

The historic environment and woodland management

The purpose of this note is to give some guidance on historic environment features and objectives when considering the management of woodlands. Note, identifying and recording the historic interest of a woodland is a valuable management activity in its own right. Three categories of historic interest relate to woodlands and influence the way it should be managed: the historic landscape; archaeology within woodlands, but not related to woodlands; and the archaeology of woodland management.

Historic landscape

All woodlands have a story to tell. Many have not altered their shape for hundreds of years and reflect ancient land use patterns. Others are recent, perhaps planted to fulfil government objectives. Understanding why a woodland exists, why it is the shape it is, how it has changed over time and how it fits into its historic landscape context are all important factors to take into account when considering how a woodland should be managed, extended or buffered.

Archaeology within woodlands

There are currently some 2.7 million hectares of woodland in Great Britain. Clearly there will be many man-made structures within this area of land which are nothing to do with woodland itself but which have been subsumed under woodland at some stage after their creation. The range of sites within woodlands is as varied as it is outside and may include hillforts, settlement sites, buildings and routeways.

The archaeology of woodland management

These sites are usually associated with past woodland management. Such sites include charcoal burning platforms (circular flat platforms, usually terraced into a slope), saw pits (rectangular depressions now almost completely filled with debris but still visible) and boundary banks. The later could have several uses – for

instance dividing woodland into parcels under different ownership, or dividing woodland into parcels of different management (for example, dividing areas of coppice from areas of wood pasture).



An old coppice boundary in Venn Wood

Gathering information

The whole woodland

Maps and photos provide a lot of historic information. Old maps will show if the woodland was present at the date of the map. If it was, has it changed shape and what else does it reveal about past character or management of the site? Recent maps and aerial photographs also provide information, for example:

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- Does the wood fit within the general pattern of the surrounding landscape - perhaps as part of a late enclosed grid-like landscape?
- Does the wood have an irregular outline, sinuous or zig-zag? Does this fit into a landscape of irregular fields and sinuous trackways? If it does, this may be a landscape that has not changed for many hundreds of years.



Industrial remains

Trees

Trees can also reveal information about the past management of the woodland. For example:

- Was it coppiced?
- Are there pollards? They may indicate wood-pasture.
- Are there open grown trees? This may indicate wood-pasture or naturally regenerated woodland.
- Single species stands in straight lines is an indication of a plantation woodland.

- Age range and physical distribution – related to tree form?

The mix of trees can sometimes indicate past management. Frequent holly or common hawthorn may sometimes indicate a period of grazing/wood pasture.



Old coppice

Vegetation

The interpretation of vegetation is complex - there are many factors to take into account when looking at and understanding vegetation assemblages. However, answering the following questions can help us understand the history of a woodland:

- Is there an assemblage indicating coppicing?
- Is there an ancient woodland assemblage?
- Are there slow colonisers that indicate the longevity of the woodland?
- Does the distribution of vegetation indicate past management patterns?

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Earthworks

These also give us clues about how a woodland was managed, how it evolved, its date etc. Are there any of the following:

- Banks? Are they wide (possibly medieval) or narrow (probably later, perhaps 19th century), with a ditch or a remnant hedge? On what side of the bank is the ditch? Is it a wood bank or an old park pale?
- Banks around the outside of the wood? In which case it has not changed shape for a long time.
- Banks inside the wood? Do these show that the wood has been enlarged, or that it has been subdivided?



Yarner wood internal bank

- Charcoal burning platforms? Are they throughout the wood or in particular locations? Look for charcoal under leaf litter.
- Saw pits? Are they throughout the wood or in particular locations?
- Old trackways? Are they related to woodland management or to the wider landscape as routeways between other locations?
- Compartments enclosed by banks and ditches? Consider the possibility that these are coppicing compartments.
- Old quarries? Can you see their access points. Are there lime kilns or other structures?

- Areas of 'lumps and bumps'? These could be all sorts of things, from prehistoric settlements to signs of old quarrying activity.
- Linear changes in ground level (lynchets)? These could represent a pre-wood phase of agricultural activity - even Roman vineyards.
- Evidence of former woodland extents? For instance, do charcoal pits/ platforms/ woodbanks extend outside the wood?

