

# Glossary of forest terms

**Age class**—a distinct aggregation of trees originating from a single natural disturbance or regeneration cutting.

**Biodiversity**—biological diversity; the variety of plants and animals, the communities they form, and the ecological functions they perform at the genetic, stand, landscape, and regional levels.

**Biological diversity**—see Biodiversity.

**Biological maturity**—the stage before decline in the life cycle of a tree when annual growth is offset by breakage and decay.

**Board foot**—a unit of wood 1 inch thick, 12 inches long, and 12 inches wide.

**Buffer strip**—forestland, usually along a road or waterway, managed to lessen visual or environmental impacts of timber harvesting.

**Bumper trees**—trees intentionally left standing adjacent to skid trails and roads to protect residual trees from damage when harvested timber is moved to the log landing site. Bumper trees are cut at the end of the harvesting operation.

**Canopy**—the upper level of a forest, consisting of branches and leaves of taller trees.

**Cavity tree**—a tree with cavities in which birds, mammals, or insects such as bees may nest (also called den tree).

**Cord**—a stack of wood measuring 4 by 4 by 8 feet.

**Cleaning**—a release treatment made in an age class not past the sapling stage in order to free the favored trees from less desirable individuals of the same age class that overtop them or are likely to do so.

**Deciduous**—losing or shedding leaves at the end of the growing season.

**Den Tree**—see cavity tree.

**Dominant**—trees with leaf-bearing branches (crowns) extending above the general level of the main canopy and receiving full sunlight from above and partial light from the sides.

**Dormant**—resting, or nongrowth, phase.

**Ecology**—the study of interactions between living organisms and their environment.

**Economic maturity**—the time in the life cycle of a tree or stand when harvesting can be most profitable.

**Ecosystem**—a natural unit comprising living organisms and their interactions with their environment, including the circulation, transformation, and accumulation of energy and matter.

**Endangered species**—species in danger of extinction throughout all or a

significant part of their range. Protection mandated by the United States Endangered Species Act, 1973.

**Epicormic branching**—delayed shoot development, or branching that occurs after other branches have developed higher on the tree trunk, often the result of the exposure of a maturing tree to previously unavailable sunlight. Epicormic branches typically arise from dormant buds that have maintained their vascular connection.

**Ford**—a shallow section of a stream that is stabilized with stone and used for crossing.

**Forest renewal**—the growth of a new forest, which includes not only the trees but also the other beneficial woody and herbaceous vegetation that contributes to the overall integrity, diversity, and health of the entire forest community and its interdependent ecological functions.

**Haul road**—a road designed for use by trucks to transport harvested timber from the log landing to its destination.

**Herbaceous**—pertaining to nonwoody vegetation, such as grasses and wildflowers.

**Improvement cutting**—a cutting made in a stand past the sapling stage primarily to improve composition and quality by removing less desirable trees of any species.

**Intermediate treatment**—a collective term for any treatment designed to enhance growth, quality, vigor, and composition of the stand after the establishment of advanced regeneration and before the final harvest.

**Intermittent**—refers to streams that do not flow continuously throughout the year.

**Leaners**—damaged trees that have been tipped or dislodged from the soil during a harvesting operation.

**Litter**—the uppermost layer of the forest floor consisting chiefly of decaying organic matter.

**Log Landing**—the area at the end of a skid road where harvested timber is stored or prepared for transport from the woodlot.

**Lop**—cut up the tops of harvested trees to reduce their height.

**Mast**—all fruits of trees and shrubs used as food by wildlife. Hard mast includes nutlike fruits such as acorns, beechnuts, and chestnuts. Soft mast includes the fleshy fruits of black cherry, dogwood, and serviceberry.

**Microsite**—a small area in which soil nutrients, water availability, sunlight, and other resources affect the growth and development of only one or a few trees and other plants.

**Natural regeneration**—the replacement of one forest stand by another through natural seeding or sprouting.

**Overstory**—trees in the upper level, or canopy, of the forest.

**Parent material**—the type of rock from which a soil type is derived.

**Perennial**—refers to streams and wetlands that contain water at or near the surface throughout the year.

**Pulpwood**—timber used to make paper and wood products other than lumber.

**Rare species**—species that exist only in one or a few restricted geographic areas or habitats or occur in low numbers over a relatively broad area.

**Refuse**—man-made debris.

**Regeneration method**—a cutting method designed to promote and enhance natural establishment of trees. Even-aged stands are perpetuated by seed tree, shelterwood, and clearcutting methods. Uneven-aged stands are perpetuated by selecting individual or small groups of trees for removal.

