

# **STANDING ADVICE FOR ANCIENT WOODLAND AND VETERAN TREES**

---

<b>Version:</b>	National Ancient Woodland and Veteran Tree Standing Advice covering England issued by Natural England and the Forestry Commission in April 2014 (replacing the previous version issued by Natural England for the south east of England).
<b>Issue Date:</b>	7 April 2014
<b>Next Review Date:</b>	6 April 2016 and then no later than every two years
<b>Local Planning Authorities to which this Standing Advice applies:</b>	All Borough, County, District, Unitary and National Park Authorities (exercising their function as Planning Authorities) in England
<b>Advice Reference:</b>	StAdv/AWVT/NE/Apr2014

# STANDING ADVICE FOR ANCIENT WOODLAND AND VETERAN TREES

## CONTENTS

---

	Page
1) <a href="#">Purpose and use of this Standing Advice</a>	3
2) <a href="#">Status of this Standing Advice</a>	4
3) <a href="#">Policy Framework</a>	4
<a href="#">National Planning Policy Framework</a>	4
<a href="#">National Planning Practice Guidance</a>	4
<a href="#">Keepers of Time</a>	4
4) <a href="#">What is ancient woodland?</a>	6
<a href="#">What is a veteran tree?</a>	7
<a href="#">The value of ancient woodland and veteran trees</a>	7
<a href="#">Identifying and locating ancient woodland - The Ancient Woodland Inventory</a>	8
5) <a href="#">Determining planning applications impacting on ancient woodland and veteran trees</a>	8
<a href="#">Decision flowchart</a>	8
6) <a href="#">Mitigation and compensation measures for development affecting ancient woodland and veteran trees</a>	10
<a href="#">Mitigation measures</a>	11
<a href="#">Compensation measures</a>	11
<a href="#">References</a>	12

## 1) Purpose and use of this Standing Advice

1.1 [Ancient woodland](#) is an irreplaceable resource of great importance for its wildlife, soils, recreation, cultural value, history and the contribution it makes to our diverse landscapes. It is a scarce resource, covering only 3% of England's land area. [Veteran trees](#) can be hundreds of years old, provide habitat for many different species and are a part of our landscape and cultural heritage. Local authorities have a vital role in ensuring the protection and conservation of ancient woodland and veteran trees, in particular through the planning system.

1.2 This Standing Advice is issued jointly by Natural England and the Forestry Commission. It provides advice which local planning authorities are advised to use in determining planning applications on or affecting ancient woodland and veteran trees. When consulted on proposals, Natural England and the Forestry Commission will refer planning authorities to this advice, although we may provide a more detailed bespoke response in certain circumstances, as set out below. Standing Advice is a material consideration in the determination of applications in the same way as a letter received from Natural England following consultation.

1.3 Natural England is a statutory consultee for development proposals affecting **all** Sites of Special Scientific Interest (SSSI) (including those SSSI's that are ancient woodland and/ or contain veteran trees). The Forestry Commission is a non-statutory consultee on ancient woodland sites, including proposals where any part of the development site is within 500m of an ancient woodland site and where the development would involve erecting new buildings or extending the footprint of existing buildings.

1.4 This advice is issued in accordance with:

- The [National Planning Policy Framework](#) (March 2012) and National Planning Practice Guidance (2014);
- Article 16 of the Town and Country Planning (Development Management Procedure) (England) Order 2010 SI 2010/2184 and any subsequent relevant amending Order; and,
- ODPM Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System.

1.5 Providing bespoke advice in addition to this standing advice:

1.5.1 Natural England must be consulted as a statutory consultee for proposals in or likely to affect ancient woodland or veteran trees that are part of a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), Special Area of Conservation (SAC) or Ramsar site. Natural England will provide bespoke advice in all cases where there is likely to be an impact on the interest features of an SSSI or other designated site.

1.5.2 When consulted on a planning application that may impact on ancient woodland or veteran trees not within a SSSI, SPA, SAC or Ramsar site, Natural England will direct planning authorities to this Standing Advice. We will only provide bespoke advice in exceptional circumstances.

1.5.3 For any proposal affecting ancient woodland – Local Authorities may also approach the Forestry Commission for advice as a non-statutory consultee. The Forestry Commission will refer to this Standing Advice and may provide bespoke advice in certain circumstances.

