The UK Forestry Standard

The governments' approach to sustainable forestry



Scottish

Forestry

na h-Alba

Coilltearachd



Cyfoeth Naturiol Cymru Natural Resources Wales



Glossary

- Access management plan Part of a forest plan used to channel and zone the recreational use of a forest. It should aim to ensure activities do not conflict with each other, facilities are used to best effect, visitors are not put at risk by forest operations and the forest environment and wildlife are protected.
- Acid deposition The process by which acid pollutants, primarily sulphur and nitrogen compounds derived in part from the combustion of fossil fuels, deposit from the atmosphere to the ground. This can be in particulate form as aerosols or gases (dry deposition), or through indirect input in aqueous solution or suspension, as rain and snow (wet deposition) or cloud water (occult deposition).
- Acidification A continuing loss of acid neutralising capacity manifested by increasing hydrogen ion concentrations and/or declining alkalinity; the term may be applied to a catchment, water or soils.
- Adaptation Initiatives and measures to reduce the vulnerability of natural and human systems to actual or expected climate change effects. In this context, it means initiatives and measures to reduce the vulnerability of forests to climate change as well as using forests to reduce the vulnerability of society.
- Adaptive management A systematic process for continually improving management policies and practices by learning from the outcomes of operational programmes.
- Afforestation The process of establishing a new forest on land that was not previously forest or land which has not been forest in the recent past.
- Ancient semi-natural woodland (ASNW) Ancient woodland composed of mainly locally native trees and shrubs that derive from natural seedfall or coppice rather than from planting. ASNW generally has the greatest level of woodland biodiversity.
- Ancient woodland Woodland that has been in continuous existence since before AD 1600 in England, Wales and Northern Ireland, and before AD 1750 in Scotland. The term ancient woodland site refers to the site of an ancient woodland irrespective of its current tree cover. Where the native tree cover has been felled and replaced by planting of tree species not native to the site it is referred to as a Plantation on Ancient Woodland Site (PAWS).
- Anticipatory (or proactive) adaptation Adaptation that takes place before impacts of climate change are observed.
- Area of Special Scientific Interest (ASSI) An area or site designated in part IV of the Environment (Northern Ireland) Order 2002 as having special scientific interest.
- **Baseflow** Sustained run-off consisting largely of groundwater. At times of peak river flow, baseflow forms only a small proportion of the total flow, but in periods of drought it may represent nearly 100%, often allowing a stream or river to flow even when no rain has fallen for some time.
- **Bioaccumulation** The gradual accumulation of substances, such as plastics, in an organism.
- **Biodiversity** The variety of plant and animal life (species), including genetic variation within species.

- **Biofuels** Fuels derived from biomass (plant matter) rather than fossil fuels (coal, oil or gas).
- **Biosecurity** A set of measures designed to prevent the introduction and spread of harmful organisms or diseases.
- **Brash** The residue of branches, leaves and tops of trees, sometimes called 'lop and top', usually left on site following harvesting.
- **Brash mats** Brash (mainly cut branches) laid along the route where forestry machinery will be driving to spread the load and reduce soil damage.
- **Brown earth** A well-drained soil of high nutrient status, with a brown humus-rich surface layer.
- **Brownfield (sites)** Land or sites that have been used in the past for industrial activity or development; sometimes abandoned, underused or contaminated by past activities. When work is required to restore them to useful purposes they are also known as derelict land. However, these sites can be or include heritage features and this should be taken into account when change is considered.
- Buffer area An area of land that protects the watercourse or heritage feature from activities on the adjacent land, such as by intercepting polluted run-off. The buffer area will usually include the riparian zone and may extend into adjacent land. For heritage features, the buffer area will normally be an unplanted area maintained as open ground.
- **Carbon sequestration (or capture or uptake)** The accumulation of carbon in the forest reservoir. Over the lifetime of a forest stand, there is a net accumulation of carbon in the forest up until the point when equilibrium is reached. Thus, the quantity of carbon accumulated is finite. The process is also reversible, and carbon can be returned to the atmosphere through dieback, decay, the burning of wood or disturbance to the soil.
- **Carbon storage** The act of storing carbon, for a finite period, in a component of the earth system, or a carbon pool. Examples of carbon pools include trees, deadwood, litter and soil, as well as harvested wood products which retain carbon during their use.
- **Certification** A voluntary scheme or standard that establishes a forest management standard together with an auditing system to verify compliance. Forestry certification schemes are owned by international non-governmental organisations and exist to promote good forestry practice. They offer product labels to demonstrate that wood or wood products emanate from well-managed forests.
- **Clearfelling** The cutting down of an area of forest (or typically felling an area greater than 0.25 hectares in a larger area of forest). Sometimes a scatter or small clumps of trees may be left standing within the felled area.
- **Colonisation** Occupation of previously unwooded sites by selfsown trees or the development of woodland on previously unwooded sites.
- **Compaction** The compression of soil leading to reduced pore space, usually due to the weight of heavy machinery. Compacted soils become less able to absorb and transmit rainfall, thus increasing run-off and erosion.

