

## GLOSSARY

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**Adsorption:** The inherent ability of a pesticide to bind to surfaces of soil particles. The greater the potential for a pesticide to adsorb to soil particles, the less the potential for the pesticide to move in solution.

**Alignment:** The horizontal route or direction of an access road. It is made up of straight line tangent sections and curves.

**All-season road:** A permanent road designed for use all year long, though there may be some restrictions on vehicle weight at times during spring breakup or wet periods. There is a great range in design standards and road surfacing for this type of road, depending on anticipated traffic load.

**Archaeology:** The field of science that studies past human culture through the examination of remaining material evidence.

**Archaeological site:** A geographic location where archaeological artifacts, features and other materials are found.

**Artifact:** An object manufactured, modified or used by humans.

**Bankfull elevation:** The height of the streambank at which the stream cannot hold any more water without it beginning to spill out onto the floodplain.

**Barriers:** Obstructions to pedestrian, horse or vehicular traffic intended to restrict traffic.

**Basal area:** The cross-sectional area of a live tree at 4.5 feet above ground. Basal area may be measured in square feet per tree or square feet per acre.

**Berm:** A low earth fill constructed in the path of flowing water to divert its direction, or constructed to act as a counter-weight beside the road fill to reduce the risk of foundation failure.

**Biodiversity:** The variety and abundance of species, their genetic composition, and the communities and landscapes in which they occur, including the ecological structures, functions and processes occurring at all of these levels.

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**Borrow pit:** That area from which soil is removed to build up the road bed, sometimes directly adjacent and parallel to a road.

**Broad-based dip:** A surface drainage structure specifically designed to drain water from an access road while vehicles maintain normal travel speeds.

**Burial mound:** An earthwork constructed to cover or enclose one or more human burials. In Minnesota, construction of burial mounds was a common cultural practice between about 2500 and 800 years ago.

**Cache pit:** A cultural feature, usually excavated into the ground, that was used to store foodstuffs or other items. Cache pits are often found in areas where resources such as maple sap and wild rice have been gathered.

**Cavity tree:** A hollow tree used by wildlife for roosting and reproduction by wildlife.

**Ceded lands:** Public lands within original reservation boundaries on which American Indian treaty rights can be exercised. See *Appendix E: Ceded Lands and Reservation Boundaries*.

**Cemetery:** Any location at which there are one or more human interments. All cemeteries in Minnesota are protected by law, without regard to age, ethnic affiliation or current land ownership.

**Certificate of exemption:** A document from a local government unit describing activities exempt from provisions of the Minnesota Wetland Conservation Act.

**Coarse woody debris:** Stumps and fallen trunks or limbs of more than 6-inch diameter at the large end.

**Connectivity:** The degree of linkage among similar habitat patches across a landscape.

**Corduroy:** Logs placed over a wetland to reinforce the natural root mat for the purpose of stabilizing the road foundation.

**Crown:** The part of a tree bearing live branches and foliage.

**Crown closure:** The degree to which the forest floor is shaded by tree crowns when the sun is immediately overhead. Complete crown closure occurs when the crowns of trees touch and effectively block sunlight from reaching the forest floor.

**Cull logs:** Logs that do not meet merchantability standards.

**Cultural resource:** An archaeological site, cemetery, historic structure, historic area or traditional use area that is of cultural or scientific value.

**Cultural resource management:** The range of activities aimed at understanding, preserving and providing for the enjoyment of cultural resources. It includes research related to cultural resources, planning for actions affecting them, and stewardship of them.

**Cultural resource management professional:** An individual trained in the principles and methods of cultural resource management. The Secretary of the Interior's Professional Qualifications Standards outline recommended levels of education and experience for CRM professionals in archaeology, history and other disciplines. See *Appendix D: Qualifications Standards for Cultural Resource Professionals*.

**Cultural resource potential:** The likelihood that a given location contains one or more cultural resources.

**Culture:** A system of beliefs, values, customs, traditions and other features that are shared by a group of people.

**Culvert:** A metal, wooden, plastic or concrete conduit through which water can flow.

**Cut-and-fill:** Process of earth moving by excavating part of an area and using the excavated material for adjacent embankments or fill areas.

