Practical Guidance

Planning for Ancient Woodland

Planners' Manual for Ancient Woodland and Veteran Trees

July 2019

WOODLAND TRUST

Contents

Niall Benvie/WTML

Introduction

Ancient woodland and veteran trees are irreplaceable. But it is still possible to undertake high quality development that respects and responds to the precarious nature of our ancient woods and trees.

This document covers a comprehensive range of issues relating to ancient woodland, veteran trees and planning.

This new updated version of the manual reflects the changes made to the *National Planning Policy Framework* (NPPF) in 2018 and 2019. We have included the latest clear, workable and accepted definitions of ancient woodland habitats and veteran trees. It also comprises our key recommendations for development in and around these irreplaceable habitats, and useful policy and technical references to support the recommendations.

The manual has been set out to provide Local Planning Authorities (LPAs) with material that they can use to prepare their own Local Plan, Supplementary Planning Documents and Technical Guidance Notes, or for inclusion in other tree, biodiversity or green infrastructure strategies or guidance on landscape character and design. It will also be useful to local groups who wish to promote the value of ancient woodland and ancient or veteran trees in their neighbourhood plan.

It also provides guiding principles to support good practice in the formulation and design of development proposals. Examples of good practice which elaborate on these principles and reflect the revision to the NPPF should be used to help avoid or mitigate adverse effects. Promotion and appropriate adoption of such policies, principles and practice can help provide clarity for the LPA, developers and communities.

We recognise that each LPA must take account of their own specific local circumstances and hope that they will tailor the information set out here to best meet their needs.

The Woodland Trust will be happy to work with you to create locally bespoke solutions for your area's individual characteristics and requirements.

For further information and support, please contact:

GovernmentAffairs@woodlandtrust.org.uk
or telephone **0330 333 3300**.

Richard Barnes CIEEM, CBiol, MRSB
Senior Conservation Adviser, Woodland Trust

National policy

The *National Planning Policy Framework* (NPPF) (paragraph 175c[1]) states:

"When determining planning applications, local planning authorities should apply the following principles:

……

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons[58] and a suitable compensation strategy exists; and

……."

Footnote 58 states:

"For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat."

What is ancient woodland?

The NPPF defines ancient woodland as:

"Ancient woodland: An area that has been wooded continuously since at least 1600 AD. It includes Ancient Semi-Natural Woodland and Plantations on Ancient Woodland Sites (PAWS)".

It includes:

- Ancient Semi-Natural Woodland (ASNW) – mainly made up of trees and shrubs native to the site, usually arising from natural regeneration.
- Plantations on Ancient Woodland Sites (PAWS) – areas of ancient woodland where the former native tree cover has been felled and replaced by planted trees, usually with species not native to the site.
- Ancient wood pasture and historic parkland. Many have not been included in the Ancient Woodland Inventory because their low tree density meant that they didn't register as woodland on historical maps.

Letting in the light.
Restoration work on PAWS at Clanger Wood, Westbury allows native broadleaves to regenerate.

1 MHCLG. (2019). *National Planning Policy Framework: Conserving and enhancing the natural environment.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

2 Forestry Commission & Natural England. (2018). *Ancient woodland, ancient trees and veteran trees: protecting them from development.* Available at: www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

Natural England and the Forestry Commission's 'Standing Advice'[2] for planning authorities notes that: *"'wooded continuously' does not mean there's been a continuous tree cover across the whole site. Not all trees in the woodland have to be old. Open space, both temporary and permanent, is an important component of ancient woodlands".*

Ancient woodland is irreplaceable. It is our richest wildlife habitat, having developed over centuries, and contains a high proportion of rare and threatened species, many of which are dependent on the particular conditions that this habitat affords. For this reason, ancient woods are reservoirs of biodiversity, and because the resource is limited and highly fragmented, they and their associated wildlife are particularly vulnerable to development-induced changes.

Their long continuity and lack of disturbance means ancient woods are often also living history books, preserving archaeological features and evidence of past land use, from earthworks to charcoal pits. They are also places of great aesthetic appeal, making them attractive for recreation and the many benefits this can bring in terms of health and well-being.

"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."[3]

What are Plantations on Ancient Woodland Sites (PAWS)?

Many ancient woodland sites have been felled (in full or in part) and replanted. Such sites are referred to as Plantations on Ancient Woodland Sites (PAWS). Often such sites have been replanted with commercial stands of timber, such as conifers, so they may not look like an irreplaceable resource. However, much of the value of ancient woodland lies in the soils and many remnants of the ancient habitat remain. Through careful management, PAWS can be restored, and advice is available from the Woodland Trust[4] and Forestry Commission.

What is wood pasture and parkland?

Wood pasture and parkland are areas that have historically been managed by grazing and therefore have a very open structure, with open grown trees. Tree canopy cover may vary considerably but will generally be above 20%. They may derive from medieval hunting forests, or from wooded commons. Many are also designed landscapes, often associated with big estates dating from the 16th century. They tend to have large trees, many of which are veteran or ancient. A fuller description of the nature and history of these habitats is in the *UK Biodiversity Action Plan Priority Habitat Description for Wood-Pasture and Parkland*[5].

Ancient wood pastures and historic parkland are those that have continuity of this habitat type since 1600. Wood pasture and parkland habitats may have been impacted by sward improvement, overgrazing, tree felling, or become in-filled with secondary woodland. The presence of ancient and veteran trees is the key indicator of continuity but other factors including historic features, permanent pasture and scrub should also be taken into consideration. Associated species will remain present and as with ancient woodland the habitat can be effectively restored from remnant features.