- **Compliance** Acting in accordance with something, particularly in accordance with the law. In the context of this standard, the term 'compliance' refers to meeting the requirements of the UKFS.
- **Connectivity** A key characteristic in the landscape contributing to character, resilience and natural beauty/scenic quality.
- Conservation management (historic environment) Any work that aims to protect a heritage feature from damage, improve its condition or increase our understanding. This may involve the development of a conservation management plan, creating a measured survey or record, or monitoring and improving its condition, such as by undertaking general vegetation management. Simple conservation management usually involves identification, avoidance and protection. Active conservation management, such as vegetation management, aims to slow decay, but in some cases more complex work or structural consolidation may be required.
- **Contingency plan** A plan of action to address potential threats to the forest arising from accidents, unexpected or unplanned events such as spillages, pollution, pest attack or wind damage.
- **Continuous cover forestry** An approach to forest management in which a range of silvicultural systems are used to maintain the forest canopy at one or more levels without clearfelling.
- **Controlled water** All streams, rivers, lakes, groundwaters, estuaries and coastal waters to three nautical miles from the shore.
- **Coppice** An area of woodland in which the trees or shrubs are periodically cut back to ground level to stimulate growth and provide wood products. *See also* Short rotation coppice (SRC).
- **Copse** A small, wooded area historically used for small-wood production, often through coppicing.
- **Coupe** An area of forest that is managed as a unit for forest operation purposes such as clearfelling or thinning.
- **Critical load (of acidity)** The highest deposition of acidifying compounds that will not cause chemical changes leading to long-term harmful effects on the ecosystem structure and function.
- **Cultivation** Any method of soil disturbance to aid the establishment of trees.
- **Cultural significance** Conservation decisions should be based on a basic assessment of cultural significance that considers a range of different values, such as rarity, condition and group value.
- **Cultural value** The weighting or worth attributed to the arts, customs, intellectual achievements, history and institutions of a nation, people, community or group.
- Deadwood All types of wood that are dead, including whole or wind-snapped standing trees, fallen branch wood and stumps, decaying wood habitats on living trees such as rot holes, dead limbs, decay columns in trunks and limbs, and wood below the ground as roots or stumps. Deadwood of native species that exceeds 200 mm diameter and is associated with sites of high ecological value contributes the most to biodiversity.
- **Design plan** The part of a forest management plan that predominantly addresses landscape and visual aspects.