**Data recovery:** The process of collecting data about a cultural resource, in order to preserve the scientific, historical or cultural information that makes the resource significant. For archaeological sites, data recovery usually involves formal excavation.

**DBH (diameter at breast height):** The diameter, including bark, of a standing tree at breast height (measured at 4.5 feet above ground on the uphill side of the tree).

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**Dip:** An economical, relatively trouble-free structure for providing effective drainage of forest roads. Dips are considerably lower in cost than culverts, so time spent in careful construction is well justified.

**Disking:** A mechanical method of scarifying the soil to reduce competing vegetation and prepare a site to be seeded or planted. See *scarification*.

**Ditch:** An open channel to conduct water.

**Drainage structure:** Any device or land form constructed to intercept or aid surface water drainage.

**Drift:** The movement of pesticides through the air to non-target areas, either as solid or liquid particles, or as vapor.

**Earthwork:** A cultural feature constructed by excavating or piling soil in a deliberate manner. Burial mounds, cache pits and building berms are examples of earthworks.

**Ecological classification system:** An approach to categorizing and delineating, at different levels of resolution, areas of land and water having similar characteristic combinations of the physical environment (such as climate, geomorphic processes, geology, soil and hydrologic function) and biological communities (plants, animals, microorganisms and potential natural communities).

**Ecoregion:** A land area characterized by similar geology, climate, topography, plant communities, soil types and other factors. Minnesota has nine ecoregions.

**Endangered species:** A species threatened with extinction throughout all or a significant portion of its range.

**Erosion:** The process by which soil particles are detached and transported by water, wind and gravity and deposited downslope or downstream.

**ETS species:** Endangered, threatened and special concern species (*see individual definitions*).

**Evaluation (of cultural resources):** The process of determining which cultural resources are important. Cultural resource management professionals often use the National Register of Historic Places criteria for evaluating significance because of their flexibility and broad application. See *Appendix C: National Register Criteria for Evaluation of Cultural Resources*.

**Even-age management:** A planned sequence of treatments designed to maintain and regenerate a stand with one or two age classes. The range of tree ages is usually less than 20% of the rotation.

**Extended rotation:** Substantially increasing the rotation age of a forest stand beyond the current optimum economic rotation age. Forest stands where extended rotation is applied are called extended rotation forests (ERFs).

**Feature (archaeological):** Any non-portable archaeological evidence. Examples include cellar depressions, building berms, foundations or trash heaps.

**Felling:** The process of severing trees from stumps.

**Fill:** Any solid material added to or redeposited in a wetland that would alter its cross-section, obstruct flow patterns, change wetland boundaries, or convert the wetland to a non-wetland.

**Filter strip:** An area of land adjacent to a water body that acts to trap and filter out suspended sediment and chemicals attached to sediment before it reaches the surface water. Harvesting and other forest management activities are permitted in a filter strip as long as the integrity of the filter strip is maintained and mineral soil exposure is kept to a minimum.

**Fire retardant:** Any substance that reduces the flammability of combustibles by chemical or physical action.

**Floodplain:** The area adjacent to a watercourse or water basin that has been or may be covered by a regional flood.

**Ford:** A place where a perennial or intermittent stream may be crossed by a vehicle. It may be necessary to reinforce the stream crossing to bear intended traffic.

**Forest community:** All organisms within and dependent on a forest ecosystem for all or part of their needs.

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**Forest ecosystem:** A community of plants, animals and microorganisms, and the physical environment they inhabit, in which trees are the dominant life form.

**Forest floor:** All dead vegetation on the mineral soil surface in the forest, including leaf litter and unincorporated humus.

**Forest management:** The multiple-use management of forest resources for sustained yields of wood, water, forage, wildlife and recreation. Multiple use includes timber management, watershed management, range management, wildlife management, fisheries management and recreation management.

**Forest road:** A temporary or permanent road connecting the most remote parts of the forest to existing public roads. Forest roads provide access to forest lands for timber management, fish and wildlife habitat improvement, fire control and a variety of recreational activities.