Richard Becker/WTML

Wood pasture

3 Defra & Forestry Commission England. (2005). *Keepers of Time: A Statement of Policy for England's Ancient and Native Woodland.* Available at: www.forestry.gov.uk/keepersoftime

4 Woodland Trust (2015). *Ancient woodland restoration - an introductory guide to the principles of restoration management.* Available at: www.woodlandtrust.org.uk/publications/2015/12/ancient-woodland-restoration/

5 JNCC. (2011). *UK Biodiversity Action Plan Priority Habitat Description: Wood-Pasture and Parkland.* Available at: jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-65-WoodPastureParkland2011.pdf

What are ancient and veteran trees?

The NPPF defines ancient and veteran trees as:

"A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage."

The Standing Advice adds that ancient and veteran trees can be found as individuals or in groups within ancient wood pastures, historic parkland, hedgerows, orchards, parks or other areas.

It also notes that the very few trees of any species become ancient. It goes on to set out that ancient trees are exceptionally valuable. Attributes can include: great age, size, condition, biodiversity value as a result of significant wood decay and the habitat created from the ageing process, cultural and heritage value.

On veteran trees, the Standing Advice notes that all ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value.

Key recommendations

Provide clear Local Policy guidance

Ensure local planning documents contain sufficient clarity and detail on the protection of ancient woodland and veteran trees to provide certainty for all involved.

Give definitions

Provide clear definitions for ancient woodland and veteran trees to avoid any misunderstanding.

Supply guiding principles

Apply the following principles to guide both site selection and the subsequent design of development:

- Avoid harm
- Provide unequivocal evidence of need and benefits
- Provide biodiversity net gain

Encourage good practice

When preparing development proposals follow established good practice for site assessment and design:

- Establish likelihood and identify types of impact
- Implement appropriate and proportionate mitigation and compensation
- Provide adequate buffers
- Provide adequate evidence to support planning proposals

Recommended Local Policy approach

While local and neighbourhood plans cannot contradict national policy, they may take the opportunity to elaborate on it to meet local needs in accordance with the latest evidence.

Recommended policy wording

Ancient woodland, veteran trees and development

i. Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons.

ii. As ancient woodland and ancient or veteran trees are irreplaceable, discussions over possible compensation should not form part of the assessment to determine whether the exceptional benefits of the development proposal outweigh the loss.

iii. Ancient wood pasture and historic parkland should receive the same consideration as other forms of ancient woodland. The protection of the whole habitat is necessary even though tree cover may be comparatively sparse. Development on open space between trees in an area of ancient wood pasture or historic parkland should not be permitted.

Lŷr Fleming Williams/WTML

Gregynog Oak at Gregynog Hall

iStock

Local Policy justification and existing adopted policies

This recommended policy is also consistent with *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services* (2011)[6]. This sets out the government's ambition to halt overall loss of England's biodiversity by 2020, support healthy, well-functioning ecosystems, and establish coherent ecological networks, for the benefit of wildlife and people. The Natural Capital Committee's first report[7] notes that ancient woodland cannot be replaced and states: *"When thinking about natural capital, wild species and habitats require special treatment that reflects their irreplaceability".*

These Local Plan polices aim to avoid harm to ancient woodlands and veteran trees and are in conformity with the revised NPPF.

Taunton Deane Site Allocations and Development Management Plan[8] - Adopted Dec 2016

Policy ENV1: Protection of trees, woodland, orchards and hedgerows

Development should seek to minimise impact on trees, woodlands, orchards, historic parklands and hedgerows of value to the area's landscape, character or wildlife and seek to provide net gain where possible. Where the loss is unavoidable, the works (or development) should be timed to avoid disturbance to species that are protected by law. Adequate provision must be made to compensate for this loss. Development which would result in the loss of ancient woodland, aged or veteran trees will not be permitted. The proper management of this resource for nature conservation purposes will be sought.

Local Plan for the Bradford District - Core Strategy (Adopted July 2017)

Section 5: Thematic Policies Planning for Places 5.4 Environment[9]

Policy EN5: Trees and Woodland

The council will seek to preserve and enhance the contribution that trees and areas of woodland cover make to the character of the district.

A. In making decisions on planning applications and in Local Plans, trees and areas of woodland that contribute towards:

1. The character of a settlement or its setting or the amenity of the built-up area
2. valued landscapes or
3. wildlife habitats will be protected.

B. Proposals which would have adverse impacts or destroy Ancient Semi-Natural Woodland, including replanted ancient woodland and or aged/veteran trees will not be permitted.

C. The planting of additional trees and woodland will be encouraged and proposals for development should result in no net loss of woodland.

D. The council will continue to make Tree Preservation Orders where necessary, especially within and adjacent to development and will rigorously enforce such orders. On development sites, the Council will require the retention of those trees which are healthy and which have or would have a clear public amenity benefit. The council will require the protection during construction of trees to be retained and, where appropriate, replacement tree planting for trees lost or damaged during construction.

6 Defra. (2011). *Biodiversity 2020: A strategy for England's wildlife and ecosystem services.* Available at: www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services

7 Natural Capital Committee. (2013). *The State of Natural Capital.* Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/516707/ncc-state-natural-capital-first-report.pdf

8 https://www.somersetwestandtaunton.gov.uk/media/1070/sadmp-adopted-2016-document.pdf

Vale of Glamorgan Council

Fragmented woodland with unbuffered development at Pencoedtre Wood, Vale of Glamorgan.

Guiding principles

The following three principles have been compiled from The Standing Advice and professional good practice, and should guide both site selection and the subsequent design of development.