- Designated heritage asset Comprising World Heritage Sites, Scheduled Monuments, listed buildings, registered battlefields, registered parks and gardens and Conservation Areas. Designated heritage assets should be considered for active conservation management.
- **Designed landscape** A pleasure ground, park or large garden laid out with the primary purpose of creating an aesthetically pleasing scene or sequence of vistas.
- Diffuse pollution Pollution arising from land-use activities (urban and rural) that are dispersed across a catchment. These are distinct from 'point' sources of pollution associated with discharges of industrial wastes, municipal sewage, and deep mine or farm effluent.
- Duty of care A legal, contractual or moral obligation, depending on circumstances. The obligation is to ensure that reasonable measures are taken to ensure that individuals will be safe when they participate in a forest-based activity.
- **Ecological connectivity** Linkages between habitats, facilitating the movement of species.
- **Ecosystem** The interaction of communities of plants and animals (including humans) with each other and the non-living environment. Ecosystems are considered to be 'in balance' when they remain stable over the long term (hundreds of years in the case of woodland).
- Ecosystem services The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other non-material benefits.
- **Enclosure** An area of land defined by a boundary such as a fence, wall, hedge or woodland belt. The enclosure pattern is the distribution of such boundaries in a tract of landscape. A sense of enclosure is the degree to which views or spaces are limited by surrounding landscape elements.
- **Energy crops** Crops grown to provide energy for heating or the production of electricity. In forestry these are usually fast-growing species. *See also* Short rotation coppice (SRC) *and* Short rotation forestry (SRF).
- Environmental Impact Assessment (EIA) The process and documentation associated with a statutory requirement to ensure that environmental consequences of projects are evaluated and public opinion is taken into account before authorisation is given.
- Environmental Statement/Report A statement or report of environmental effects that is required where an Environmental Impact Assessment is called for.
- **Establishment (period)** The formative period which ends after young trees are of sufficient size so that, given adequate protection, they are likely to survive as woodland at the required stocking density.
- Eutrophication See Nutrient enrichment.
- **Fertility** The availability and balance of nutrients required for plant growth.
- Field pattern See Enclosure.

- Forest Land predominately covered in trees (defined as land that is under stands of trees with a canopy cover of at least 20%), whether in large tracts (generally called forests) or smaller areas known by a variety of terms (including woods, copses, spinneys or shelterbelts).
- Forest carbon stock The sum of all the carbon in the forest ecosystem at a given point in time, including the whole tree, leaf litter and the forest soil.

Forest certification See Certification.

- Forest infrastructure Structure and facilities practice of forestry such as roads, tracks, stacking and landing areas, and buildings.
- Forest (or woodland) management plan A plan that states the objectives of management together with details of forestry proposals over the next five years and outlines intentions over a minimum total period of 10 years. Forest plans allow managers to communicate proposals and demonstrate that relevant elements of sustainable forest management have been addressed, and can be used to authorise thinning, felling and other management operations.
- Forest management unit (FMU) A convenient management area determined by the nature of the forest, the management objectives and proposed operations, and which is subject to a forest management plan or proposal. Extensive FMUs allow a strategic approach to be taken to meeting UKFS Requirements and Guidelines. The term is synonymous with a Woodland Management Unit (WMU).
- Forest potential The capability of a forest area to produce goods and services within the limits of sustainability. *See also* Sustainable forest management.
- Forestry authority Government departments in England, Scotland, Wales and Northern Ireland responsible for regulating forestry activity in that country.
- Forestry operations Work or procedures carried out within a forest such as felling, extraction, cultivation and planting.
- **Gley** A soil that is permanently or periodically waterlogged, lacking oxygen and characterised by its blue-grey colours, often mottled with orange-red.
- Greenhouse gases (GHGs) Gases in the atmosphere, both natural and man-made, that absorb and emit thermal infrared radiation emitted by the Earth's surface, the atmosphere itself and clouds. The primary greenhouse gases are water vapour (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and ozone (O₃).
- **Groundwater** All water that is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil. This zone is commonly referred to as an aquifer, which is a subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow a significant flow of groundwater or the abstraction of significant quantities of groundwater.
- Habitat (or Herbivore) Impact Assessment A Habitat (or Herbivore) Impact Assessment (HIA) can be used to establish a baseline and then to monitor and record changes in impacts (generally by herbivores) over time. An HIA makes it easier to monitor whether an impact mitigation effort is sufficient to enable land management objectives to be achieved.

