tree diseases.

**Forestry.** The art and science of managing forests and related natural resources to meet the demands of society.

**Gall.** A swelling of plant tissues frequently caused by insects.

**Gallery (galleries).** Tunnels excavated under tree bark, by bark beetles, for the purpose of egg-laying.

**Genus.** A group of species having similar fundamental traits.

**Girdling.** The practice of severing phloem tissue around a tree's circumference to cut the supply of food to the roots and kill the tree.

**Grass stage.** The early life stage of longleaf or South Florida slash pine. The seedling resembles a clump of grass and develops an extensive root system prior to initiating height growth 3–7 years following germination.

**Gunther's Chain (chain).** A unit of length equal to 66 feet.

**Gymnosperm.** Plants with seeds born exposed (not in an ovary).

**Hammock.** A slight elevation arising from wet soils occupied by one or more species of hardwood trees.

**Hardpan.** A compacted, impermeable layer of soil.

**Head.** The most rapidly spreading portion of a fire's perimeter, usually to the leeward side (with the wind) or upslope.

**Headfire.** A fire , or portion of the fire, that burns *with* the wind.

**Heartwood.** Dead or inactive xylem, located in the center of the tree, often of a different color than the sapwood.

**Herbaceous.** Having little or no woody tissue.

**Herbicides.** Plant-killing chemicals.

**Imperfect Flower.** A flower with one type of sexual structure only.

**Increment Borer.** A device used to extract small cores from a tree trunk for examination of annual rings.

**Insect.** An invertebrate animal having three distinct body segments, three pairs of legs, and, generally, one or two pairs of wings.

**Intermediate.** Trees that receive some sunlight from above, but none from the sides because of competition from the dominant and co-dominant trees.

**Kerf.** The amount of wood removed as sawdust in the sawing operation.

**Larvae.** The immature life stage of an insect.

**Latewood (summerwood).** The wood that develops in summer during periods of slower growth. It is the dark-colored band of an annual ring.

**Lateral Bud.** Bud located to the sides of the stem below the terminal bud. If the terminal bud is damaged, the lateral bud grows to replace it as the site of shoot elongation.

**Leaf Margin.** The edge of a leaf.

**Leaf Scorch.** The browning of leaf edges and the areas between major veins of the leaves.

**Leaflet.** One leaf of a compound leaf.

**Log.** A sawtimber-size tree whose merchantable wood is cut into 16 foot lengths.

**Mast.** The flowers, fruits,or seeds of plants, especially of trees and shrubs, that are eaten by animals.

**Merchantable Height.** The smallest diameter of usable wood on a standing tree trunk.

**Merritt Hypsometer.** A device found on the Biltmore stick that measures merchantable tree height.

Millen Board Feet (MBF). One thousand board feet.

**Monoculture.** A single tree specie that occurs together in a particular habitat.

**Monoecious.** Trees with both male and female flowers on the same tree. (See *dioecious*.)

**Multiple-Use Management.** Managing forestland for more than one purpose. For example, managing for both timber and wildlife.

**Mychorrizae.** Beneficial fungi that aid a root to absorb water and nutrients.

**Naval Stores.** Products such as turpentine and rosin derived from the gum, or resin, of pines.

**Natural Regeneration.** The practice of relying on seed produced and disseminated from standing trees, on stump sprouts, for regeneration.

**Niche.** The unique environment or set of ecological conditions in which a specific plant or animal species occurs, and the function the organism serves within that ecosystem.

**Opposite.** A paired leaf arrangement. A part directly across anotheras paired leaves on a stem.

**Orientation.** The arrangement of leaves, twigs, and buds on a branch.

**Organic Matter.** Non-living, decomposed organic material.

**Overtopped.** Trees that are growing beneath the canopy of other trees, and which receive little or no direct sunlight.

Pace. Two normal, relaxed steps.

Pathogen. A living disease-causing agent.

Pathologist. A person who studies diseases.

Pathology. The study of diseases.

Perfect flower. A flower with both male and female sexual structures.

**Pesticide(s).** A general group of pest-killing chemicals. This grouping can include herbicides, insecticides, nematicides, rodenticides, etc.

**Petiole.** The stem-like part of the leaf.

**pH.** A measure of soil acidity or alkalinity. The pH scale runs from 1 to 14, with 1 being extremely acid, 7 being neutral, and 14 being extremely basic.

**Phloem.** Tissue which conducts food manufactured in the crown to the rest of the tree. It is formed on the outward side of the vascular cambium. (See also *xylem*.)

**Photosynthesis**. The food-making process in all green plants. Carbon dioxide and water are combined to form sugars and oxygen gas.

**Pioneer Species.** The first plants to become established on bare land.

**Pitch Tube.** Hardened resin with a tube-like or balled form on the outside bark of pine trees infested with bark beetles.

**Pneumatophore.** Black mangrove root structures that grow vertically from the soil surface and provide air to undreground and underwater roots.