**Formulation:** The pesticide product as purchased, usually consisting of a mixture of active and inert ingredients.

**Fuel break:** A natural or constructed barrier used to stop the spread of fire by removing fuel or rendering fuel inflammable by use of water or fire retardants. Examples include constructed firelines, wetlines and water barriers.

**Functions:** The physical, chemical and biological processes in a forest, including photosynthesis, decomposition and nutrient cycling.

**Gabion:** A woven wire basket filled with stones of minimum size that will not pass through the openings in the basket. Individual baskets are laid in place like building blocks, and then filled to form retaining walls and erosion-resistant surfaces.

**Geotextile:** A product used as a soil reinforcement agent and as a filter medium. Geotextile is made of synthetic fibers manufactured in a woven or loose non-woven manner.

**Grade:** The slope of a road or trail expressed as a percent of change in elevation per unit of distance traveled.

**Ground water:** The subsurface water supply in the saturated zone below the level of the water table.

**Habitat:** The sum total of environmental factors (including food, water and cover) that a species needs to survive and/or reproduce in a given area.

**Half-life:** The time it takes for a pesticide in soil to be degraded so that its concentration decreases by one-half.

**Hard mast:** Nuts and seeds, typically produced by overstory mature trees (such as oaks and hickories); conifer seeds are also included.

**Harvesting (timber harvesting):** The felling, skidding, processing, loading and transporting of forest products.

**High bank forest:** An area immediately adjacent to a stream or lake where the depth to the water table is more than 10 feet, soil moisture ranges from moist to dry, the hillside bank rises steeply above the water, and the water body cuts into the hillside bank, which results in its eroding. Roots from trees growing on the terrace above the water do not reach the water table and therefore do not provide much bank stability. Depending on the site and ecological history, dominant tree species are aspen, birch, jack pine, red pine, balm o'Gilead, red oak, bur oak, white oak, maple/basswood, balsam fir, ash/elm/cottonwood, red maple or white spruce.

**Highly erodible soil:** Soil on slopes greater than 35% that is considered to be in the severe category for potential erosion.

**High water mark:** The highest level at which water has remained long enough to leave its mark upon the landscape. Generally, it is the point where the natural vegetation changes from predominantly terrestrial to aquatic.

**Historic area:** An area in which there are features (structures, archaeological sites, or a combination of the two) that reflect historic uses. Examples include roads and trails, formal plantings, parks and building complexes.

**Historic building:** Any complex construction created and used by people to shelter their social, cultural and economic activities. Common types of historic buildings in forested areas include houses, barns, sawmills, churches, hotels and schools. See also *historic structure*.

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**Historic structure:** A functional construction built for a purpose other than providing shelter. Examples include fire towers, rail grades, bridges, dams, silos, kilns and canals. See also *historic building*.

**Impact:** A loss in quantity, quality or biological diversity.

**Inclusion:** A small patch or stand of vegetation situated within a larger patch or stand. Inclusions are distinguishable on aerial photographs or in the field as distinct patches, but are typically too small or insignificant to be practically mapped or managed independently of the surrounding stand. See also *stand*.

**Infiltration:** The process by which water passes through the soil surface.

**Infrastructure:** The network of access roads, approaches, trails and landings used to move equipment onto and around a forest management site.

**Integrated pest management (IPM):** Selection, integration and use of management actions based on scientific knowledge of forest systems, including insects and pathogens, in order to achieve desirable economic, ecological and sociological forest management goals.

**Intermittent streams:** Streams with well-defined channels, banks and beds that flow only certain times of the year, when they receive water from springs or runoff. During dry years, these streams may cease to flow entirely or may be reduced to a series of separate pools.

**Label:** The information printed on or attached to the pesticide container or wrapper.

**Landing:** A place where trees and logs are gathered in or near the forest for further processing or transport.

**Leaching:** Downward movement of a pesticide or other soluble material through the soil as a result of water movement.

**Lead-off ditch:** A ditch to remove water from a road or skid trail to a vegetated area.

**Leave log:** All or part of a felled live tree that is deliberately left on a site to provide fresh coarse woody debris. See *coarse woody debris*.