- Heritage feature The majority of heritage features are archaeological sites, where the cultural significance predominantly lies in its material fabric (both above ground as earthwork or masonry, and below ground as buried archaeological remains). The appropriate management regime for a heritage feature is usually protection as part of simple conservation management, although significant heritage features may require or warrant more active or complex conservation management.
- Historic environment All aspects of the environment resulting from the interaction between people and places through time, including the surviving physical remains of past human activity, whether visible, buried or submerged, and including designed landscapes and planted or managed flora.
- Historic Environment Record Many national and local historic environment services maintain a register of all the known archaeological sites in their area, generally known as a Historic Environment Record (HER). Only a small proportion of these sites are protected as Scheduled Monuments or listed as being of special architectural or historic interest, but many other recorded sites merit protection for their regional or local importance. HERs represent the major information source for understanding the historic environment. The inclusion of a site on an HER gives it formal recognition in the planning process and local planning authorities take account of this in drawing up development plans and reaching planning decisions.
- Historic landscape The wider context of historic land use and character beyond individual heritage features and historic buildings. Historic landscapes vary from individual ancient woodlands and designed parks and gardens to entire landscapes with distinctive or unique characteristics.
- **Hydromorphology** The physical characteristics of the shape, the boundaries and the content of a water body.

Infiltration The entry of water into soil.

- Integrated design The comprehensive, holistic approach to forest design that brings together specialisms often considered separately. It applies to the UKFS elements of sustainable forest management and enables efficient working through the integrated, spatially defined design process considering landscape context and applying the design principles.
- **Interception** The evaporation of rainwater from the wetted surfaces of leaves, branches and tree trunks, resulting in less water reaching the ground.
- Invasive species Any animal or plant that has the ability to spread, causing damage to the environment, the economy, our health or the way we live. Many invasive species are not native or locally native (called invasive non-native species).
- **Ironpan** A soil with a hardened impervious layer, in which iron oxides are the chief cementing agents that impair drainage and plant growth.
- ISO 14001 An international standard for environmental management systems developed by the International Organization for Standardization (ISO). ISO 14001 does not set specific performance targets, other than legal compliance,

and therefore sector-specific performance targets can be linked with the standard.

Landform The three-dimensional shape of the land or terrain.

- Landscape An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.
- Landscape character The distinct and recognisable pattern of elements that occur consistently in a particular type of landscape and combine to describe its essential nature.
- Landscape Character Assessment (LCA) The process of systematic description, classification and analysis of landscape in order to identify, describe and understand its character. The scale and detail of the assessment will depend upon the purpose for which it is being undertaken.
- Landscape characteristics Repeated and consistent patterns of natural components and human elements that recur across a landscape. The most persistent, dominant and influential are key characteristics.
- Landscape context The relevant circumstances pertaining to the site, situation and local area; in landscape these will include the landscape character, sensitivity, distinctiveness, and historic and cultural significance.
- Landscape function The capacity of the landscape to provide goods and services to society; the term is comparable in certain respects to the concept of ecosystem function.
- Landscape sensitivity The degree to which specific types of land-use changes or development affect the character and qualities of the landscape. Sensitivity depends upon the type, nature and magnitude of the proposed change and the characteristics of the host landscape. High sensitivity indicates landscapes are vulnerable to the change; low sensitivity that they are more able to accommodate the change and that key characteristics of the landscape will essentially remain unaltered.
- LiDAR (Light Detection And Ranging) This remote sensing technique uses airborne lasers to record and map the landscape below.
- Low impact silvicultural system (LISS) A forest management system, such as continuous cover forestry, that encourages structural and species diversity and evolutionary adaptation by promoting natural regeneration.
- Main river Designated stretches of river in England and Wales where the Environment Agency or Natural Resources Wales have permissive powers for flood defence purposes to construct and maintain defences and to control the actions of others through byelaws and the issuing of consents.
- Mineralisation The production of inorganic ions such as nitrate in the soil by the oxidation of organic compounds.
- Minimum intervention Management with only the basic inputs required to protect the forest from external forces or to ensure succession of key habitats and species.
- Mitigation (climate change) A human intervention to reduce the sources or enhance the sinks of greenhouse gases; in a forestry context, establishing and managing forests and their products to enhance their potential as a 'sink' of greenhouse gases.