1.6 This Standing Advice only covers Natural England's and the Forestry Commission's advice on planning applications affecting ancient woodlands/ veteran trees. It does not provide specific advice on development plan policies relating to ancient woodland, although some of the advice set out may be useful. It does not relate to Natural England's advice on other natural environment issues or remove the need to consult Natural England on certain developments.

1.7 The Forestry Commission regulates tree felling under the Forestry Act (1967). Where tree felling is not immediately required for the development, for example felling immediately outside the boundary of the planning application to allow access, a felling licence may be needed. The Forestry Commission is the competent authority under the Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999. Local Authorities are the competent authority under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. The relationship between the two sets of regulations can be complex so you may need to seek further advice from the Forestry Commission regarding this issue.

## **2) Status of this Standing Advice**

2.1 In line with article 16 of the Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended), referral by a statutory consultee to current standing advice constitutes a substantive response to a consultation on a planning application and must be taken into account by the local planning authority in the determination of the application, in the same way as a letter received by the consultee.

2.2 When this Standing Advice is revised or withdrawn, Local Planning Authorities will be informed directly by e-mail or letter. Any new Standing Advice will be published by Natural England on their current website and the old Standing Advice removed.

## **3) Policy Framework**

The key policy documents for the protection and enhancement of ancient woodland and veteran trees are summarised below.

### **3.1 National Planning Policy Framework**

The National Planning Policy Framework (NPPF) (2012) is the key government policy document relating to planning decisions affecting ancient woodland. The importance of ancient woodlands as an irreplaceable habitat is set out in paragraph 118<sup>1</sup> of the NPPF, which states:

*'planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.'*

### **3.2 National Planning Practice Guidance (NPPG) (2014)**

The National Planning Practice Guidance sets out the Government's guidance to support the NPPF. The Natural Environment guidance includes guidance on ancient woodland and veteran trees. Planning authorities are advised to consult Natural England's Ancient Woodland Inventory to establish whether an area is [ancient woodland](#) and to consult the Forestry Commission on development proposals likely to affect ancient woodland. The guidance also states:

---

<sup>1</sup> CLG (2012)  
[Return to Contents](#)

*‘Both Ancient Semi-Natural Woodland (ASNW) as well as Plantations on Ancient Woodland Sites (PAWS) are ancient woodland. Both types should be treated equally in terms of the protection afforded to ancient woodland in the National Planning Policy Framework.’*

The Woodland Trust’s Ancient Tree Hunt dataset is currently the only record of the locations of some veteran trees and should also be referred to.

### 3.3 Keepers of Time

3.3.1 Keepers of Time (2005) is a statement of policy for England’s ancient and native woodland and veteran and ancient trees. It emphasises their value, evaluates threats and opportunities and sets out actions to improve their protection and quality.<sup>2</sup> The Government Forestry & Woodlands Policy Statement (2013)<sup>3</sup> confirms the Government’s commitment to Keepers of Time.

The document:

- provides a strong framework for ancient woodland protection and enhancement, stating that:  
*‘England’s ancient woodlands and trees represent a living cultural heritage, a natural equivalent to our great churches and castles. They are also our richest wildlife habitat and are highly valued by people as places of tranquillity and inspiration.’*
- sets out a vision that:  
*‘Ancient woodlands, veteran trees and other native woodlands are adequately protected, sustainably managed in a wider landscape context, and are providing a wide range of social, environmental and economic benefits to society.’*
- includes six policy statements for ancient woodland including that:  
*‘The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland.’*

3.3.2 Keepers of Time recognises a number of threats to ancient woodland, making specific reference to the threat posed by development pressures:

*‘There are still occasions where native and ancient woodland is threatened by development, and many woods suffer attrition through incursions at their boundaries. Even if the woodland itself is protected, it can suffer serious disturbance where houses or roads are built right up to its margins, both directly from the impact of development, or indirectly through changes to drainage.’*

3.3.3 Natural England and the Forestry Commission’s aims in relation to ancient woodland and veteran trees reflect the Government’s policy framework:

- Protection and maintenance of the ancient woodland resource as an irreplaceable biological and cultural asset;
- Improvement in the condition of our tree and woodland resource through sensitive sustainable management, including restoration of Plantations on Ancient Woodland Sites (PAWS) to native woodlands;
- Protection of veteran trees.

