

GLOSSARY • KEY STANDARD AND GUIDELINE TERMS

ACTIVITY CENTER - As used in owl standards and guidelines refers to the "site" (nest location or roost grove) around which a protected activity center is delineated.

ADAPTIVE MANAGEMENT - Refers to a process in which policy decisions are implemented within a framework of scientifically driven experiments to test predictions and assumptions inherent in management plans.

ANALYSIS AREA - A delineated area of land subject to analysis of impacts of proposed management activities.

ASPECT - The direction towards which a slope faces.

ASPEN FOREST - Forested sites in the *Abies lasiocarpa*, *Picea pungens*, *Abies concolor*, *Picea engelmannii*, *Pseudotsuga menziesii*, and *Pinus ponderosa* series where a majority of the basal area is made up of *Populus tremuloides*.

BASAL AREA - The area of the cross-section of a tree stem over 1 inch in diameter near its base, generally breast height and inclusive of bark.

CANOPY - A layer of foliage, generally the uppermost layer, in a forest stand. Can be used to refer to mid or understory vegetation in multi-layered stands.

CANOPY COVER - The percentage of a fixed area covered by crowns or plants delineated by a vertical projection of the outermost perimeter of the spread of their foliage.

CLEAR CUT - An area where the entire stand of trees has been removed in one cutting.

CLIMAX SPECIES - Any species that is characteristic of a plant community that through natural processes reaches the apex of its development after sufficient time. The opposite of seral species.

D.B.H. - Diameter at breast height, a standard measure of tree size.

DISTURBANCE - Significant alteration of habitat structure or composition. May be due to natural (e.g. fire) or human-caused events (e.g. timber harvest).

EARLY SERAL STAGE - An area that is in the early stages of ecological succession.

ECOLOGICAL SUCCESSION - The change of an area through time from one vegetative community to another. For example, an area may proceed from grass-forb through aspen forest to mixed-conifer forest.

ECOSYSTEM - An interacting system of organisms and their environment.

ECOSYSTEM MANAGEMENT AREA - A delineated contiguous area of land with identifiable boundaries that can be located on a map. Areas would typically be 10,000 to 100,000 acres and be delineated based on human values, use patterns, and physical and biological factors such as watershed boundaries. The area would have a common desired condition and set of management prescription.

ENVIRONMENTAL ASSESSMENT - A concise public document for which a federal agency is responsible that briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

ENVIRONMENTAL IMPACT STATEMENT - A detailed written statement as required by Section 102(a)(c) of the Environmental Policy Act, which serves as an action forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government and provides full and

fair discussion of significant environmental impacts and informs decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.

EVEN-AGED MANAGEMENT - The application of a combination of actions that results in the creation of stands in which trees of essentially the same age grow together. Managed even-aged forests are characterized by a distribution of stands of varying ages (and therefore tree sizes) throughout the forest area. The difference in age between trees forming the main canopy level of a stand usually does not exceed 20 percent of the age of the stand at harvest rotation age. Regeneration in a particular stand is obtained during a short period at or near the time that a stand has reached the desired age or size for regeneration and is harvested. Clearcut, shelterwood, or seed tree cutting methods produce even-aged stands.

FIRE REGIME - A description of the frequency, severity, and extent of fires that typically occur in an area or habitat.

FORB - An broad-leaf herbaceous plant; for example, western yarrow, mountain dandelion and milkvetch.

FOREST PLAN REVISION - A legally scheduled change in a forest plan which must occur at least every 15 years.

FOREST SERVICE DIRECTIVES SYSTEM - The set of manuals and handbooks that codifies the agency's policy, practice, and procedure. The directives system is for directing the work of Forest Service employees. It is the primary basis for the management and control of all internal programs and the primary source of administrative direction to Forest Service employees.

FOREST SERVICE HANDBOOK - The portion of the Forest Service Directives system that provides guidance and instructions on how to proceed with a specialized phase of a program or activity. Handbooks are based on a part of the manual or incorporate external directives.

FOREST SERVICE MANUAL - The portion of the Forest Service Directives system that contains legal authorities, objectives, policies, responsibilities, instructions, and guidance needed on a continuing basis by Forest Service line officers and primary staff in more than one administrative unit to plan and execute assigned programs.

