

# UK Biodiversity Action Plan: Lowland wood-pasture and parkland

## Current Status

### Biological status

Lowland wood-pastures and parkland are the products of historic land management systems, and represent a vegetation structure rather than being a particular plant community. Typically this structure consists of large, open-grown or high forest trees (often pollards) at various densities, in a matrix of grazed grassland, heathland and/or woodland floras.

There are no reliable statistics on the extent of the overall resource, nor on historical and current rates of loss or degradation of this type of habitat. The figure of 10-20,000 ha 'currently in a working condition' given in the 'habitat statement' of the UK Biodiversity Steering Group report is the current best estimate. This habitat is most common in southern Britain, but scattered examples occur throughout the country for example Hamilton High Parks and Dalkeith Oakwood in Scotland.

Outgrown wood-pasture and mature high forest remnants ('virgin forests') occur in northern and central Europe, but the number and continuity of ancient (veteran) trees with their associated distinctive saproxylic (wood-eating) fauna and epiphytic flora are more abundant in Britain than elsewhere.

Parklands and wood-pasture may also be of interest for bats and birds and may preserve indigenous tree genotypes. These areas are outstanding at a European level.

These sites are frequently of national historic, cultural and landscape importance. Some, but not all, of the individual habitat components (lowland beech and yew woodland, lowland heathland, lowland dry acid grassland) are biodiversity action plan priority habitats in their own right. Requirements of these plans will need to be given due regard during implementation.

Included in this plan are:

- i. Lowland wood-pastures and parklands derived from medieval forests and emparkments, wooded commons, parks and pastures with trees in them. Some have subsequently had a designed landscape superimposed in the 16th to 19th centuries. A range of native species usually predominates amongst the old trees but there may be non-native species which have been planted or regenerated naturally.
- ii. Parklands with their origins in the 19th century or later where they contain much older trees derived from an earlier landscape.
- iii. Under-managed and unmanaged wood-pastures with veteran trees, in a matrix of secondary woodland or scrub that has developed by regeneration and/or planting.
- iv. Parkland or wood-pasture that has been converted to other land uses such as arable fields, forestry and amenity land, but where surviving veteran trees are of nature conservation interest. Some of the characteristic wood-pasture and parkland species may have survived this change in state.

Not included in this plan are:

- i. Upland sheep-grazed closed-canopy oak woodland or Caledonian pine forest (see the respective plans for these habitats).
- ii. Parklands with 19th century origins or later with none of the above characteristics.

In terms of the National Vegetation Classification (NVC) of plant communities lowland wood-pastures and parkland are most commonly associated with W10 *Quercus robur* - *Pteridium aquilinum* - *Rubus fruticosus* woodland, W14 *Fagus sylvatica* - *Rubus fruticosus* woodland, W15 *Fagus sylvatica* - *Deschampsia flexuosa* woodland and W16 *Quercus* spp. - *Betula* spp. - *Deschampsia flexuosa* woodland, although others may occur. In addition the more open wood-pastures and parkland may include various scrub, heathland, improved and unimproved grassland NVC communities.

### Links with other action plans

Lowland wood-pasture and parkland is an important habitat for a number of priority species including [violet click beetle](#) *Limoniscus violaceus*, the [stag beetle](#) *Lucanus cervus*, a bark beetle *Emoporus tiliae*,

a [wood boring beetle](#) *Gastrallus immarginatus*, [orange-fruited elm lichen](#) *Caloplaca luteoalba*, the lichens *Bacidia incompta*, *Enterographa soledata* and *Schismatomma graphidioides*, the royal bolete fungi *Boletus regius*, oak polypore *Buglossoporus pulvinus* and the [heart moth](#) *Dicycla oo*. Their requirements should also be taken into account in the implementation of this plan. Other rare species include [Moccas beetle](#) *Hypebaeus flavipes*, and the lichen the New Forest parmelia *Parmelia minarium*.

## Current factors affecting the habitat

Lack of younger generations of trees is producing a skewed age structure, leading to breaks in continuity of dead wood habitat and loss of specialised dependent species.

Neglect, and loss of expertise of traditional tree management techniques (e.g. pollarding) leading to trees collapsing or being felled for safety reasons.

Loss of veteran trees through disease (e.g. Dutch elm disease, oak dieback), physiological stress, such as drought and storm damage, and competition for resources with surrounding younger trees.

Removal of veteran trees and dead wood through perceptions of safety and tidiness where sites have high amenity use, forest hygiene, the supply of firewood or vandalism.

Damage to trees and roots from soil compaction and erosion caused by trampling by livestock and people and car parking.

Changes to ground-water levels leading to water stress and tree death, resulting from abstraction, drainage, neighbouring development, roads, prolonged drought and climate change.

Isolation and fragmentation of the remaining parklands and wood-pasture sites in the landscape. (Many of the species dependent on old trees are unable to move between these sites due to their poor powers of dispersal and the increasing distances they need to travel).

Pasture loss through conversion to arable and other land-uses.

Pasture improvement through reseeded, deep ploughing, fertiliser and other chemical treatments, leading variously to tree root damage, loss of nectar-bearing plants, damage to the soil and epiphytes.