**Leave trees:** Live trees selected to remain on the site to provide present and future benefits, including shelter, resting sites, cavities, perches, nest sites, foraging sites, mast and coarse woody debris.

**Leave tree strip:** An area of land of variable width adjacent to a water body where trees are retained to provide resources benefits.

**Legacy patch:** An area within a managed site that protects soil organic matter and the organisms associated with it, and that will aid in recolonization of the adjacent managed area.

**Local government unit:** A city council, town board, county board of commissioners or watershed management organization.

**Mast:** Nuts, seeds, catkins, flower buds and fruits of woody plants that provide food for wildlife.

**Material Safety Data Sheet (MSDS):** The basic hazard communications tool that provides details on chemical and physical dangers, safety procedures and emergency responses for a particular chemical.

**Midden:** In archaeology, a pile or scatter of debris created as a byproduct of some human activity. Middens often mark old homestead and logging camp locations.

**Minnesota Indian Affairs Council (MIAC):** An organization created by statute to serve as a liaison between the State of Minnesota and the 11 tribal governments within the state. MIAC administers a program designed to protect cultural resources related to American Indian heritage and culture, and it shares authority for treatment of Indian cemeteries with the Office of the State Archaeologist.

**Mulching:** Using organic residues (such as grass, straw or wood fibers) or commercially available alternatives as a covering for exposed forest soil. This mulch covering protects exposed soil, helps control erosion and facilitates revegetation.

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**Mycorrhiza** (pl. mycorrhizae): A mutually beneficial association of fungi and roots of plants.

**National Register of Historic Places**: A nationwide program which recognizes sites, structures, objects, buildings and districts that are significant in national, regional, state or local history, architecture or archaeology.

**Natural community**: A group of native plants and animals that interact with each other and their environment in ways not greatly altered by modern human activity.

**Nonpoint source pollution**: Diffuse pollution that enters a water body from over the landscape. Nonpoint source pollution reaches streams, lakes, wetlands and ground water through leaching, surface runoff and erosion.

**Nutrient cycling**: The process by which nutrient elements move into, out of, and within an ecosystem.

**Nutrients**: Mineral elements in the forest ecosystem, such as nitrogen, phosphorus or potassium, that are naturally present or may be added to the forest environment by such forest practices as application of fertilizer or fire retardant. Nutrients are necessary for the growth and reproduction of organisms. In water, nutrients are those substances that promote growth of algae and bacteria (chiefly nitrates and phosphates).

**Obligate species**: A species able to survive in only one environment. An osprey is a riparian obligate species, because it requires an environment that includes suitable nesting trees near water bodies containing fish.

**Obliterate**: To unbuild, decommission, deactivate or dismantle a road; to deny use, eliminate travelway functionality, and remove the road from the forest development road system; to return the road corridor to resource production by natural or designed means.

**Old forest**: A forest community distinguished by old trees and related structural features characteristic of later stages of stand and successional development.

**Open water wetland:** Shallow to deep open water generally having readily observable surface water. Water depth varies from a few inches to less than 10 feet. According to the USF&WS wetland classification system, it includes Type 3 (shallow marsh), Type 4 (deep marsh) and Type 5 (shallow open water) wetlands (Shaw and Fredine 1956).

**Office of the State Archaeologist (OSA):** A state office that enforces provisions of law related to private cemeteries and archaeological sites. The office also maintains inventories of recorded archaeological sites and cemeteries in Minnesota.

**Overstory:** That portion of the trees in a forest of more than one story, forming the upper or uppermost canopy.

**Patch:** Unit of land with relatively similar biological and/or physical characteristics.

**Peat:** Unconsolidated material consisting of organic matter accumulated under conditions of excessive moisture.

**Perennial streams:** Streams with well-defined channels, banks and beds that exhibit essentially continuous flow. These streams flow year round, but surface water may not be visible during extreme drought.

**Permanent road:** A forest road intended to be left in place for the long term.

**Persistence:** The time it takes for a pesticide in soil to degrade to the point where it is no longer active.

**Pesticide:** A chemical compound or biological agent used for the control of undesirable plants, animals, insects or diseases.