PRINCIPLE 1: Avoid harm – can the proposed development go elsewhere?

Development should be designed to avoid the loss of, or in the case of adjacent development, detrimental impact on, ancient woodland, wood pastures, historic parkland and ancient or veteran trees.

Government policy on ancient woodland (*Keepers of Time*, 2005 and re-endorsed in 2013)[4] states:

"The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland".

The Standing Advice instructs LPAs to use the Assessment Guide[10], published by Natural England and the Forestry Commission. The first question planning authorities are asked to consider is:

"Is the site of the ancient woodland the only possible place for this proposal? Does it have to be on the ancient woodland site (i.e. is it location dependent) or can it go anywhere else?"

9 https://www.bradford.gov.uk/Documents/planningStrategy/10%20Adoption/Adopted%20core%20strategy//Section%205.4%20-%20Environment.pdf

10 Forestry Commission & Natural England. (2015). *Ancient Woodland and Veteran Trees: Assessment Guide to potential impacts in relation to planning decisions*. Available at: www.forestry.gov.uk/pdf/150330AWAssessmentGuide2.pdf/$FILE/150330AWAssessmentGuide2.pdf

Case study

Land adjacent to Oakhurst Rise, Cheltenham

Appeal Reference: 17/00710/OUT

Decision date: 22 March 2019

This was an outline application for residential development of up to 69 dwellings including access, layout and scale, with all other matters reserved for future consideration (revised scheme following refusal of application ref. 17/00710/OUT). The application was refused by Cheltenham Borough Council.

This case is a good example of a LPA applying the *'wholly exceptional'* test from paragraph 175c of the revised NPPF.

"The proposed development would result in the loss of a number of trees within the application site, including a significant TPO'd tree which has some valuable characteristics and features of a veteran tree. The scale of the development on this valuable site would also be likely to result in the deterioration of the retained veteran trees, which would fail to be outweighed by wholly exceptional reasons.

The development would therefore be contrary to saved policies GE5 and GE6 of the Cheltenham Borough Local Plan *(2006), adopted policy INF3 of the* Joint Core Strategy *(2017), and paragraph 175(c) of the* National Planning Policy Framework *(2019)."*

Case study

Boot and Slipper Inn, Long Lane, Wettenhall, Cheshire, CW7 4DN

Appeal Reference: 18/4771N

Decision date: 30 November 2018

This was a planning application for the development of three dwellings. The impact on a veteran tree was one of the two reasons for refusal. It also shows the value of Tree Preservation Orders.

"The proposed development would result in the threat of continued health and life expectancy of a veteran oak tree which is covered by a TPO; and raises concerns over social proximity to the proposed development. The proposal is therefore considered to be unacceptable and contrary to Policies SE3 and SE5 of the Cheshire East Local Plan Policy, *the* Standing Advice of Natural England, *and the* National Planning Policy Framework*."*

PRINCIPLE 2: Establish unequivocal evidence of need and benefits

If development is likely to harm ancient woodland or veteran trees, unequivocal and credible evidence should be prepared to justify the exceptional need and benefits. Simply restating a national drive for housing, or need for new transport infrastructure, does not constitute exceptional circumstances.

The Standing Advice reminds planners that *"ancient woodland, ancient trees and veteran trees are irreplaceable. Consequently you should not consider proposed compensation*

WTML

Ancient woodland damaged by camping activities.

Ben Lee/WTML

measures as part of your assessment of the merits of the development proposal."

Since ancient woodland covers less than 3% of England's land mass, the country's development needs can be fully delivered without negatively impacting ancient woodland or veteran trees.

If any infrastructure that enables sustainable management is required within ancient woodland (such as forest tracks for timber extraction, especially when restoring PAWS), this should be specifically mentioned as a requirement in a management plan that has attained UKWAS/FSC® accreditation. Some management infrastructure (such as worker accommodation) should never be sited within ancient woodland.

PRINCIPLE 3: Provide biodiversity net gain

DEFRA consulted on the concept of implementing biodiversity net gain in December 2018. The Chancellor subsequently confirmed in his 2019 Spring Statement *'that new developments must deliver an overall increase in biodiversity'.* This mandating of net gain is an important step change in planning policy. The consultation recognised that ancient woods and trees should be excluded from the proposed metrics. It also reiterates: "Net gain will not weaken existing planning policy protection for irreplaceable habitats such as ancient woodland."

Irreplaceable habitats must never be included in net gain calculations and mitigation and compensation measures must not form part of the considerations in making planning decisions.

Biodiversity net gain requires development that leaves biodiversity in a better state than before. Impacts on irreplaceable habitat always results in net loss. These impacts cannot be offset elsewhere. Where ancient woodland or veteran trees are lost or damaged there will always be net loss of biodiversity and it is impossible to secure net gain.

Biodiversity enhancement is supported in paragraphs 109, 117 and 118 of the NPPF[1], and an explanation of how to achieve net gain is provided in *Biodiversity Net Gain Good practice principles for development; A practical guide*[11].