**Renewal**—see forest renewal.

**Residual stand**—trees remaining following any cutting operation.

**Riparian zone**—an area adjoining a body of water, normally having soils and vegetation characteristic of floodplains or areas transitional to upland zones. These areas help protect the water by removing or buffering the effects of excessive nutrients, sediments, organic matter, pesticides, and pollutants.

**Rotation**—the planned time interval between regeneration cuts in a forest.

**Rubble land**—an area characterized by its high content of large rock fragments.

**Sapling**—a small tree, usually defined as being between 2 and 4 inches in diameter at breast height.

**Sawtimber**—a relatively well-formed tree large enough to yield at least one sawlog, which is used for lumber. Usually the small end of a sawlog must be at least 10 to 12 inches in diameter for hardwoods.

**Seasonally wet**—refers to wetlands that have water at or near the surface only during periods of abundant rainfall or snow melt.

**Seedling**—a young tree originating from seed that is less than 4 feet tall and smaller than 2 inches in diameter at ground level.

**Selection cut**—the removal of trees singly or in small groups for the purpose of regeneration. A well-designed selection cut removes trees of lesser quality and trees in all diameter classes along with merchantable and mature, high-quality timber.

**Selective cut**—the removal of high-quality trees singly or in small groups based on a minimum diameter limit. Selective cuts often equate to high-grading and can compromise the quality of the future stand.

- Shade intolerant**—the inability of a tree to become established and survive at relatively low levels of sunlight. Shade-intolerant species, such as black cherry, aspen, and yellow poplar, germinate and grow best in full sunlight.
- Shade tolerant**—the ability of a tree to become established and survive at relatively low levels of sunlight. Sugar maple, Eastern hemlock, and beech can persist for many years in the shady understory.
- Silviculture**—the art, science, and practice of establishing, tending, and reproducing forest stands.
- Site quality**—the potential productive capacity of a site, usually expressed as volume production of a given species.
- Skid**—drag logs by lifting one end off the ground to reduce resistance.
- Skid road**—a road designed for frequent use by skidding equipment. Skid roads typically incorporate water-control structures.
- Skid trail**—a trail requiring less construction than a skid road because it is used less frequently by skidding equipment.
- Snag**—a standing dead tree with few branches, or the standing portion of a broken-off tree. Snags may provide feeding and nesting sites for wildlife.
- Spring seep**—a class of wetland created by groundwater emerging in small pools surrounded by vegetation. Spring seeps create snow-free zones critical for wildlife feeding during the winter.
- Stand**—a grouping of vegetation sufficiently uniform in species composition, age, and condition to be distinguished from surrounding vegetation types and managed as a single unit.
- Stand density**—a quantitative, absolute measure of tree occupancy per unit of land area in such terms as numbers of trees, basal area (cross-sectional area of a tree trunk at breast height), or volume.
- Stem**—the main trunk of a tree (also called bole).
- Structure**—the species composition of a forest stand *by age class*.
- Stumpage**—the commercial value of standing trees.
- Succession**—the natural series of replacements of one plant community (and the associated fauna) by another over time and in the absence of disturbance.
- Sustainable forestry**—the management of forests to meet the needs of the present without compromising the ability of future generations to meet their own needs.
- Thinning**—a cutting that reduces stand density of trees, made primarily to improve growth, enhance forest health, or recover potential mortality.
- Threatened species**—a species likely to become endangered in the foreseeable future, throughout all or a significant portion of its range, unless protected.

**Understory**—the smaller vegetation (shrubs, seedlings, saplings, small trees) within a forest stand, occupying the vertical zone between the overstory and the herbaceous plants of the forest floor.

**Vernal (or autumnal) pond**—a class of wetland characterized by small, shallow, temporary pools of fresh water present in spring and fall, which typically do not support fish but are important breeding grounds for many species of amphibians. Some species, such as spring peepers and mole salamanders, are totally dependent upon such ponds.

**Wetland**—area that is either transitional between land and water (where the water table is at or near the land surface) or area of land covered by shallow water (such as a marsh, swamp, bog, and fen). Although only 2 percent of Pennsylvania remains as wetlands today, these areas fulfill an essential role in our landscapes by maintaining water quality, stabilizing shores and stream banks, controlling floods and erosion, and providing critical habitat to many plant and animal species.

**Wolf tree**—a large, branchy tree that occupies more space in the forest than similar trees of the same diameter. Wolf trees may have high wildlife and aesthetic value but little, if any, timber value.

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Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

This publication is available from the Publications Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Building, University Park, PA 16802. For information telephone (814) 865-6713.

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. T. R. Alter, Director of Cooperative Extension, The Pennsylvania State University.

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