FORMAL CONSULTATION - A process between the U.S. Fish and Wildlife Service and the Forest Service that commences with the Forest Service's written request for consultation under Section 7(a)(2) of the Endangered Species Act and concludes with the U.S. Fish and Wildlife Service's issuance of a biological opinion under Section 7(b)(3) of the Endangered Species Act.

FRAGMENTATION - The process of reducing the size and continuity of habitat .

FUEL LADDER - Dead or living fuels that connect fuels on the forest floor to the canopy, and promote the spread of surface fires to tree crowns.

FUEL LOADS - The amount of combustible material present per unit area.

FUELS - Combustible materials.

FUELWOOD - Wood, either green or dead, harvested for purposes of cooking or space heating, and usually measured in cords. (1 cord = volume of cut and stacked wood, 4 X 4 X 8 ft in dimension).

GROUP (CLUMP) - A group of trees within a patch having interlocking or nearly interlocking crowns. A group contains 2 trees up to many trees. A group could be the same size as a patch if all trees within the patch were uniformly spaced with interlocking, or nearly interlocking crowns.

GROUP SELECTION - Annual or periodic removal of trees in small groups from an uneven-aged forest. Group size is less than or equal to two times the height of the dominant trees.

GROUP SHELTERWOOD - A shelterwood system in which the canopy is opened by group cutting to create fairly evenly distributed gaps that are enlarged by subsequent cuttings as the groups of regeneration develop.

HABITAT - Suite of existing environmental conditions required by a species for survival and reproduction. The place where an organism typically lives.

HABITAT FRAGMENTATION - (See FRAGMENTATION)

HABITAT MOSAIC - The mixture of habitat conditions across a landscape.

HIGH ELEVATION FOREST - Forested sites in the *Pinus aristata*, *Picea engelmannii*, or *Abies lasiocarpa* series having a plurality of the basal area made up of a combination of these species. Also any other series and habitat types where 80 percent or more of the dominant and codominant trees are *Pinus aristata*, *Picea engelmannii*, and *Abies lasiocarpa*.

HOME RANGE - The area used by an animal in its day-to-day activities.

INFORMAL CONSULTATION - An optional process that includes all discussions and correspondence between the U.S. Fish and Wildlife Service and the Forest Service prior to formal consultation, if required.

INTEGRATED RESOURCE MANAGEMENT (IRM) - The Southwestern Region's process to implement ecosystem management which incorporates guidance on ecosystem management, forest plan-to-project analysis, project analysis, and monitoring.

INTERIM DIRECTIVE - An internal directive in the Forest Service Directives system which modifies previous directives or establishes new direction, which must be issued promptly to ensure compliance or program accomplishment and which expires 18 months from issuance.

IRREGULAR SHELTERWOOD - Irregular or gradual opening of the canopy generally in groups with long regeneration intervals that result in uneven-aged forests.

LAND MANAGEMENT PLAN (LMP) - A plan written for the management of a National Forest. These plans were mandated by the National Forest Management Act of 1976. Also often abbreviated FLRMP and FP.

LATE SERAL STAGE FOREST - A forest in the latter stages of development, usually dominated by large, old trees.

MANAGEMENT ACTIVITY - Any new or on-going action authorized, funded or carried out by the Forest Service.

MIXED CONIFER FOREST - Forested sites in the *Pseudotsuga menziesii*, *Abies concolor*, *Picea pungens*, *Pinus strobiformis* and *Pinus flexilis* series and included habitat types except for those sites where 80 percent or more of the existing dominant and codominant trees are species other than *Pseudotsuga menziesii*, *Abies concolor*, *Picea pungens*, *Pinus strobiformis* and *Pinus flexilis*. Also included are forested sites in the *Pinus aristata*, *Picea engelmannii*, and *Abies lasiocarpa* series where *Pinus aristata*, *Picea engelmannii*, and *Abies lasiocarpa* are not a plurality of the basal area. Excluded are sites with mixed species but where *Populus tremuloides* makes up 50 percent or more of the basal area. (See Aspen Forest)

MONITORING - The process of collecting information to determine whether or not the objectives of a management plan are being met. In reference to the Mexican Spotted Owl Recovery Plan, it means the collection and evaluation of data related to habitat and population trends.