**Potential cavity tree:** A tree at least 6 inches in diameter showing signs of physical injury or decay and susceptible to excavation by birds.

**Prescribed burning:** The controlled application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions. These conditions allow the fire to be confined to a predetermined area, while at the same time producing the fire intensity and rate of spread required to attain planned resource management objectives.

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**Presettlement wetlands:** Wetlands that existed in Minnesota prior to and at the time of European settlement.

**Primary skid trail:** An arterial route used by skidders or forwarders to haul trees and logs to the landing. Primary skid trails are heavily traveled routes which are fed by a system of secondary skid trails of less frequent travel. Primary skid trails are typically traversed 10 or more times by heavy equipment.

**Puddles:** Depressions in the soil surface where water pools during wet periods. A puddle will not have a noticeable difference in forest litter compared to the surrounding area.

**Raking:** A mechanical method of removing stumps, roots and slash from a future planting site.

**Reserve area:** A portion of the management area set aside for a special purpose or use or to protect specific resources.

**Residuals:** Trees selected to remain on the site to provide present and future benefits.

**Rhizome:** A rootlike, usually horizontal stem growing under or along the ground, sending out roots from its lower surface and leaves or shoots from its upper surface.

**Riparian area:** The area of land and water forming a transition from aquatic to terrestrial ecosystems along streams, lakes and open water wetlands.

**Riparian management zone (RMZ):** That portion of the riparian area where site conditions and landowner objectives are used to determine management activities that address riparian resource needs. It is the area where riparian guidelines apply.

**Riprap:** A layer of boulders or rock fragments placed over soil to protect it from the erosive forces of flowing water.

**Rotation age:** The number of years between the formation or regeneration of an individual tree, crop or stand and its final cutting or demise.

**Runoff:** In forest areas, that portion of precipitation that flows across a drainage area on the land surface and in open channels.

**Ruts:** Depressions made by the tires of such vehicles as skidders, log trucks and pickup trucks, usually under wet conditions.

**Rutting:** The creation of depressions made by the tires of such vehicles as skidders, log trucks and pickup trucks, usually under wet conditions.

**Scarification:** The process of removing the forest floor or mixing it with the mineral soil by mechanical action preparatory to natural or direct seeding or the planting of tree seedlings.

**Seasonal road:** A permanent road designed for long-term periodic use, such as during dry and frozen periods. Seasonal roads are built to lower engineering standards and have minimal material surfacing.

**Seasonal ponds:** Sometimes called *vernal pools*, seasonal ponds are depressions in the soil surface where water pools during wet periods of the year, typically in spring (vernal) and fall (autumnal). A pond will have an identifiable edge caused by annual flooding and local topography. The edge is best identified during the spring or fall, but it may be identified during dry periods by the lack of forest litter in the depression. Such depressions typically are fishless and retain water for longer periods than puddles. (*Note:* The leaf litter is replenished annually but is consumed during inundated periods and noticeably depleted thereafter. Deciduous litter will likely be consumed faster and more thoroughly than conifer litter.)

**Secondary skid trail:** A skidding route used to haul felled trees or logs from the back portions of a site to the secondary skid trails. Secondary skid trails branch out from a primary skid trail and are less heavily traveled. Secondary skid trails are traversed from 3 to 10 times by heavy equipment.

**Sedge/grass/shrub forest:** An area adjacent to a stream, lake or open water wetland that is covered by grasslike sedges or shrubs and where soils are wet. The depth to the water table in these areas averages less than 6 inches. Depending on the site and ecological history, dominant plant species are alders, willows, sedges, grasses or mosses.

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**Seeps and seepage wetlands:** Small wetlands (often less than an acre or two) that generally occur where ground water comes to the surface. Soils at these sites remain saturated for some portion or all of the growing season and often stay wet throughout the winter.

**Sediment:** Solid material in suspension, being transported, or moved from its original location by air, water, gravity or ice.

