

The meaning of 'tree'

This is the first in a series of articles on the meaning of terms we use or hear a lot, but that are often taken for granted.

Philip Wilson looked into the meaning of over 3000 terms relating to arboriculture for the compilation of his book, A–Z of tree terms: A companion to British arboriculture, which is available on the AA's website and will also be on sale at the AA Conference in September. The terms, with abridged definitions, can be found at www.treeterms.co.uk.

A tree is: 'A perennial woody plant growing to a considerable height and size, with a self-supporting main stem and usually developing branches at some distance from the ground'. This definition, like many similar ones, has three main elements in general form: growing to a considerable height and size (tree size); a woody perennial (tree species); and having a self-supporting main stem usually developing branches at some distance from the ground (tree form).

This definition seems perfectly reasonable, yet the judge in *Bullock v. Secretary of State* 1980 40 P&CR 246 preferred: 'anything that ordinarily one would call a tree', and the case *Palm Developments Ltd v. Secretary of State for Communities and Local Government* 2009 EWHC 220 (admin) was precisely about what is or is not a tree in a specific context. Tree preservation orders protect trees but not shrubs, yet the difference is not

specified in the National Planning Practice Guidance.

Tree size

Size criteria are clear and unequivocal, and no doubt for that reason they are used in various legal thresholds for what a tree is.

The diameter of the trunk is usually preferred. Trees having statutory protection in conservation areas have a main-stem diameter of at least 7.5cm, while those requiring the issue of a felling licence have a minimum diameter at breast height of 8cm, 10cm or 15cm depending on circumstances. BS 5837 (2012) has a threshold at 15cm at which conservation value increases, while Lord Denning, in *Kent County Council v. Batchelor* 1976 33 P&CR 185, distinguished trees from saplings at 18–20cm.

Mitchell (1974) defined trees as having a mature height of at least 6m, while Lonsdale (1999) preferred 4m, and

the distinction between scrub and woodland in the National Vegetation Classification (Rodwell, 1991) is 5m.

Size criteria must include palms (Mitchell includes their close relative the cabbage tree, *Cordyline australis*), and since the palms belong to the Monocotyledoneae and so don't have true wood, it's then difficult not to include the ligneous tree ferns, cycads and bamboo. Size alone would also be unable to differentiate well between small trees and big shrubs, or to exclude the herbaceous banana and succulent saguaro cactus*.

The use of size criteria fails to take account of the context, which might include adverse site conditions (exposure, browsing etc.) or management that limits size, and also excludes young trees. Seedlings of whatever height were recognised as trees in the Palm Developments case in the context of a woodland tree preservation order, and minimum height is also undefined in the UK forestry statistics (FC, 2013).

Tree species

Even if trees are restricted to those perennial species having secondary thickening (i.e. true wood), there is no clear distinction between a tree species and other species because it cannot be said that any one species characteristically does or does not achieve tree size and tree form. For instance, individuals of Portugal laurel and hazel are usually seen as shrubs but sometimes attain tree size and form if grown on a sufficiently favourable site, while species usually seen as trees may be shrubby on poor sites. The same kind of variation can be created by training and pruning.

Tree form

A tree usually has a more or less spreading crown supported some distance off the ground by a main stem, so that the crown is typically sparse or absent near ground level. It is reasonable to include multi-stems if the main stems are trunk-like relative to the rest of the plant, as in mature trees of coppice origin, and open-grown trees whose lower branches have subsided to the ground all round.



Tree size? A larch with a mature height of about 4m, stunted by exposure. Galashiels, Scotland.

*The saguaro cactus is native to the deserts of south-west North America. Apart from being non-ligneous it is surprisingly difficult to exclude from the definition of 'tree': it achieves tree size when mature (height 10m, main-stem diameter 50cm), has a trunk-like main stem, a crown of first-order branches and is furnished with leaves (albeit modified as spines).