All the above are commonly found within woods but are rarely on the Historic Environment Record. Despite this, they need to be carefully considered when planning the management of a woodland and should be taken into account when considering the use of Environmental Stewardship options.

Woodland management considerations

The following is a list of potential threats to archaeological features that need to be considered when planning woodland management:

- Cultivations, eg for tree planting.
- Desiccation.
- Root damage and tree throw.
- Erosion caused by vehicles and public access.
- Burrowing animals.
- Chemical change to the surrounding environment.
- Damage by activities associated with woodland management – for instance vehicle rutting or the creation of new trackways.

Any management must avoid damaging or increasing the risk of damage to a site. Where possible it should also try to alleviate any threats in the future. The ideal state for an archaeological site is to be covered in a short dense grass turf. It may be possible to achieve this within a woodland in the medium to long term by siting woodland rides, glades and other areas near to, or around, the archaeological site so it can be managed to maintain a grassy sward. Advice needs to be sought on an appropriate seed mix if new grass is to be established through sowing rather than natural

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regeneration. In addition, the danger of increasing the risk of damage to archaeological sites by allowing greater access should be considered, for example, increased vehicular or foot access may increase erosion.

A sward of short dwarf shrubs (eg heather and bilberry) is also an acceptable cover where this is an appropriate habitat. However, in some woodlands, establishing a turf or dwarf shrub cover may not be possible or desirable. For example, trying to establish a sward could actually damage the feature and in ancient woodlands and woodland SSSIs the introduction of the seed to create a grass sward is generally undesirable from a biodiversity point of view.

Regular management is a prerequisite for a grassy or dwarf shrub sward. Without it, larger shrubs and trees will regenerate. These can damage a site through root growth and their dense understorey vegetation can attract burrowing animals.

Where it is not possible to achieve an appropriate sward, the question of whether to retain trees or fell them must be carefully considered. Retaining mature trees is often the best option for the following reasons:

- Retaining a dense canopy will prevent the development of understorey vegetation. This will reduce the risk of damage by burrowing animals and maintain the view of the historic feature.
- There is little risk of root damage as the roots of mature trees have stopped spreading.

However, where mature trees are retained they should be regularly monitored to limit the risk of them blowing over. The root plate disturbance resulting from wind throw can damage archaeological features, and trees likely to fall **must** be managed to prevent this. It may be necessary to coppice, pollard or fell these trees.

When trees are removed on an archaeological site they should not be replaced. The growth of tree roots through the soil can disrupt archaeological deposits and the story they tell.

Environmental Stewardship

The Farm Environment Plan

All historic features within woodlands should be adequately addressed in a Farm Environment Plan (FEP). Where they are identified on the ground they should be given a grid reference and their condition assessed, just as for any other Historic Environment (HE) feature. We know of only a small proportion of the HE features found in the countryside, and this is more true of woodland than of any other type of land. A FEP can therefore be an extremely valuable tool for our future understanding of archaeology within, and of, woodlands as well as considering woodland in its historic landscape context. Also, recording these features in an FEP should help to prevent any further damage to them.

Environmental Stewardship woodland options

The historic environment is an important factor when considering Environmental Stewardship woodland options. Most of the options state that the protection of historic features and the historic nature of woodlands is an important objective.

Finally

- We can only manage the future sympathetically if we understand the past.
- Please remember that there is support within Natural England to help make decisions about the management of woodlands. This support includes that from historic and landscape advisers, ecology advisers and other colleagues.
- Advice can also be sought from the archaeological and historic environment advisers of County Councils and National Parks.
- Work on Scheduled Monuments requires consent from the Secretary of State for the Department of Culture, Media and Sport (DCMS) through English Heritage. Undertaking such work without consent is a criminal offence.

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Further information

Natural England Technical Information Notes are available to download from the Natural England website: www.naturalengland.org.uk. Other notes on woodland include:

- TIN053 - *Guidance on dealing with the changing distribution of tree species*

For information on other Natural England publications contact the Natural England Enquiry

Service on 0845 600 3078 or e-mail enquiries@naturalengland.org.uk.

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