11 CIEEM, CIRIA & IEMA. (2019). *Biodiversity Net Gain: Good practice principles for development; A practical guide.* https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development-a-practical-guide/

Edge effects: the impact on ancient woodland

Further reading

Ryan, L.(2012). *Impacts of Nearby Development on Ancient Woodland – Addendum.* Available at: www.woodlandtrust.org.uk/mediafile/100168353/Impacts-of-nearby-development-on-the-ecology-of-ancient-woodland-addendum.pdf

Corney, P.M. et al. (2008). *Impacts of Nearby Development on the Ecology of Ancient Woodland.* Available at: www.woodlandtrust.org.uk/mediafile/100168350/Impacts-of-nearby-development-on-the-ecology-of-ancient-woodland.pdf


ROADS/LINEAR INFRASTRUCTURE
• Fragmentation and isolation from the wider environment
• Chemical run-off e.g. road salts
• Air pollution
• Noise pollution
INDUSTRIAL DEVELOPMENT
• Risk of water-borne pollution
• Air pollution
• Dust deposits
• Disturbance
• Fragmentation
• Invasion by non-native plant species
CAMPSITE
• Recreation pressure
• Collection of deadwood for firewood
• Disturbance by dogs
• Anti-social behaviour
• Removal/damage of ancient trees
• Trampling
• Light and noise pollution
• Fragmentation
QUARRY
• Changes to local hydrology
• Noise pollution
• Light pollution
• Dust deposits
• Vibration
• Fragmentation

Case study

Recognition of the status and importance of PAWS

Northside Copse (Lake House), Fernhurst, Kent

Appeal reference: APP/Y9507/A/12/2173809

Decision date: 24 July 2013

This inquiry involved a proposal for a single large dwelling within part of an ancient woodland. Considering whether the need for a development outweighs the loss of ancient woodland, the Inspector maintained that small incursions into ancient woodland are unacceptable:

"Impacts on the AW caused by the proposal would include the direct loss of flora and irreplaceable ancient soils and a substantial change in the character of the woodland arising from the development and its ancillary services. Whilst the Appellants have suggested that this would be only a small proportion of the woodland identified as AW, the NPPF considers any loss to be unacceptable".

Case study

An appeal decision supporting use of the Ancient Woodland Inventory

Northside Copse (Lake House), Fernhurst, Kent

Decision date: 24 July 2013

Appeal reference: APP/Y9507/A/12/2173809

This inquiry involved a proposal for a single large dwelling within part of an ancient woodland. In her report, the inspector made special reference to the importance of the AWI as a tool for policy makers and planners.

"The inventories are an important tool for policy makers and to assist planners in making decisions about development. Accordingly, it was an important tool for the authority when it considered the application the subject of this appeal.

...given that the definition used for AW in NPPF is essentially no different to the one used in the survey which informed the Revised Ancient Woodland Inventory (RAWI), I do not consider that it would be unreasonable for the authority to rely upon the recently updated RAWI to identify whether a particular woodland meets the NPPF definition or not."

Good practice

Development proposals should follow established good practice for site assessment and design and should:

- Establish likelihood and identify types of impact
- Implement appropriate and proportionate mitigation and compensation
- Provide adequate buffers
- Provide adequate supporting evidence

Establishing likelihood of impacts

Refer to Natural England's Ancient Woodland Inventory (AWI)[12], recorded on Natural England's MAGIC database[13], to identify the presence of ancient woodland on or near to a proposed development site. For priority wood pasture and parkland consult this layer in the MAGIC database.

The inventories (AWI, priority wood pasture and Parkland) can never be fully comprehensive; new evidence may come to light that confirms a wood or parkland as ancient that has not previously been recorded on the AWI or MAGIC. Absence does not therefore mean a site is not ancient. Natural England should be contacted if evidence arises to suggest that a site could be ancient.

Ancient woods less than two hectares (ha) in area, and wood pastures and parkland, were not originally recorded systematically on the AWI. Development affecting small woodland or wood pasture and parkland sites should be subjected to archive and map study, and field survey. Any woods found to be ancient should be added to the inventories by contacting Natural England with the relevant evidence.

NOTE: In some counties of south-east England, sites as small as 0.5ha have been surveyed for the AWI. The results can be found in a Natural England review[14], and the methodology outlined in that document can be followed by planning authorities wishing to refine the AWI in their area. This update is currently being rolled out across the country.

natureonthemap.naturalengland.org.uk/

Illustrative extract from Natural England's MAGIC database

Will veteran trees be affected?

The first step in establishing whether proposed development is likely to impact veteran trees is to refer to the Ancient Tree Inventory (ATI) to identify their presence on or near to a proposed development site.

More than 175,000 ancient, veteran and notable trees are recorded on the ATI and while the number is growing all the time (trees are still being actively recorded), it is not comprehensive. Therefore a full tree survey (in accordance with guidance in the BSI Standards publication *BS 5837 Trees in relation to design, demolition and construction*) is required for development sites. If any trees are identified to be ancient, veteran or notable, applicants and LPAs should ensure these are added to the ATI. Ancient and veteran trees outside ancient woodland, along with wood pasture and parkland, should be classified as *"A3"* according to *BS 5837*.

Furthermore, it is our view that all trees within priority habitat such as ancient woodland would be classified as A3 even if not individually ancient or veteran (including dead trees).

12 Natural England. *Digital Boundary Sets: Ancient Woodland Inventory (Provisional) for England.* Available at: www.gis.naturalengland.org.uk/pubs/gis/tech_aw.htm

13 Natural England et al. *MAGIC: Interactive Mapping at Your Fingertips.* Available at: www.natureonthemap.naturalengland.org.uk/

14 Natural England. (2011). *A Review of the Ancient Woodland Inventory in the South East (NERR042).* Available at: publications.naturalengland.org.uk/publication/32032

15 The Woodland Trust. *Ancient Tree Inventory.* Available at: www.ancient-tree-hunt.org.uk/discoveries/interactivemap/

Identifying types of potential impacts

In addition to *'direct impacts'* leading to the actual damage or loss of ancient woodland or veteran trees, consideration should also be given to *'indirect impacts'*; these can also result in significant harm.