---

<sup>2</sup> Defra/ Forestry Commission (2005)

<sup>3</sup> Defra (2013) Government Forestry & Woodland Policy Statement

## 4) What is ancient woodland?

4.1 Ancient woodland in England is defined as an area that has been wooded continuously since at least 1600 AD<sup>4</sup>. If current woodland has been through a long phase in the last 400 years when the land was open and entirely cleared of trees, for example as grassland, heath, moor or arable, then the site is classed as recent woodland. It may still have high value for nature conservation, but it is not ancient woodland.

4.2 'Continuously wooded' in the above definition does not require there to have been a continuous physical cover of trees and shrubs across the entirety of a site. Open space, both temporary and permanent, is an important component of woodlands. Habitats such as glades, deer lawns, rides, ponds and streams, as well as gaps created by natural disturbance, and normal forestry such as tree-felling and coppicing may all occur within woodland and add to its diversity. Wood-pastures, even if there is only a thin scatter of trees, can be a distinct form of ancient woodland and may be included on the ancient woodland inventory.

4.3 In most, if not all ancient woods, the trees and shrubs have been cut down periodically as part of the management cycle. The time between the felling occurring and the tree canopy being re-established will vary depending on the management regime, and regrowth may be delayed by deer grazing or other factors. Provided that the area has remained as woodland, the stand is still considered ancient. Since it may have been cut over many times in the past, ancient woodland does not necessarily contain very old trees.

4.4 Ancient woodland includes both ancient semi-natural woodland and plantations on ancient woodland sites:

- **Ancient semi-natural woodland (ASNW)** is where the stands are composed predominantly of trees and shrubs native to the site that do not obviously originate from planting. However, woodlands with small planting of trees native to the site would still be included in this category. The stands may have been managed by coppicing or pollarding in the past or the tree and shrub layer may have grown up by natural regeneration.
- **Plantations on ancient woodland sites (PAWS, also known as ancient replanted woodland).** These are areas of ancient woodland where the former native tree cover has been felled and replaced by planted trees, predominantly of species not native to the site. These will include conifers such as Norway spruce or Corsican pine, and also non-native broadleaves such as sweet chestnut. These sites often retain some ancient woodland features such as soils, ground flora, fungi, and woodland archaeology – and they can respond well to restoration management.

4.5 As set out in the NPPG, both ASNW and PAWS are ancient woodland, and thus both types should be treated equally in terms of the protection afforded to ancient woodland in the NPPF.

4.6 Wood-pastures, often with populations of veteran trees, are typically associated with parks, areas of present or former common, upland grazed woods, and Royal Forests, or may be part of a Registered Parks and Garden. Many have not been included on the Ancient Woodland Inventory because their low tree density meant that they did not register as woodland on the historical maps consulted<sup>5</sup>. Where ancient wood-pastures are identified they should receive the same consideration as other forms of ancient woodland.

---

<sup>4</sup> Spencer & Kirby (1992)

<sup>5</sup> Ibid.

## 4.7 What is a veteran tree?

4.7.1 The most recent guidance on managing veteran trees<sup>6</sup> uses the definition of Owen and Aldermann<sup>7</sup> for 'Ancient Tree Hunt' verifiers:

- An ancient tree is one that has all or most of the following characteristics:
  - a) Biological, aesthetic or cultural interest, because of its great age (the biological interest is largely derived from the development of a diverse range of habitats associated with dead and decaying wood, which is largely an age-dependent process);
  - b) A growth stage that is described as ancient or post-mature;
  - c) A chronological age that is old relative to others of the same species.

4.7.2 A distinction is sometimes made between 'ancient' and 'veteran' tree. A tree can be a veteran without necessarily being very old, so if a tree has the physical characteristics of an ancient tree but is not ancient in years compared with others of the same species, it is classed as veteran but not ancient. The term ancient is applied specifically to trees that are ancient in years. The number of years required to attain ancient status could vary according to the tree species, climate, soil type, and other factors that influence the growth rate and longevity of trees.