**Sensitive communities:** Those communities that are sensitive to disturbance, including some kinds of forest management activities. Minimizing levels of disturbance is often critical to their well-being. Sensitivity may be linked to human activity, disruption of water flowage, alteration of stand structure or composition, or some other factor. Sensitive communities include certain native plant communities (sometimes referred to as natural communities), such as seepage swamps and calcareous fens.

**Sensitive sites:** Those sites that are sensitive to disturbance, including some kinds of forest management activities. Minimizing levels of disturbance is often critical to their well-being. Sensitivity may be linked to human activity, disruption of water flowage, alteration of stand structure or composition, or some other factor. Some examples of sensitive sites include colonial waterbird tree-nesting sites and overwintering cover for rattlesnakes.

**Shade tolerance:** The capacity of a plant to grow under low light conditions, typically caused by canopy shading.

**Shearing:** The operation of cutting off trees and brush at ground level by pushing a bulldozer blade along the frozen surface in winter.

**State Historic Preservation Office (SHPO):** A branch of the Minnesota Historical Society that administers the National Register program for Minnesota, maintains cultural resource inventories, and conducts project reviews required under federal law.

**Silt curtain:** Filter fabric weighted at the bottom and attached to a flotation device at the top. A silt curtain is used to isolate an active construction area within a lake or wetland and prevent silt-laden water from migrating out of the construction zone.

**Silt fence:** A temporary barrier made of geotextile and installed to prevent the off-site movement of silt material.

**Silviculture:** The scientific management of forest trees.

**Site:** An area evaluated as to its capacity to produce a particular forest or other vegetation based on the combination of biological, climatic and soil factors present.

**Site preparation:** The practice of altering site conditions to favor the establishment, survival and growth of a desired tree species.

**Skid trail:** A temporary pathway over forest soil to haul forest products to a landing.

**Skidding:** The act of moving trees from the site of felling to a loading area or landing.

**Slash:** All residual woody material created by logging or timber stand improvement.

**Slope:** Degree of deviation of a surface from the horizontal, measured as a numerical ratio, as a percentage or in degrees.

**Snag:** A standing dead tree.

**Soft mast:** Fruits, berries, catkins and flower buds produced by a wide variety of early successional species (such as raspberries). In later forest successional stages, soft mast is produced by shade-tolerant understory shrubs.

**Soil compaction:** The increase in soil density resulting from loads applied to the soil surface.

**Soil productivity:** The capacity of soil, in its normal environment, to support plant growth.

**Solubility:** The ability of a pesticide to dissolve in water or other solvents. The greater the solubility in water, the greater the chance that the pesticide will leach to ground water or move in solution to surface water.

**Special concern species:** A species that, although not endangered or threatened, is extremely uncommon in Minnesota or has unique or highly specific habitat requirements. Special concern species may include 1) species on the periphery of their range in Minnesota, but not listed as threatened or endangered; and 2) species that were once threatened or endangered but now have increasing, protected or stable populations.

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**Stand:** A community of trees possessing sufficient uniformity in composition, age, arrangement or condition.

**Stream:** Watercourse with a definable bank, including intermittent streams with or without water (even if dry). Stream width is estimated at the bankfull elevation at the narrowest portion of a straight channel segment within the management area.

**Super canopy tree:** Usually a mature or overmature tree, whose crown is at least 25% taller than the majority of the dominant/codominant trees in the stand. (*Dominant tree:* A tree whose crown extends above the general level of the main canopy of even-age stands or, in uneven-age stands, above the crowns of the tree's immediate neighbors and receiving full sunlight from above and partial light from the sides. *Codominant tree:* A tree whose crown helps to form the general level of the main canopy in even-age stands or, in uneven-age stands, the main canopy of the tree's immediate neighbors, receiving full sunlight from above and comparatively little from the sides.)

**Surface soil horizons:** The uppermost part of the soil (typically 3-4 inches) dominated by organic matter accumulation and including the organic "O" horizon and the mineral "A" horizon.

**Sustainability:** Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

**Sustainable forest management:** Development, protection and use of forest resources for achievement of economic and social well-being without damaging the forest resource base or compromising the ability of future generations to meet their own needs.