Development may result in one or more indirect impact and are not mutually exclusive.

See pages 13 and 14 for more detail on types of development and potential impacts.

Development types and indirect impacts

Development Type	Potential Effects
Housing	Chemical effects Disturbance, including: • noise • vegetation clearance • light and dust pollution • trampling • grazing Habitat and landscape fragmentation Invasion by non-native plant species Impacts from domestic pets (e.g. cats) Reducing the amount of semi-natural habitats next to ancient woodland Changes to the water table or drainage Damaging activities such as fly-tipping Changes to surrounding landscape character Cumulative effects
Transport	
Commercial and industrial development	
Intensive livestock units	
Energy generation and transmission	
Quarrying and mineral extraction	
Waste disposal	
Leisure and sports	
Military activity	
Water management	
Permitted development	
Cumulative development	

A comprehensive review of indirect impacts on ancient woodland is provided by the Woodland Trust[17] [18].

Christine Byrne/WTML

Oaken Wood, an ancient woodland in Maidstone, Kent, encroached upon by Hermitage Quarry in the foreground.

Jill Butler/WTML

Inappropriate parking at Chatsworth International Horse Trials causing compaction in parkland.

17 Corney, P.M. et al. (2008). *Impacts of Nearby Development on the Ecology of Ancient Woodland.* Available at: www.woodlandtrust.org.uk/mediafile/100168350/Impacts-of-nearby-development-on-the-ecology-of-ancient-woodland.pdf

18 Ryan, L. (2012). *Impacts of Nearby Development on Ancient Woodland – Addendum.* Available at: www.woodlandtrust.org.uk/mediafile/100168353/Impacts-of-nearby-development-on-the-ecology-of-ancient-woodland-addendum.pdf

19 Europe Economics. (2015). *The Economic Benefits of Woodland.* Available at: www.woodlandtrust.org.uk/publications/2015/03/the-economic-benefits-of-woodland/

The economic benefits of woodland

A research report by Europe Economics[19] considers and quantifies a wide range of benefits associated with trees and woodlands. These benefits include: business goods (e.g. timber); flood management; improving water quality; landscape and aesthetics; climate change mitigation; health (e.g. improvements to air quality and recreation); and safeguarding biodiversity for future generations.

The report concludes that, while it may be an underestimate (because some benefits will have been missed or undervalued), the approximate aggregate value of UK woodland is over £250bn. However, the broad range and nature of the benefits associated with woodlands often means that their full value is not understood and reflected in important decisions.

Therefore, in assessing any project, policymakers should consider whether woodland, existing or potential, might provide a range of benefits that are not obvious, but could be of profound importance to the community and of more value in the medium to long term than that of a new development proposal.

Chemical effects - ammonia

Ammonia is a compound of nitrogen and hydrogen; it is a colourless gas with a characteristic pungent smell. Ancient woodland is being negatively impacted due to increasing concentrations of ammonia in the air, and as a result of nitrogen being deposited to on the ground. The Woodland Trust has recently seen an upsurge in applications for ammonia-emitting developments (such as intensive livestock units) close to ancient woodland.

Healthy communities of lungwort lichens (left) and beard/horsehair lichens (right) on trees in Lochaber, Scotland, where ammonia pollution is very low.

Trees covered with slimy algal 'gloop' due to ammonia pollution at Woodland Trust's Coed Gwernafon in Powys, Mid-Wales.

Case study

The impacts of ammonia on ancient woodland

Poultry farming in the Forest of Dean

Refused 10 April 2019

Application reference: P1191/18/FUL & P1038/18/FUL

A retrospective planning application for a poultry house and associated infrastructure (control room, plant room, siting of two no feed bins, backup generator, water tank, two no gas tanks and construction of a concrete apron and access road).

There were 12 areas of ancient woodland within 3km radius of the application site. The Trust objected on account of significant air pollution, especially with regard to the nearest ancient woodland Great Lambsquay Wood, which would have seen an increase of critical levels of ammonia by 1,781%, and 925% of the nitrogen critical load. The background levels of ammonia in the ancient woodlands of concern were already significantly higher than the established nitrogen critical load and ammonia critical level, so any additional contributions will lead to the further deterioration of sensitive species adapted to low nutrient conditions, as well as wider ecosystem functioning.

In cases of livestock farming and other ammonia emitting developments, the Trust recommends that the process contribution of ammonia (and total nitrogen deposition) is insignificant (<1%) to ensure no further deterioration to the ancient woodlands surrounding the development. Applicants must demonstrate this through modelling the dispersion and deposition of air pollutants.

Reason for refusal

'The concentration of ammonia will exceed critical recommended levels in terms of the impacts upon the adjoining ancient woodland.'

Definitions[1]

Critical level: the gaseous concentration of the pollutant in the air (at which direct adverse effects are considered to occur on woodland ecosystems.

Critical load: the quantity of the pollutant deposited from the air to the ground, below which significant harmful effects do not occur on ecosystems.

Process contribution: the ammonia released to the air/nitrogen deposited on the ground as a result of the development, expressed as a percentage of the critical load or critical level.