4.7.3 In addition to the characteristics above, measuring the tree's girth at breast height can be used as a rule-of-thumb guide to tree age and veteran status. Figure 1.3 in Lonsdale (2013) shows for eleven tree species how girth size relates to veteran/ ancient status.

## 4.8 The value of ancient woodland and veteran trees

4.8.1 Ancient woodland is of prime ecological and landscape importance, providing a vital part of a rich and diverse countryside. In particular, ancient woodland:

- is exceptionally rich in wildlife, and supports many rare and threatened species;
- may contain surviving descendants and features from the original natural forests;
- acts as reservoirs from which wildlife can spread into new woodlands;
- has valuable soils due to their undisturbed nature;
- is an integral part of England's historic landscapes and the biological and visual functioning of a landscape;
- contains a wealth of features of historical and archaeological importance little altered by modern cultivation or disturbance;
- contributes to people's sense of place and imagination.

4.8.2 Veteran trees are highly valued for:

- the sense of inspiration, fascination, and awe they instil in people when faced with a living plant that is older than many human generations;
- their importance as a repository of genetic information from many centuries past;
- the many habitat niches they provide – especially the dead wood found in living trees;
- their role in providing local distinctiveness, structure and interest to landscapes;
- the historical and cultural links they can provide to past generations and communities.

---

<sup>6</sup> Lonsdale (2013) This publication updates Read (2000) which is the veteran tree reference in the NPPG.

<sup>7</sup> Owen & Aldermann (2008)

## 4.9 Identifying and locating ancient woodland - The Ancient Woodland Inventory

4.9.1 The key information source for identifying ancient woodlands in England is the Ancient Woodland Inventory (AWI), which Natural England is responsible for maintaining. It was originally compiled in the 1980s and 1990s. It provided boundaries of **ancient woodland sites greater than 2ha** for both ASNW and PAWS. Across much of South East England, the inventory has been revised and includes ancient woodlands less than 2ha. The revisions report for the South East is at:

<http://publications.naturalengland.org.uk/publication/32032>

4.9.2 The Inventory can be downloaded as a Geographic Information System (GIS) dataset from Natural England's website<sup>8</sup>. Digital maps depicting ancient woodland boundaries are also available at [www.magic.gov.uk](http://www.magic.gov.uk)

4.9.3 The inventory is the most accurate database available for identifying ancient woodland. However the inventory is considered provisional as information and evidence may become available that shows that woods not currently on the inventory are likely to be ancient or vice versa. Such information, when provided to Natural England, will be considered and a decision taken on whether a site should be removed or added to the inventory.

## 5) Determining planning applications impacting on ancient woodland and veteran trees

5.1 This section helps local authorities assess impacts when dealing with applications affecting ancient woodland and veteran trees. The steps to take in determining a planning application are included in the flow chart.

### 5.2 Decision-making flowchart

The flow chart on page 9 shows the decision making process for local authorities determining planning applications affecting ancient woodland and veteran/ ancient trees. This flowchart can be used in conjunction with the [Assessment Guide](#) held on the Forestry Commission website.

Step 1: Identify if the planning application is likely to cause direct loss of, or impact on, ancient woodland or veteran trees.

Step 2: Identify what the impacts on ancient woodland/ veteran trees will be. Such impacts may include:

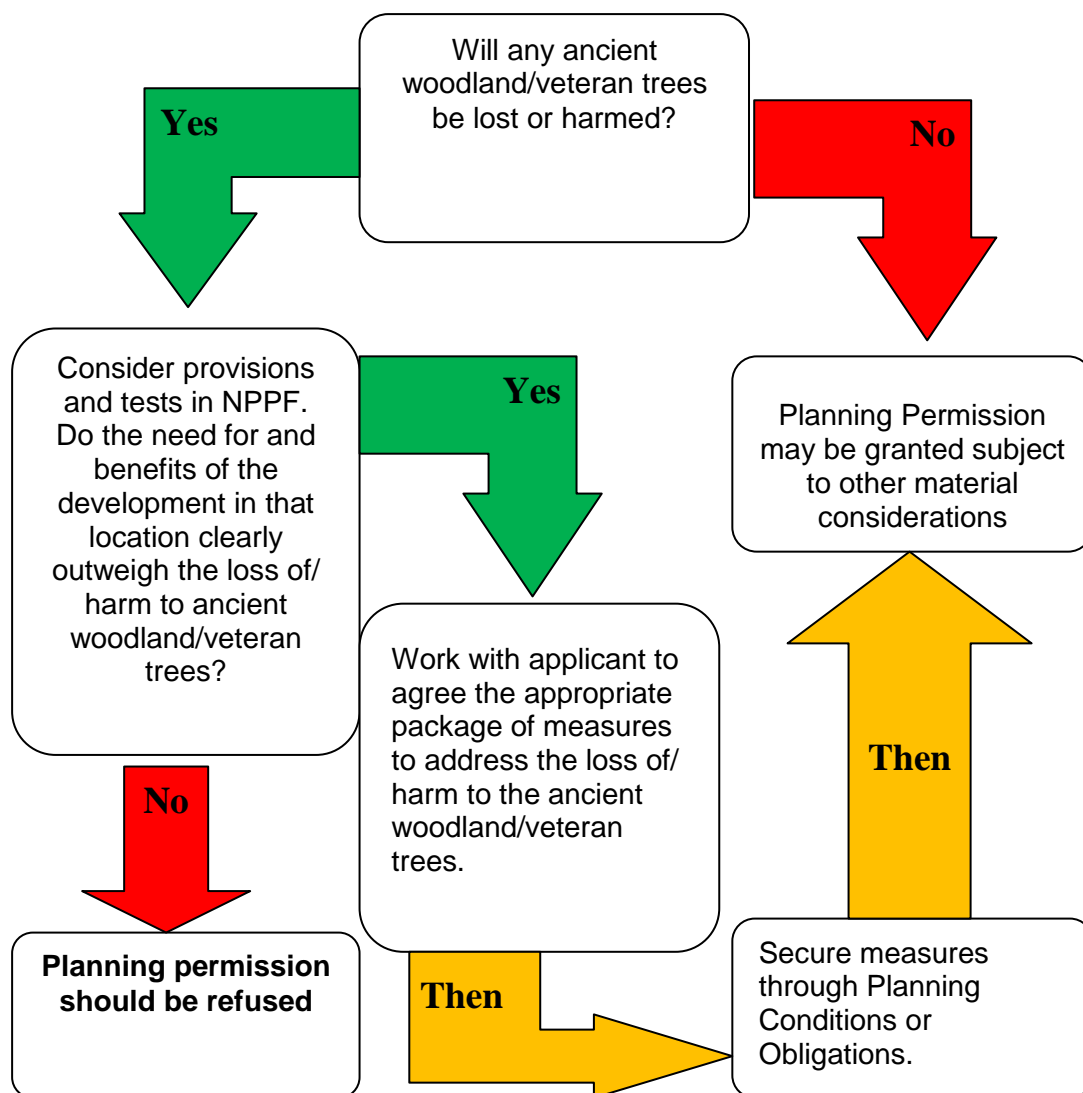
#### **Effects from development within ancient woodland:**

- Destruction of an area of ancient woodland;
- Loss of whole veteran trees and/ or loss of limbs;
- Ground damage, loss of understorey, and/ or soil and/ or root disturbance, and changes to hydrology from drainage within ancient woodland;
- Damage to archaeological or historical features within ancient woodland or associated with ancient or veteran trees.

---

<sup>8</sup> See web link: [http://www.gis.naturalengland.org.uk/pubs/gis/tech\\_aw.htm](http://www.gis.naturalengland.org.uk/pubs/gis/tech_aw.htm)  
[Return to Contents](#)





#### Effects from development of adjacent land:

- Fragmentation and loss of ecological connections with surrounding woodland/ veteran trees and the wider natural landscape;
- Effects on the root protection area of individual trees;
- Reduction in the area of other semi-natural habitats adjoining ancient woodland;
- Increased exposure to pollutants from the surrounding area;
- Increased deposition of dust, particularly from quarries, resulting in physical and/or chemical effects;
- Impacts on local hydrology through drainage or water table levels changing;
- Increased public use near veteran trees such that safety works leading to possible damage to the tree may be needed;
- Change to the landscape context for ancient woods and veteran trees;
- Change to light pollution at night (if development includes street lighting);
- Fly tipping, garden encroachment and increased predation from cats.

