

Identifying Ancient Trees

This guidance note provides further details on identifying ancient trees.

Definition of an Ancient (or Veteran) Tree

The FEP handbook describes ancient trees as:

Trees that are or look old relative to others of the same species. Characteristics include:

- Very large girth for the species.
- Hollow or hollowing trunk.
- A large quantity of dead wood in the canopy.

This definition also applies to dead trees and non-native species as they are important habitats for plants and animals and can be reminders of historic landscapes.

NB: The terms 'ancient tree' and 'veteran tree' are interchangeable for the purposes of the FEP.

What is a 'very large girth for the species' ?

The following table lists the minimum tree trunk girths and diameters that can be counted as "very large girth for the species" for a selection of tree species.

Tree Girth ¹ (minimum)	Diameter at Breast Height (dbh) ² (minimum)	Species
190 cm	60cm	Birch species, Hawthorn.
240 cm	75cm	Field maple, Rowan, Grey and Goat willow, Hornbeam, Holly, Cherry, Alder.
310 cm	100cm	Oak species, Ash Scot's pine, Yew, Elm species.
470 cm	150cm	Lime species, Sycamore, Horse chestnut, Poplar species, other Pine species, Beech, Sweet chestnut, White and Crack willows.

¹ The data in the table above is based on research carried for English Nature to help understand the relationship between the size of a tree and its ancient status. The data was collected as dbh but we have converted to girth to help non-specialists.

² Diameter at breast height (dbh) is the measurement commonly used by foresters to calculate timber volumes and is most easily recorded with a special girth tape which is calibrated to show dbh.

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How do I measure the girth of a tree ?

The girth or diameter of a tree trunk is normally measured at 1.3 metres above the ground and is known as breast height.

Drawbacks of using tree girth to identify Ancient Trees

Tree species grow to different sizes in different situations and conditions. In good growing conditions a tree may have a "very large girth" but not be ancient. Conversely, the girth can be restricted by poor growing conditions or by management, such as pollarding. The girth of some ancient trees (particularly pollarded oaks) may fall below the "very large girth" criteria. Therefore, please do not rely on girth measurements alone, but always make an assessment of whether the tree looks old and whether the other characteristics are present or not.

Other characteristics of Ancient Trees

There are other features which are typical of ancient trees and which add to their environmental interest. If these features are present then you can be more confident in identifying a tree as ancient.

- Girth large for the tree species concerned
- Major trunk cavities or progressive hollowing
- Large quantity of dead wood in the canopy
- Naturally forming water pools
- Decay holes
- Physical damage to trunk
- Bark loss
- Sap runs
- Crevices in the bark, under branches, or on the root plate sheltered from direct rainfall
- Fungal fruiting bodies (e.g. from heart rotting species)
- High number of interdependent wildlife species
- Epiphytic plants
- An 'old' look
- High aesthetic interest

In addition the tree may also:

- Have a pollard form or show indications of past management
- Have a cultural/historic value
- Be in a prominent position in the landscape

One of the difficulties of using these indicators of ancient status is that young trees which have been physically damaged eg by fire, can show these features whilst some ancients may exhibit very few.

Ancient Trees and Wood Pasture and Parkland

If the ancient trees are remnants of wood pasture or parkland then they should be recorded as 'T03 Wood pasture and parkland' in the FEP data sheet rather than 'T01 Ancient Trees' or 'T02 Mature Trees'. Ancient trees within woods do not need to be recorded in the FEP data sheet.

Other sources of information

English Nature have published a Veteran Tree Management Handbook (Read 2000) www.english-nature.org.uk/pubs/Handbooks/ which contains valuable additional information on how to identify veteran (or ancient trees) as well as in-depth information on their management.

Ancient tree guides no 1: trees and farming, produced by the Woodland Trust and Ancient Tree Forum. 8 pages Free www.ancient-tree-forum.org.uk Specific information on how best to look after trees in farmed landscapes.