1 https://www.woodlandtrust.org.uk/publications/2019/04/air-pollution-ammonia/

Mitigation and compensation

The Chartered Institute of Ecology and Environmental Management (CIEEM)[20] provides a useful reminder of the distinction between the following two terms:

"***Mitigation***: *Measures taken to avoid or reduce negative impacts. Measures may include: locating the development and its working areas and access routes away from areas of high ecological interest, fencing off sensitive areas during the construction period, or timing works to avoid sensitive periods".*

*"***Compensation***: Measures taken to make up for the loss of, or permanent damage to, ecological features despite mitigation. Any replacement area should be similar in terms of biological features and ecological functions to that which have been lost or damaged, or with appropriate management have the ability to reproduce the ecological functions and conditions of those biological features".*

If it is decided that the benefits of a development are exceptional enough to outweigh the loss or harm, planning authorities should consider the impacts in terms of what is both:

- **Appropriate** (i.e. what type of mitigation and/or compensation measures are necessary), and;
- **Proportionate** (i.e. adequate in terms of quality and quantity to address the level of harm predicted)

Direct impacts that would lead to damage or loss of ancient woodland habitat or veteran trees must either be avoided or compensated for if the need is judged to be truly exceptional; there is no appropriate mitigation for the loss of irreplaceable habitats.

Mitigation

Use carefully designed, appropriate mitigation measures to reduce the effect of indirect impacts. These may include:

- Adhering to *BS 5837:2012* to provide adequate tree and root protection (but note *"buffers around ancient and veteran trees"* paragraph below)
- Non-invasive root investigation for ancient trees and protection beyond the limit of the usual investigative tools
- Retaining and enhancing natural habitats around ancient woodland to improve connectivity with the surrounding landscape
- Producing and funding an access management plan for the woodland, and/or providing alternative natural greenspace to reduce additional visitor pressure
- Sympathetic design and use of appropriate lighting to avoid light pollution
- Measures to control noise, dust and other forms of water and airborne pollution
- Woodland restoration – such as in PAWS
- Introduction of sympathetic management for neglected woodlands or trees
- Implementation of an appropriate monitoring plan to ensure that proposed measures are effective over the long term and accompanied by contingencies should any conservation objectives not be met

Adam Burton/WTML

20 CIEEM. (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland.* Available at: https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/

21 Lawton, J. et al. (2010). *Making Space for Nature: A Review of England's Wildlife Sites and Ecological Networks.* Available at: webarchive.nationalarchives.gov.uk/20130402170324/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf

Provide adequate buffers

A buffer is a landscape feature used to protect a sensitive area from the impact of disturbance both during and after construction. A buffer may:

- Go around the whole area to be protected, or just along one edge
- Be planted with trees or shrubs, or it could be an area of land that the development is not allowed to encroach upon, e.g. a grassy strip
- Also contain man-made structures such as fences, walls and earthworks (though it must not contain Sustainable Drainage Systems which could impact on the hydrology of the ancient woodland)

Although there is no *'one size fits all'* with buffer design, each one should be designed to fulfil the specific requirements of its location and the type of proposed development.

As a precautionary principle, a minimum 50 metre buffer should be maintained between a development and the ancient woodland, including through the construction phase, unless the applicant can demonstrate very clearly how a smaller buffer would suffice. A larger buffer may be required for particularly significant engineering operations, or for after-uses that generate significant disturbance.

The preferred approach is to create new habitat, including native woodland, around existing ancient woodland. This will help reverse the historic fragmentation of this important habitat. The consequent increase in ecological connectivity between areas of ancient woodland will create the resilient landscapes recommended in *Making Space for Nature* published by Defra (2010)[21].

Victoria Bankes Price/WTML

Unlawful access in to woodland from adjacent residential property

Case study

Provide 50 metre buffers

Reffley Wood – *King's Lynn and West Norfolk Council Site Allocations and Development Management Policies* (2016).

During the consultation process on their Local Plan, King's Lynn and West Norfolk Councils agreed that a 50 metre buffer was needed to protect ancient Reffley Wood from the impacts of future housing development. They continued this approach in their site allocations and development management policies (see Policy 4.1) when they allocated the neighbouring Knights Hill site.

This policy was applied in a subsequent planning application for a major housing scheme (reference: 16/02231/OM) that accepted and included a 50 metre buffer in its proposals. This shows the value of strong, effective planning policies in delivering real protection for ancient woodland and providing improved biodiversity and recreational opportunities as part of a scheme.

Case study

Provide 100 metre buffers

The *Wiltshire Core Strategy*[22], adopted in January 2015, sets out various requirements for proposed development for the Ashton Park Urban Extension, south east of Trowbridge. On page 354, at the beginning of the section on ecology, it identifies the need for:

"100m woodland/parkland buffer between all ancient woodland, including Biss Wood and Green Lane Wood, and built development."

22 Wiltshire Council. (2015). *Wiltshire Core Strategy*. Available at: www.wiltshire.gov.uk/adopted-local-plan-jan16-low-res.pdf

Mitigation for veteran trees

Appropriate mitigation for veteran trees may include:

- Incorporating the tree(s) into open space within the development
- Providing green connectivity between individual trees wherever possible
- Controlling activities that might cause harm such as excavations and/or use of overhead machinery in close proximity to the Root Protection Area (RPA)

Buffers around veteran trees

For these trees, where a more precautionary approach is warranted, RPA distances should be greater than the standard buffers stated in *BS 5837:2012*. The RPA should be a minimum of 15 times the diameter of the tree trunk or five metres beyond the canopy, whichever is the greater.[23] [24]

Jill Butler/WTML

Excavation close to veteran tree

23 Lonsdale, D. (2013). *Ancient and other veteran trees: further guidance on management*. Available from: ancienttreeforum.co.uk/wp-content/uploads/2015/02/ATF_book.pdf

24 The Woodland Trust. (2005). *Ancient tree guide 1: Trees and farming*. Available at: www.woodlandtrust.org.uk/publications/2005/01/ancient-tree-guide-1/

Compensation for loss of ancient woodland

Replacement planting

Natural England states that ancient woodland, the product of centuries of habitat continuity and undisturbed soils, is an irreplaceable resource. As such, its loss cannot be mitigated for by creating a new woodland – an irreplaceable habitat cannot, by definition, be replaced.