Step 3: Identify any mitigation measures which could be used to avoid or reduce the impacts upon the ancient woodland/ veteran trees. Advice on mitigation and compensation measures (where impacts cannot be avoided) is included in Section 6 below.

5.3 Whilst it may be possible for some aspects of an assessment made by planning officers to be desk-based, it is likely that many aspects will require assessments to be carried out by ecological consultants engaged by the applicant. This Standing Advice can be used to assist in the preparation of comprehensive ecological reports.

5.4 The local planning authority should fully consider the assessment of impacts before deciding whether or not to grant planning permission. The [Assessment Guide](#) held on the Forestry Commission website can help record these impacts.

5.5 The [NPPF](#) requires local authorities to undertake a balancing exercise when considering the relative importance of the need for and benefits of development on the site and the ecological and cultural importance of the ancient woodland and veteran trees. While that balance must be struck taking account of all the circumstances of each case, relevant appeal decisions can help inform this assessment. Some key [appeal decisions](#) are set out on the Forestry Commission's website.

## **6) Mitigation and compensation measures for development affecting ancient woodland and veteran trees**

Mitigation and compensation measures may be offered by a developer to offset the damage to, or loss of environmental resources. This section provides advice on the appropriateness of such measures.

6.1 The irreplaceable nature of ancient woodland and veteran trees means that loss or damage cannot simply be rectified by mitigation and compensation measures.

Therefore, where measures seek to address issues of loss or deterioration of ancient woodland or veteran trees, through for instance, attempting to minimise the area of ancient woodland affected (mitigation), or through the provision of replacement habitat (compensation), our advice is that these should be issues for consideration only **after** it has been judged that the wider benefits of a proposed development clearly outweigh the loss or damage of ancient woodland.

6.2 In line with the NPPF there is the possibility that developments affecting ancient woodland and veteran trees may receive planning permission. Natural England advocates an approach for dealing with such cases that allows an objection to be maintained if significant loss or damage to the ancient woodland is likely, whilst at the same time discussions with the developer/planning authority proceed in a positive manner. These discussions would consider what mitigation or compensation measures should be secured in the event that a decision is taken that the scheme's benefits clearly outweigh the loss of the ancient woodland. However, discussion of what might be feasibly included as mitigation and compensation should not be taken as implying that this would, if delivered, reduce or avoid any harm to ancient woodland or resolve objections to a scheme.

6.3 As a non-ministerial department, the Forestry Commission would not object to a scheme, it rather can offer factual advice to Local Authorities on the implications of proposals on the woodland, as part of its role as a non-statutory consultee.

## 6.4 Mitigation measures:

### Buffer Zones:

- Development must be kept as far as possible from ancient woodland, with a buffer area maintained between the ancient woodland and any development boundary. An appropriate buffer area will depend on the local circumstances and the type of development.<sup>9</sup> In a planning case in West Sussex the Secretary of State supported the arguments for a 15m buffer around the affected ancient woodland,<sup>10</sup> but larger buffers may be required.
- The permanent retention of buffer zones must be secured as part of the planning permission. These should be allowed to develop into semi-natural habitat. Developments such as gardens must not be included within buffer zones as there is limited control over how they may be used, or developed in the future; for example, they might be paved or decked without the need for planning permission or they may include inappropriate species which could escape into the woodland.

## 6.5 Compensation measures (to compensate for loss of ancient woodland/ veteran trees):

6.5.1 Ancient woodland and veteran trees are irreplaceable, but if a planning decision has been taken that results in the loss of ancient woodland or veteran trees, the following measures may, in certain circumstances, contribute to an appropriate compensation package, provided that they are secured as part of the planning permission via planning conditions or obligations.

6.5.2 **New native woodland planting:** Creating new woodland cannot provide a direct replacement for ancient woodland - the habitat is irreplaceable. However, if an area of ancient woodland is lost to development, native woodland habitat creation, **at a large scale**, could be considered as part of a compensation package.

6.5.3 **Beneficial management of alternative sites:** As well as new native woodland planting, restoration of a PAWS or securing the appropriate management of an area of unmanaged ancient woodland nearby may be considered as part of a compensation package, provided that the long term management of the site(s) is secured.