**Swamp forest:** An area adjacent to a stream, lake or open water wetland where the depth to the water table is between 6 and 18 inches and the soils are wet. Depending on the site and ecological history, dominant tree species are black spruce, tamarack, northern white cedar or black ash.

**Temporary road:** Generally a minimum-standard road designed for short-term use during a specific project, such as a timber harvest. Use of temporary roads is typically limited to dry or frozen conditions to minimize rutting and compaction.

**Threatened species:** A species likely to become endangered in the foreseeable future throughout all or a significant portion of its range.

**Timber harvesting:** The felling, skidding, processing, loading and transporting of forest products, roundwood or logs.

**Timber stand improvement:** Forest management practices intended to either improve growth and form of intended crop trees or manipulate stand composition.

**Toxicity:** A measure of the capacity of a pesticide to cause injury.

**Traditional use area:** A location which has been historically used by one or more groups of people for some type of activity, very often related to the vegetation of the area. Examples include sugar bushes, wild rice beds, and locations where people carry out religious and social activities or gather resources for craftwork or medicinal purposes.

**Trout lakes:** Those lakes which are designated through rule-making. The lakes designated by rule are specified by legal description (township, range and section).

**Trout streams:** Those streams and their associated tributaries which are designated through rule-making. The portions of the streams designated by rule are specified by legal description (township, range and section).

**Turnout:** A widened space in a road that allows vehicles to pass one another and slopes away (downhill) from the road.

**Understory:** Any plants growing under the canopy formed by others; particularly, herbaceous and shrub vegetation under a brush-wood or tree canopy.

**Uneven-age management:** A planned sequence of treatments designed to maintain and regenerate a stand with three or more age classes. All age classes could be represented.

**Upland forest:** An area adjacent to a stream, lake or open water wetland where the depth to the water table is at least 1.5 feet and soil moisture ranges from moist to dry. Depending on the site and ecological history, dominant tree species are aspen, birch, jack pine, red pine, balm o'Gilead, red oak, bur oak, white oak, maple/basswood, balsam fir, ash/elm/cottonwood, red maple or white spruce.

**Values:** The characteristics of the forest that are beneficial to society, including protection of functions, public recreation and commercial uses.

**Vernal pools:** See *seasonal ponds*.

**Vertical structure:** The diversity of above-ground vegetative layers in the vertical profile of a stand.

**Visual quality:** A subjective measure of the impact that viewing an object, landscape or activity has on a person's perception of attractiveness.

**Volatilization:** Conversion of a solid or liquid to a gas.

**Water bar:** A ditch and hump across a trail or road tied into the uphill side for the purpose of carrying water runoff into vegetation, duff, ditch or dispersion area so that it does not gain the velocity and volume which causes soil movement and erosion.

**Watercourse:** Any channel having a definable bed and banks capable of conducting generally confined runoff from adjacent lands. During floods, water may leave the confining beds and banks, but, under low and normal flows, water is confined within the channel. A watercourse may be perennial or intermittent.

**Water quality:** The chemical, physical and biological characteristics of water, usually in respect to its suitability for a particular purpose.

**Water table:** The upper surface of the ground water, generally referred to in terms of linear depth below the soil surface.

**Watershed:** The surrounding land area that drains into a lake, river or river system.

**Wetland inclusion:** Wetland basin within an upland site.

**Wetlands:** Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by shallow water. Wetlands must have the following three attributes:

- 1) A predominance of hydric soils (soils that result from wet conditions)
- 2) Inundation or saturation by surface water or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation (plants adapted to wet conditions)
- 3) Under normal circumstances, a prevalence of hydrophytic vegetation

**Wildfire:** Uncontrolled fire occurring in forest land, brushland and grassland.

**Wildlife:** All forms of life that are wild, including plants, animals and microorganisms.

**Windfirm:** The ability of a tree to withstand strong winds and resist windthrow (blowdown) and major breakage.

**Windrow:** Slash, residue and debris raked together into piles or rows.

**Windthrow:** A tree or trees uprooted by the wind. Also known as blowdown timber.