OLD GROWTH - Forested sites distinguished by old trees and related structural attributes. Old growth encompasses the later stages of stand development that typically differ from earlier stages in a variety of characteristics which include tree size, accumulations of large dead woody material, number of canopy layers, species composition, and ecosystem function. A table presented in Appendix E for Alternative G lists the minimum structural attributes for a site to be considered old growth for the five primary forest cover types in the southwest. (FSH 2090.11)

OPENINGS - Breaks in the forest canopy that may allow the forest floor to be covered by grasses, forbs, shrubs, tree seedlings; or areas with sapling-sized trees and larger that are stocked less than 10 percent of the areas capacity.

OTHER FOREST & WOODLAND - As used in MSO standards and guidelines, refers to areas where general ecosystem management principles are implemented to promote recovery of the species.

OVERSTORY - The highest limbs and foliage of a tree, and consequently extending and relating to the upper layers of a forest canopy.

PATCH - An area of trees within a site where the vegetative structure stage is sufficiently uniform to be distinguishable from an adjacent patch. An existing patch can be sufficiently large to be the same size as a site. Patch size ranges from 1/4 acre to 4 acres in size for ponderosa pine.

PINE-OAK FOREST - All forested sites in the *Pinus leiophylla* series. Forested sites within the Upper Gila and Colorado Plateau Recovery Units in the *Pinus ponderosa* series with *Pinus ponderosa*/*Quercus gambelii* habitat types where a plurality of the basal area exists in ponderosa pine and at least 10 percent or 10 square feet of the basal area is made up of *Quercus gambelii* greater than 5 inches in diameter at the root collar. Forested sites in the Basin and Range West Recovery Unit where a plurality of the basal area is in yellow pines (ponderosa, Arizona, Apache, or Chihuahua) and at least 10% or 10 square feet of basal area is made up of any oak species greater than 5 inches in diameter at the root collar.

PONDEROSA PINE FOREST - Forested sites in the *Pinus ponderosa* series not classified as pine-oak forest and sites in any other series and habitat type where 80 percent or more of the dominant and codominant trees are *Pinus ponderosa*.

PRESCRIBED FIRE - A fire burning under specified conditions; may result from either planned or unplanned ignitions.

PROTECTED ACTIVITY CENTER (PAC) - An area established around an owl nest (or sometimes roost) site, for the purpose of protecting that area. Most management activities are severely restricted or not allowed within this area.

PROTECTED AREAS - As used in owl standards and guidelines refers to areas that are protected, and where most management activities are severely restricted or not allowed. Includes Protected Activity Centers.

RECOVERY UNIT (RU) - A specific geographic area, identified mainly from physiographic provinces, used to evaluate the status of the Mexican spotted owl.

RECOVERY UNIT WORKING TEAM - An interagency team to oversee the implementation of the Mexican spotted owl recovery plan for each recovery unit.

RESERVED LANDS - Lands that have been administratively withdrawn from commercial activities, such as wilderness or research natural areas.

RESTRICTED AREAS - As used in owl standards and guidelines, refers to areas that are not protected (see Protected Areas), but where specific guidelines for management activities are proposed.

RIPARIAN - Of or relating to a river; specifically applied to ecology, "riparian" describes the land immediately adjoining and directly influenced by streams. Example: Riparian vegetation includes any and all plantlife growing on the land adjoining a stream and directly influenced by that stream.

RIPARIAN FORESTS - Forests along rivers, streams, and other wetland environments, typically characterized by the presence of riparian obligate plants such as cottonwoods, willows, sycamores, or alders.

ROTATION - The planned number of years between regeneration of a forest stand and final harvest of that stand.

SALVAGE - The exploitation of trees that are dead, dying or deteriorating (e.g., because overmature, or materially damaged by fire, wind, insects, fungi or other injurious agencies) before their timber becomes worthless (Source: Society of American Foresters)

SANITATION SALVAGE - Removal of dead, damaged, or susceptible trees primarily to prevent the spread of pests or pathogens and to promote forest health.

SEED-TREE CUT - An even-age regeneration cutting in which only a few seed trees are retained per acre. Shelterwood cuts retain more seed trees.