- **Mounding** The process of forming a small mound on which to plant a tree, thus increasing the aerobic zone of soil and maximising root extension. Hinge mounding is where an excavator scoops out and inverts a mound of soil with one edge of turf remaining intact.
- National Scenic Area (NSA) A conservation designation used in Scotland for areas of outstanding scenic value in a national context.
- Native species Species that have arrived and inhabited an area naturally, without deliberate assistance by humans. For trees and shrubs in the UK, this is usually taken to mean those present after post-glacial recolonisation and before historical times. Some species are only native in particular regions. Differences in characteristics and adaptation to conditions occur more locally – hence 'locally native'.
- Native wood(land) A wood mainly or entirely composed of native species, and including ancient woodland.
- Natural regeneration Plants growing on a site as a result of natural seedfall or suckering. The term is also used to describe the silvicultural practices used to encourage natural seeding and establishment.
- Nitrate leaching The removal of nitrate in solution from the soil via water movement, with the potential to contaminate surface water and groundwater.
- Nitrate Vulnerable Zones (NVZs) Designated areas of land designed to protect waters against nitrate pollution from agriculture.
- Nutrient enrichment (eutrophication) Excessive richness of nutrients in waters or soils that results in adverse effects on the diversity of the biological system, the quality of the water and the uses to which the water may be put.
- **Open space/ground** Areas within a forest without trees, such as glades, stream sides, grass or heathland, water bodies, rocky areas, roads and rides.
- **Operational plan** The operational details of how planned work will be implemented at site level within the framework of a forest management plan. May also be called a site plan.
- **Organic matter** The organic fraction of the soil exclusive of undecayed plant and animal residues.

Organo-mineral (peaty) soil Soil with a peat topsoil (i.e. containing more than 20% organic matter) that is less than the depth of deep peat, as defined in each country.

- **Origin** The geographic locality within the natural range of a species where the parent seed source or its wild ancestors grew.
- **Peat** A largely organic substrate consisting of partly decomposed plant material forming a deposit on acidic, boggy ground.
- **Permissive (use)** Use by permission, whether written or implied, rather than by legal right.
- Pesticide Any substance, preparation or organism prepared or used, among other uses, to protect plants or wood or other plant products from harmful organisms, to regulate the growth of plants, to give protection against harmful creatures or to render such creatures harmless.
- **pH** A logarithmic index for the hydrogen ion concentration in an aqueous solution, used as a measure of acidity. A pH below 7

is considered to be acidic and a pH above 7 is considered to be alkaline.