Consequently, where it is deemed that there is going to be unavoidable residual damage or loss to ancient woodland, the measures taken to compensate for this must be of a scale and quality commensurate with loss of irreplaceable habitat. Where ancient woodland is to be replaced by new woodland, this should aim to create 30 hectares of new woodland for every hectare lost. In commenting on the proposals for the new HS2 rail link, Natural England has supported a 30:1 ratio[25], stating:

"... a commitment to such a ratio would be a clear statement by HS2 Ltd that it recognises the critical importance of ancient woodland and the scale of newly created woodland provided would leave a positive legacy for the natural environment and for the communities along its route. It would also make a significant contribution to the [sic] delivering the recommendations of the Lawton report and set the standard for future projects (Lawton et al., 2010)".

Habitat and soil translocation

Compensation proposals for the loss of ancient woodland often include suggestions to move or *'translocate'* the soil, or even individual trees (as coppice stools), from the ancient woodland to a new receptor site where woodland creation is proposed. However, translocation should be viewed only as a measure of last resort, and:

- should only be used as a form of partial compensation for damaging development when all other alternatives to protect the habitat have been exhausted;
- should not be viewed as a benefit and will not make a proposed development on ancient woodland more palatable.

The Standing Advice states emphatically that:

"You cannot move an ancient woodland ecosystem because:

- *it's not possible to replicate the same conditions at another site*
- *it's no longer an ancient woodland"*

The reason an ancient woodland ecosystem cannot be moved is because it has developed at this site over hundreds, sometimes thousands of years. The soil composition and structure, varied topography, range of micro-habitats, species assemblages, and mycorrhiza fungi associations with tree roots, cannot be moved intact.

The Joint Nature Conservation Committee's (JNCC) guidance on translocation[26] remains the most up-to-date detailed advice. It states:

"Habitats translocation has been proposed as a means of saving wildlife from areas threatened by development. These translocations have been portrayed by some as a means of reducing the impact of developments (mitigation), whereas in reality they can only partly make amends for developments (as incomplete compensation)."

A comprehensive review of the limited evidence available on translocation was published by the Woodland Trust in 2013[27].

Where translocation is considered, a monitoring period of at least 50 years will be required, along with alternative plans to ensure the stated benefits will be achieved if the translocation fails. Furthermore, the new site should be identified as an *'ancient woodland translocation site'* in the LPA's Local Plan, and properly protected from future development.

Jane Corey/WTML

Every ancient wood is the unique product of its location, geology, soils, climate and history –conditions that cannot be re-created elsewhere

25 Natural England. (2016). *Review of the High Speed 2 'no net loss in biodiversity' metric.* Available at: www.gov.uk/government/publications/review-of-hs2-ltds-no-net-loss-in-biodiversity-metric

26 JNCC. (2003). *A Habitats Translocation Plan for Britain.* Available at: jncc.defra.gov.uk/pdf/habitats_policy.pdf

27 Ryan, L. (2013). *Translocation and Ancient Woodland.* Available at: www.woodlandtrust.org.uk/mediafile/100115770/Translocation-and-Ancient-Woodland.pdf

Compensation for loss of veteran trees

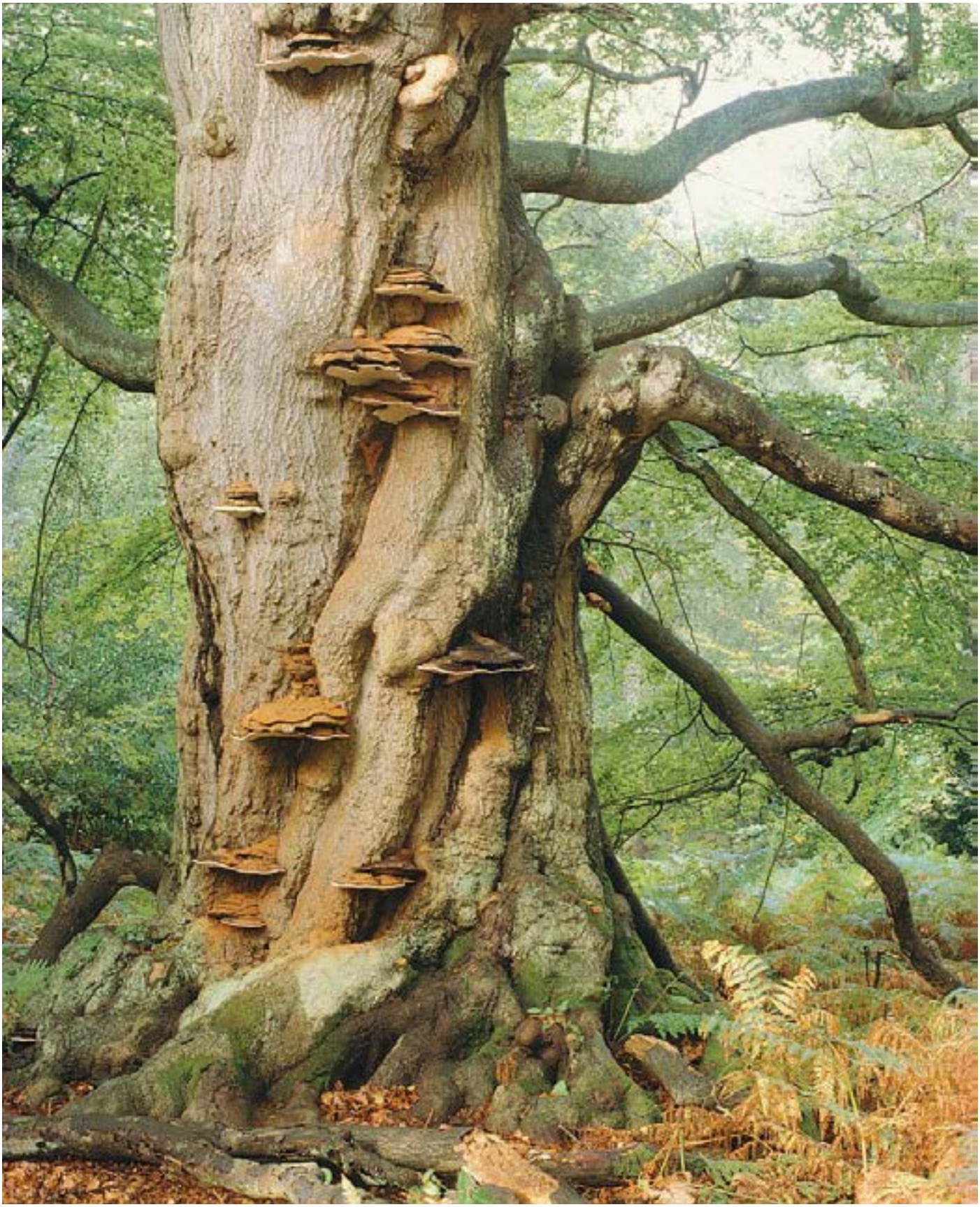
It is not possible to replace the characteristics and inherent value of veteran trees with new planting.