SELECTED PROJECT ACTION - The action chosen by the responsible official for implementation from among the alternatives considered in the environmental analysis. Biological Assessments and Evaluations and cultural resource clearances are prepared for the selected action and not all alternatives evaluated.

SERIAL SPECIES - Any plant or animal that is typical of a seral community (stage).

SERIAL STAGE - Any plant community whose plant composition is changing in a predictable way; for example, an aspen community changing to a coniferous forest community.

SHELTERWOOD CUT - An even-aged regeneration cutting in which new tree seedlings are established under the partial shade of remnant seed trees.

SIGNIFICANT FOREST PLAN AMENDMENT - A change in a forest plan that would significantly alter the long-term relationship between levels of multiple-use goods and services originally projected and that may have an important effect on the entire forest plan or affect land and resources throughout a large portion of the planning area during the plan period.

SILVICULTURE - The practice of controlling the establishment, composition, and growth of forests.

SINGLE-TREE SELECTION CUTTING - A cutting method based on removal of individual trees, rather than groups of trees (see also group selection cutting).

SITE (STAND) - An area of trees possessing sufficient uniformity (species, composition, age, and physical features) to be distinguishable from trees on adjacent areas. Sites contain patch(s) and groups.

SITE - As used in owl standards and guidelines refers to the nest location, a roost grove commonly used during the breeding season, or the best roosting/nesting habitat if actual nesting and roosting locations can not be confirmed.

SLASH - The residue left on the ground after logging, including logs, uprooted stumps, branches, twigs, leaves, and bark.

SOUTHWESTERN REGION (Region 3) - An administrative unit of the USDA Forest Service, including national forests in Arizona and New Mexico and national grassland units in Oklahoma and Texas.

SNAG - A standing dead tree.

SPRUCE-FIR FOREST - (See HIGH ELEVATION FOREST).

STAND - Any homogeneous area of vegetation with more or less uniform soils, landform, and vegetation. Typically used to refer to forested areas.

STANDARDS AND GUIDELINES - The bounds or constraints within which all management activities are to be carried out in achieving forest plan objectives.

STAND DENSITY INDEX (SDI) - Stand density index was developed by L.H. Reineke. Stand density index is the expression of the existing numbers of trees per acre as the equivalent number of trees at an average stand diameter (ASD) of ten inches. For example, if you currently have 4000 trees per acre at 2" ASD that is equivalent in density to 300 trees per acre at 10" ASD; therefore, the SDI is 300.

STAND REPLACEMENT FIRE - A severe burn through the forest canopy (crown fire) that kills all or nearly all of the trees over a large area setting the area back to an earlier successional stage and making it unsuitable habitat.

STEEP SLOPES - Areas of national forests that are over 40% inclination.

TERRESTRIAL ECOSYSTEM SURVEY (TES) - A system of ecosystem classification, inventory, mapping, and interpretation based upon terrestrial vegetation and environmental factors, used by the USDA Forest Service, Southwestern Region. Ecosystems are defined by combinations of potential vegetation, soils, and climates. Land is partitioned into mapping units based upon inventory data, classification, and air photo interpretation.

TERRITORY - The area that an animal defends against intruders of its own species. Not synonymous with home range, as parts of the home range are typically shared with other individuals.

THINNING - The practice of removing some of the trees in a stand so that remaining trees will grow faster.

UNDERSTORY - Any vegetation whose canopy (foliage) is below, or closer to the ground than, canopies of other plants. The opposite of overstory.

UNEVEN-AGED MANAGEMENT - The application of a combination of actions needed to simultaneously maintain continuous high-forest cover, recurring regeneration of desirable species, and the orderly growth and development of trees through a range of diameter or age classes to provide a sustained yield of forest products. Cutting is usually regulated by specifying the number or proportion of trees to retain within each area, thereby, maintaining a planned distribution of size classes. Cutting methods that develop and maintain uneven-aged stands are single-tree selection, group selection, and irregular shelterwood.

VEGETATION TYPES - A land classification system based upon the concept of distinct plant associations. Vegetation or habitat types (plant associations) have been documented for western forests, and keys to their identification are available.

VIABILITY - Ability of a population to persist through time.

WOODLAND FOREST - Forested sites in the pinyon sp., Juniperus sp., Cupress arizonica, and evergreen oak series.