- **Planning gain** Provision by a developer to include in a proposal those projects that are beneficial to a community in exchange for permission for a commercially promising but potentially unacceptable development.
- **Plantation** An area that has been intentionally planted with trees; usually more recent sites and can include commercial timberproducing plantations using non-native trees, as well as new native woods planted for wildlife and carbon capture.
- Plantation on Ancient Woodland Site (PAWS) Planted forests of native or non-native tree species that have replaced the original 'natural' woods on sites with a long history of woodland cover. *See* Ancient woodland.
- **Podzol** An infertile or low nutrient status acidic soil with an ash-like subsurface layer (from which minerals have been leached) and a lower dark stratum, where organic carbon has accumulated, occurring typically under heathland and some temperate coniferous forests.
- **Pollard/pollarded tree** A tree cut 2–4 m above ground level, managed to produce a crop of branches that can be harvested in subsequent years.
- **Priority habitat or species** Habitats and species that have been listed as priorities for conservation action in biodiversity strategies.
- **Productivity (of a forest)** The capacity to produce forest goods and ecosystem services.
- Protected habitat or species Habitats or species protected by law including UK and country wildlife; countryside and conservation legislation provides protection for special sites and listed species.
- **Provenance** Location of trees from which seeds or cuttings are collected. Designation of Regions of Provenance under the Forest Reproductive Material Regulations is used to help nurseries and growers select suitable material. The term should not be confused with 'origin', which is the original natural genetic source.
- **Regeneration** The regrowth of a forest through sowing, planting or natural regeneration, or regrowth following coppicing.
- **Resilience** The ability of a social or ecological system to resist or absorb disturbances while retaining the same basic structure and ecosystem provision, by having the capacity for selforganisation and the capacity to adapt to stress and change while providing the same services.
- **Restocking (or regeneration)** Replacing felled areas by sowing seed, planting, or allowing or facilitating natural regeneration.
- **Restructuring** Diversifying the distribution of age classes of a forest, usually by advancing felling in some areas and retarding it in others. Restructuring is usually associated with wider measures to redesign a forest as part of a forest management plan.
- Ride Open space used to separate forest areas and provide an access route.
- **Riparian** Relating to, or situated adjacent to, a watercourse or water body.

- **River basin** The area of land from which all precipitation eventually drains to the sea at a single river mouth or estuary, through a sequence of streams, rivers and lakes.
- **River Basin Management Plan** A detailed document describing the characteristics of the basin, the environmental objectives that need to be achieved and the pollution control measures required to achieve these objectives through a specified programme of work.
- **River morphology** The term used to describe the shapes of river channels and how they change over time due to sedimentation and erosion processes.
- Rotation The period required to establish and grow trees to a specified size, product or condition of maturity. The period varies widely according to species and end use.
- Rutting (vehicle) Making deep tracks in the ground by the repeated passage of the wheels of vehicles.
- **Scarify** A method of shallow cultivation designed to create suitable positions for tree planting or a seedbed for natural regeneration.
- Scheduled Monument A monument or area of archaeological remains of national importance that is entered into a schedule maintained by the Secretary of State under the relevant legislation and is subject to legal protection under that legislation.
- Semi-natural woodland Woodland composed of mainly locally native trees and shrubs that derive from natural seedfall or coppice rather than from planting and include a range of age classes and deadwood and a representative native woodland ground flora.
- Setting (historic environment) The surroundings in which a heritage feature is experienced. Its extent is not fixed and may change as the heritage feature and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of a heritage feature and may affect the ability to appreciate that significance.
- Short rotation coppice (SRC) Trees (usually willow or poplar) typically grown as an energy crop and harvested at intervals of about three years.
- Short rotation forestry (SRF) The practice of growing single or multi-stemmed trees of fast-growing species on a reduced rotation length.
- Siltation Deposition of waterborne, mainly soil-derived, particles within a watercourse, other body of water, or wetland.
- Silviculture The growing and cultivation of trees, including techniques of tending and regenerating forests, and harvesting their physical products.
- Site of Special Scientific Interest (SSSI) A site in Great Britain, referred to as an Area of Special Scientific Interest (ASSI) in Northern Ireland, that is protected by law for nature or geological conservation.
- Site plan See Operational plan.
- Soil carbon Carbon stored within the soil; primarily associated with the organic component of soil, it can be classified into three main fractions: rapidly cycled carbon stored in microbial biomass and easily decomposed plant residues; slowly cycled stable carbon held through chemical and

physical processes for around a hundred years; and an inert or passive store that takes more than a thousand years to recycle.