However, to help compensate for loss, young trees of the same species as the lost veterans should be planted.

To conserve genetic characteristics, consideration should be given to taking seeds and/or scions (cuttings for grafts) of the original tree.

Replacement trees must be located sufficiently close to the lost trees to provide some ecological connection with other veterans nearby, but not to the detriment of those veterans or other habitats.

If felled or removed, the intact hulk of a veteran tree should be relocated in an upright state in close proximity to a nearby veteran tree, woodland or parkland area. This will give opportunity for those invertebrates and fungi resident within the tree to relocate.



Ted Green/WTML

Providing adequate evidence to support planning proposals

Case study

Appeal decision notes inadequacy of information submitted with the original application

Northside Copse (Lake House), Fernhurst, Kent

Decision date: 24 July 2013

Appeal reference: APP/Y9507/A/12/2173809

In this appeal, the inspector criticised the appellants for not engaging with Natural England on their contention that the site was wrongly included on the Revised AWI. She agreed that, by the appellant not making any attempt to provide further information to Natural England in respect of disputing the inclusion of part of their land on the Revised AWI, but instead relying on commissioning substantial new evidence as part of the appeal, the South Downs National Park Authority consequently incurred unnecessary additional expense in the appeal process. This would not have been incurred if the evidence had been made available at the application stage.

"A fair inference to draw from the appellants' handling of this case is that a tactical decision is likely (although not necessarily) to have been taken to avoid any engagement with Natural England so that the appellants could state their case on ancient woodland status at the latest possible stage and give the authority as little time as possible to respond to it. If that was not the intention, it was certainly the effect. This was not reasonable given the complexity of the issues involved."

Preparation and submission of supporting ecological evidence

It is important to submit adequate information with a planning application. This should be supported by work undertaken in accordance with professional good practice to enable the planning authority to determine the application lawfully.

Therefore, in addition to following good practice on gathering evidence on the status of ancient woodland and veteran trees, planning applications likely to affect them should be prepared and implemented in accordance with British Standard publications:

- *BS 5837:2012 Trees in relation to design, demolition and construction - recommendations*[19]
- *BS 42020:2013 Biodiversity. Code of practice for planning and development*[28] (particularly Clauses 4, 5, 6, 10 and 11)

And from the Chartered Institute of Ecology and Environmental Management (CIEEM):

- *Guidelines for Ecological Report Writing*[29]
- *Guidelines for Ecological Impact Assessment in the UK and Ireland*[30]
- *Guidelines for Accessing and Using Biodiversity Data*[31]

NOTE: Information supporting a planning application should be in the form of a full Ecological Impact Assessment (EcIA). Preliminary Ecological Appraisals (PEAs) are not sufficient to inform the determination of a planning application (other than under the exceptional circumstances set out in CIEEM's guidelines).[32]

Adherence to published good practice will help ensure that applications contain adequate information and are not delayed through the validation and registration process, nor delayed or even refused at the determination stage.

In addition to the references in the footnotes below, the Woodland Trust can provide further details and technical advice on the recommended policy, and the principles and good practice set out in this document.

If you require assistance, please email **GovernmentAffairs@woodlandtrust.org.uk** or phone **0330 333 3300**.

28 British Standard. (2013). *BS 42020:2013 Biodiversity. Code of practice for planning and development.* Available at: shop.bsigroup.com/ProductDetail/?pid=000000000030258704

29 CIEEM. (2017). *Guidelines for Ecological Report Writing; Second Edition.* Available at: www.cieem.net/guidelines-for-ecological-report-writing

30 CIEEM. (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland.* Available at: https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/

31 CIEEM. (2016). *Guidelines for Accessing and Using Biodiversity Data.* Available at: https://cieem.net/resource/guidelines_for_accessing_and_using_biodiversity_data/

32 CIEEM. (2017). *Guidelines for Preliminary Ecological Appraisal; Second Edition.* Available at: https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/

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