**Pollen.** A plant's powdery, male reproductive particles.

## Prescribed Burning.

**Precommercial Thinning.** A <u>non</u>-merchantable, partial harvest of timber designed to control the density of a timber stand.

**Prime Meridian.** A concrete marker near Tallahassee where the Township numbering system for the state begins.

**Pulpwood.** Standing timber or cut roundwood, suitable for converting to paper.

**Range Lines.** Parallel lines 6 miles apart running north-south that are numbered to denote east-west locations of townships.

Rayon. A textile fiber made from a cellulose solution.

**Regeneration.** The re-establishment of a forest through planting, seeding, or natural processes.

**Root Hairs.** Minute projections of tree roots that absorb the bulk of nutrients and water required by the tree.

**Rosin.** The hard resin left after the distillation of crude turpentine. It is rubbed on violin bows and used in making varnish.

**S-T-R.** The abbreviation for section, township, and range.

**Sapwood.** Active xylem tissue; the layer of wood that transports water and nutrients from roots to crown.

**Sawtimber.** Trees suitable for the production of lumber.

**Scarification.** The treatment of seeds that make them permeable to water and gases. This usually done by mechanical abrasion or by soaking seeds briefly in strong acid or other chemical solution.

**Section.** A land unit of one square mile (640 acres).

**Seed Tree Cut.** The practice of removing all timber from a stand except for a 10-15 desirable "seed" trees.

**Select Cut.** The select removal of timber as single trees, scattered trees or trees in small groups at short intervals.

**Shelterwood Cut.** The practice of removing all timber from a stand except for a 20-40 desirable "seed" trees.

**Sign.** Physical evidence of a pathogen or disease-causing agent.

**Silviculture.** The science of producing and tending a forest.

**Simple.** A tree leaf that contains one leaf per petiole

**Site Index.** The productive capacity of an area of forestland for a specific tree species.

**Slope.** An upward or downward incline.

**Snags.** Standing dead trees.

**Soil texture.** The proportional distribution of different size mineral particles in a soil.

**Species.** The asexual reproductive unit of ferns, lower plants, and fungi.

**Spore.** The asexual reproductive unit of ferns, lower plants, and fungi.

**Spot Fire.** Fire set outside the perimeter of the main fire by flying, or rolling, sparks or embers.

**Springwood (early wood).** The wood (xylem) that develops in the spring during periods of rapid growth. It is the lighter colored band of an annual ring.

**Stick.** A pulpwood tree whose merchantable wood is cut into 5.25 foot lengths.

**Stocking rate.** The number of livestock animals per acre of forest rangeland.

**Stomata.** Microscopic pores on the underside of leaves that release water vapor from the tree and take in carbon dioxide.

**Stratification.** Treatment to seeds to break dormancy and promote germination. This is usually accomplished by exposing seeds to moisture at near freezing temperatures for a specified time.

**Streamside Management Zone.** A buffer strip of vegetation left adjacent to a body of water to protect it from degradation from timber harvest or reforestation.

**Street Tree Survey.** An inventory of trees growing along public rights-of-way.

**Succession.** The process by which plant communities evolve over a period of time.

**Summerwood (late wood).** The wood that develops in summer during periods of slower growth. It is the dark-colored band of an annual ring.

**Sustained Yield.** The principle of managing land in a manner that provides the same amount of product at the time of harvest to perpetuity.

**Symptom.** Characteristic exhibited by a disease host, indicative of a disease; response of a tree to disease.

**Taproot.** The main supportive root of a tree's root system. It serves as support for the rest of the tree and also aids in water and nutrient absorption.

**Terminal Bud.** The bud located at the end of a branch that is the site of shoot elongation.

**Thinning.** A partial harvest of timber designed to control the density of a timber stand.

**Thorax.** The body region behind the head on an insect which bears legs and wings.

**Timber cruising.** Measuring trees in the forest to determine their volumes.

**Timber Stand Improvement (TSI).** The practice of removing undesirable trees from a stand.

**Township.** A land unit of 36 square miles containing 36 sections.

**Township Line.** Parallel lines 6 miles apart and running east-west that are numbered to denote north-south locations of townships.

**Tree.** A woody perennial plant, with a single stem and a well defined crown, that grows at least 8 feet in height.

**Tree Disease.** A sustained, progressive impairment of the structure or function of any part of a living tree.

**Turpentine.** A colorless, volatile oil distilled from a substance extracted from various coniferous trees.

**Urban forestry.** The practice of managing trees and other resources to improve the urban environment.

**Vascular cambium.** The zone of xylem and phloem development where cells divide and differentiate into either xylem cells on the inside of this zone or phloem cells to the outside.

**Wedge Prism.** A glass instrument that foresters use to determine the basal area on a specific site of a sample point.

**Whorled.** An arrangement where three or more leaves or flowers are located at the same point.

**Wolf trees.** Large, bushy trees that suppress younger, more desirable trees in a stand.

**Xylem.** Woody tissue which transports water and nutrients from the roots to the crown consisting of millions of tubelike cells. It is formed on the inward side of the vascular cambium. (See *phloem*.)