

Glossary of Urban Forestry Terms

Absorbing roots: Non-woody roots formed at the ends of woody lateral roots that are responsible for water and nutrient absorption. Also called fine roots.

Aeration: The exchange of air in the soil. Compaction reduces and cultivation improves soil aeration

Annual ring: The growth layer of one year. Can be seen on the cross section of a stem, branch or root.

Apical bud: Located at the end of each twig where most of growth takes place. Also called terminal buds.

Arborist: A professional who possesses the technical competence through experience and related training to provide for or supervise the management of trees and other woody plants in the residential, commercial and public landscape.

Backfill: Soil used to fill in the excavated area around the roots of a newly planted tree or shrub. May be native soil or a mixture of native soil and amendments such as compost.

Basal area: The cross-sectional area of a tree trunk at 4½' above ground. Commonly measured in square inches or square feet.

Bioretention: On-lot retention of stormwater through the use of vegetated depressions engineered to collect, store, and filter runoff.

Buffer: A vegetated zone adjacent to a stream, wetland, or shoreline where development is restricted or controlled to minimize the effects of development,

Callus: Tissue formed by the cambium layer of a tree that surrounds a wound

Cambium: The layer of cells between the inner bark and wood of a tree. This is where growth takes place. The cambium forms sapwood (xylem) to the inside and bark (phloem) to the outside.

Canopy: The upper level of a tree and/or forest, consisting of branches and leaves of taller trees.

Carbon sequestration: Processes that remove carbon from the atmosphere.

Clinometer: An instrument used to estimate the height of a tree using a vertical angle and a distance determined by taping or pacing.

Community forestry: Addresses the social benefits of the urban forest: community pride, community planting and care projects, reduction of violent crimes and a sense of safety.

Crown cleaning: The removal of dead, dying, diseased, crowded, weakly attached, low-vigor branches and watersprouts from a tree's crown..

Girdle: To cut through the bark and growing layer (cambium) all around the trunk of a tree.

Girdling root: A root which has grown so that it encircles and constricts other roots or the main stem of a tree. May result in the decline or death of the tree.

Heartwood: The inactive wood toward the center of a tree trunk, branch or root

Inventory, Tree: Gathering of accurate information on the health and diversity of the community forest which can include: listing and description of trees and planting sites.

Lifting: The cutting/removal of lower branches for underclearance.

Line clearance: Pruning and removing trees for safe, uninterrupted electric service.

Open space: Land set aside for public or private use that is not built upon.

Percolation: The downward movement of water through the soil.

Remote sensing: Collecting and interpreting information about the environment and the surface of the Earth from a distance primarily by sensing radiation that is naturally emitted or reflected by the Earth's surface. Examples of remote sensing methods include aerial photography, radar and satellite imaging.

Sapwood: The active xylem (wood) found right under the cambium, that stores water and carbohydrates, and transports water and nutrients.

Scaffold branches: Permanent or structural branches that form the scaffold architecture or structure of a tree.

Scaffold roots: Larger, woody roots found close to the trunk that form the root flare at the base of a tree, providing anchorage. Also help transport water absorbed by the absorbing roots to the trunk, and absorbing oxygen to be used during respiration.

Shelterbelt: One or more rows of trees and shrubs planted upwind of an area or building to protect it from winter winds and blowing snow. Shelterbelts are also commonly known as windbreaks or hedgerows.

Stub: An undesirable short length of branch remaining after a break or incorrect pruning cut is made.

Tracing: Careful removal of loose bark along the edges of a wound. Tracing does not remove any bark that is healthy or attached to the cambium of the tree.

Urban ecology: The study of natural systems and human constructed environments in urban areas. This study includes identifying and addressing problems related to water and air quality, wildlife and plant conservation, human life quality and other related topics.

Urban ecosystem: The community of living organisms and non-living elements that make up the whole landscape of an urban environment. This includes people and their domesticated animals, wildlife, plant life, water, geology, etc.

Urban forest: An urban forest includes all of the natural resources in an urban area: plants, soil, water, and animals.

Urban Forest Effects Model (UFORE): A model developed by the US Department of Agriculture (USDA) Forest Service to estimate the composition, environmental impacts, and value of the urban forest.

Urban forestry: The management of the urban forest to maximize benefits to people without compromising the health and condition of the forest.

Urban heat island effect: A phenomenon where air temperatures in urban areas are 2-10°F hotter than surrounding rural areas due to the high concentrations of buildings and pavement in urban areas.

Urban planning: Profession that guides the development and redevelopment of communities by planning for land use, housing, transportation, and economic development. Urban planners often work for cities, regional and state governments, or design firms.

Urban sprawl: Patterns of urban growth that include large acreage of low-density residential development, rigid separation between residential and commercial uses, residential and commercial development in rural areas away from urban centers, minimal support for nonmotorized transportation methods, and a lack of integrated transportation and land use planning.

Zoning: Regulations or requirements that govern the use, placement, spacing, and size of land and buildings within a specific area.