- **Soil horizons** Individual layers of soil differing in colour, texture or composition.
- Soil structure The combination or arrangement of primary soil particles into secondary units. The secondary units are characterised on the basis of size, shape and grade (degree of distinctness).
- Source Protection Zone (SPZ) An area of land supplying groundwater to a well, borehole or spring for public supply that is designated by the competent authority as being at risk from potential polluting activities.
- **Spatial** How elements fit together and their relationships with each other. In landscape, how hills relate to valleys; how forestry relates to open ground.
- Species assemblages Collections of species making up any cooccurring community of organisms in a given habitat.
- **Species compartment** A geographically recognisable unit of forest land forming the basis for planning and management activities. In the UK, compartments are usually identified by species composition and planting year.
- **Stand** A discrete area of trees characterised by homogeneity in attributes such as yield class, age, condition, distribution and thinning history.
- Statutory body/bodies The authorities and bodies responsible for nature conservation (Natural England, NatureScot, Natural Resources Wales and Northern Ireland Environment Agency); environmental protection (Environment Agency in England, Natural Resources Wales, Scottish Environment Protection Agency and Northern Ireland Environment Agency); and the historic environment (Historic England, Historic Environment Scotland, CADW (historic environment service of the Welsh Government) and Northern Ireland Environment Agency).
- Structural consolidation (historic environment) Any repair or maintenance work that aims to maintain or improve the structural integrity of a heritage feature or historic building.
- **Structural diversity** The degree of physical variation in the elements of a forest, particularly the spatial distribution of trees, and vertical distribution of the canopy and other layers of vegetation.
- **Stump removal** Harvesting of the basal part of the tree that remains after felling of the stem or log.
- Substitution The use of wood products in place of other more energy-intensive materials such as concrete, metals and glass, or the use of wood as a fuel in place of fossil fuels such as coal, oil and gas.
- Sustainable forest management The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity and vitality, as well as their potential to fulfil, now and in the future, relevant ecological, economic and social functions at local, national and global levels, and that does not cause damage to other ecosystems.
- **Texture** The visual appearance of a surface due to the size, nature and density of surface elements, coarser textures having larger elements at wider spacing and finer textures

having smaller elements at closer spacing. In forestry, different ages and species of tree appear as different textures in the landscape.

- **Thinning** The removal of a proportion of trees in a forest after canopy closure to promote growth and greater value in the remaining trees.
- **Transpiration** The evaporation of water through the stomata on the surface of leaves.
- Veteran tree A tree of considerable age that is of interest biologically, culturally or aesthetically because of its age, size or condition, including the presence of deadwood micro-habitats.
- Visual sensitivity An attribute determined by the visibility of the landscape, the main views of the forest, by whom and how it is seen, the nature of the viewing experience and the value placed on the landscape. Cultural or historical associations all contribute to this value.
- Watercourse Any natural or man-made channel through which water flows continuously or intermittently.
- Wetlands Transitional areas between wet and dry environments, ranging from permanently or intermittently wet land to shallow water and water margins, and including marshes, swamps and bogs and the intertidal zone. When applied to surface waters, it is generally restricted to water shallow enough to allow the growth of rooted plants.
- Whole-tree harvesting The removal from a felled site of every part of the above-ground tree, except the stump.
- Wildness (wildland) A quality of the landscape, usually due to natural character, remoteness or lack of obvious human influence, experienced by people through such values as feeling close to nature and experiencing a sense of solitude.
- Windthrow (or windblow) Uprooting of trees by the wind.
- Wood pasture Areas of historical, cultural and ecological interest, where grazing is managed in combination with a proportion of open tree canopy cover.
- **Woodfuel** Wood used as a fuel, available in various forms such as logs, charcoal, chips, pellets or sawdust.
- Woodland heritage Veteran trees and evidence of previous woodland management can be of interest biologically, culturally or aesthetically, and can include the presence of valuable micro-habitats such as deadwood and soil biodiversity. In particular, veteran pine and oak trees can help dendrochronologists build regional reference chronologies.
- Woodland management unit (WMU) A convenient management area determined by the nature of the forest/ woodland, the management objectives and proposed operations, and which is subject to a forest management plan or proposal. Extensive WMUs allow a strategic approach to be taken to meeting UKFS Requirements and Guidelines. The term is synonymous with Forest Woodland Management Unit (FMU).

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