6.5.4 **Tree planting to replace lost veterans:** It is not possible to replace veteran trees with new planting. However, planting many young trees of similar species to the veterans that have been lost should be undertaken to help compensate for this loss. The new trees must be located close to the lost trees to provide some ecological connections with other veterans nearby. Also, the intact hulk of the veteran tree should be felled and relocated in close proximity to a nearby veteran tree, woodland or parkland area. This will at least give opportunity for those invertebrates and fungi resident within the tree to relocate, provided there is suitable habitat nearby.

---

<sup>9</sup> Corney, P.M., Smithers, R.J., Kirby, J.S., Peterken, G.F., Le Duc, M.G. & Marrs, R.H. (2008) Impacts of nearby development on the ecology of ancient woodland.

<sup>10</sup> In a planning case concerning an ancient woodland in West Sussex, Four Acre Wood, a minimum 15m buffer was recommended by the Inspector and endorsed by the Secretary of State. Asquith, P. J. (2007) Report on Appeals by Crest Nicholson (South) Limited Relating to Bolnore Village Phases 4 And 5, Haywards Heath, West Sussex. The Planning Inspectorate, Bristol. Appeal refs: APP/D3830/A/05/1195897-98 & APP/D3830/A/06/1198282-83.

**6.5.5 Ancient woodland translocation:** An ancient woodland ecosystem cannot be moved. It has developed over hundreds, and sometimes thousands of years – it is this presence at the same site that makes it ancient woodland. The soil composition and structure, varied topography, range of micro-habitats, species assemblages, and mycorrhiza fungi associations with tree roots, cannot be moved intact. Whilst the translocation of ancient woodland soil to a new site is sometimes proposed as a compensation measure for the loss of ancient woodland, it is not possible to replicate the same conditions at another site; it will no longer be ancient woodland. However, where an ancient woodland is going to be lost to development, it is possible that translocation of the soils to a new site which is then planted with typical native woodland tree and shrub species, could in some circumstances support the development of an ecosystem which contains some of the plants and fungi of the former ancient woodland.

Natural England's view, that an ancient woodland ecosystem cannot be moved, is supported by the policy on translocation provided by the JNCC in its 'A Habitats Translocation Policy for Britain'.<sup>11</sup> The policy states that the uncertainty of habitat translocation means that it should be viewed only as a measure of last resort in partial compensation for damaging developments.

## References

Asquith, P. J. (2007) Report on Appeals by Crest Nicholson (South) Limited Relating to Bolnore Village Phases 4 And 5, Haywards Heath, West Sussex. The Planning Inspectorate, Bristol. Appeal refs: APP/D3830/A/05/1195897-98 & APP/D3830/A/06/1198282-83.

CLG (2012) National Planning Policy Framework. Department for Communities and Local Government, London.

Corney, P.M., Smithers, R.J. , Kirby, J.S., Peterken, G.F. , Le Duc, M.G. & Marrs, R.H. (2008) Impacts of nearby development on the ecology of ancient woodland

Defra (2013) Government Forestry & Woodland Policy Statement

[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/221023/pb13871-forestry-policy-statement.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221023/pb13871-forestry-policy-statement.pdf)

Defra/ Forestry Commission (2005) Keepers of time: A statement of policy for England's ancient and native woodland. DEFRA and the Forestry Commission, England.

JNCC (2003) A Habitats Translocation Policy for Britain. Joint Nature Conservation Committee, Peterborough.

[www.gis.naturalengland.org.uk/pubs/gis/tech\\_aw.htm](http://www.gis.naturalengland.org.uk/pubs/gis/tech_aw.htm)

Lonsdale, D. (ed.) (2013). Ancient and other veteran trees: further guidance on management. The Tree Council, London 212pp.

Owen, K. and Aldermann, D. (2008) *Ancient Tree Hunt: the minimum girth of ancient trees – a guide for verifiers*. Ancient Tree Hunt (Ancient Tree Forum, Woodland Trust, Tree Register of the British Isle), 30 pp.

Read, H. (2000). *Veteran Trees: A guide to good management*. English Nature, Peterborough. 176 pp

Spencer, J. & Kirby, K. (1992) An inventory of ancient woodland for England and Wales. *Biological Conservation*, 62, 77-93.

---

<sup>11</sup> JNCC (2003) pp. 9-10.