Inappropriate grazing levels: under-grazing leading to loss of habitat structure through bracken and scrub invasion; and over-grazing leading to bark browsing, soil compaction and loss of nectar plants.

Pollution derived either remotely from industry and traffic, or locally from agro-chemical application and nitrogen enrichment from pasture overstocking, causing damage to epiphyte communities and changes to soils.

## Current Action

### Legal status

For any woodland component of parkland and wood-pasture, national forestry policy includes a presumption against clearance of broad-leaved woodland for conversion to other land uses, and in particular seeks to maintain the special interest of ancient semi-natural woodland. Individual trees and groups may be afforded protection under the Town and Country Planning Act, 1990 and the Forestry Act, 1967. Felling licences from the Forestry Authority (FA) are normally required but veteran trees may be particularly at risk because fellings for safety reasons are exempt.

Statutory site protection plays an important part in the conservation of this habitat type. Designation as Sites of Special Scientific Interest (SSSI), or as Areas of Special Scientific Interest (ASSI) (Northern Ireland), of most larger areas of wood-pasture and parkland and most of the better-known sites of significance for invertebrates and lichens, ensures compulsory consultation with the statutory nature conservation agencies over management operations and development proposals. Designation under the EC Habitats Directive as Special Areas for Conservation will give additional protection to some parkland and wood-pasture sites. Some sites, including Moccas Park, Duncombe Park, Burnham Beeches, Leigh Woods, Hatfield Forest, parts of Bredon Hill, and Ashstead Common are also protected by National Nature Reserve (NNR) agreements.

Other sites receive some protection through initiatives such as the Inheritance Tax Exemption scheme or the declaration of National Trust and Corporation of London land properties as inalienable land. A few sites have specific legislation to protect them such as the Epping Forest Act of 1878.

The [Moccas beetle](#) *Hypebaeus flavipes*, [violet click beetle](#) *Limoniscus violaceus* and the [orange-fruited elm lichen](#) *Caloplaca luteoalba* and New Forest parmelia *Parmelia minarium* (all confined to parkland or wood-pasture) are fully protected under the 1981 Wildlife and Countryside Act, as are all species of bat and most tree-hole nesting birds. This Act also offers some protection to their 'place of shelter'.

There is recognition of the value of the habitat and individual old trees in various development plans, and landscape designations (e.g. by English Heritage, and CADW: Welsh Historic Monuments).

## **Management, research and guidance**

There are a number of significant but currently uncoordinated inventories, datasets and registers of lowland wood-pasture and parkland. These include the Nature Conservancy Council's 1970s survey of parklands and wood-pastures of importance for the 'Mature Timber Habitat'; the Forestry Commission's National Inventory of Woodlands and Trees; The National Trust (NT) biological survey of NT-owned parkland and wood-pasture sites and English Nature's parkland inventory pilot study (1995) for Norfolk and Bedfordshire. English Heritage also has a register of parks and gardens which is being upgraded between 1997 and 2000, and similar data for Wales is held by CADW: Welsh Historic Monuments. Scottish Natural Heritage maintains an inventory of Gardens and designed landscapes in Scotland. There is also an Inventory of Historic Parks and Gardens, based at University of York, which contains information on historically important sites and County Historic Gardens Trust data. Surveys of saproxylic invertebrates and lichens have also been undertaken. These include the Countryside Council for Wales's strategic survey of Welsh parklands; K.N.A. Alexander's (National Trust) personal dataset on saproxylic beetle sites and the JNCC's Lower Plants and Invertebrate Site Registers. The British Lichen Society also maintains a database for parkland and wood-pasture. Grant aid may be available for the management and restoration of parkland. The key sources of this aid include agri-environment schemes such as MAFF's Countryside Stewardship Scheme and the Countryside Council for Wales- Tir Cymen (which will be incorporated into an all-Wales Agri-environment scheme known as Tir Gofal in 1999) includes a scheme for Historic Landscapes and old orchards. Both of these schemes assist in the production of management plans, tree and grassland management and restoration of arable land to parkland. Other agri-environment schemes such as Environmentally Sensitive Areas (ESAs) and the Habitat Scheme (Wales) may subsidise the management or restoration of grassland and tree planting, and provide some protection for existing trees. The Forestry Authority's Woodland Grant Scheme is available for woodland with over 20% canopy cover.

The Veteran trees Initiative, launched in 1996, aims to promote the value and importance of veteran trees and to conserve them wherever possible. This initiative is the result of a partnership between English Nature, English Heritage, the National Trust, Countryside Commission, Forest Authority, FRCA, Corporation of London and the Ancient Tree Forum. The initiative is developing a database for recording veteran trees, and provides advice on their management. It runs a national programme of demonstration and training days, and produces publications.

English Heritage's Conservation Area Partnerships, Scheduled Monuments and outstanding registered parklands initiative may also provide grant-aid and some Local Authority schemes, such as the Essex County Council's historic landscapes designation may also provide funding for management. The Countryside Council for Wales- 'Orchards and Parklands Tree Scheme' grant aids management and restoration of parklands in Wales.

EC *Life* funding has also been awarded for management of the New Forest.

There is a wealth of information available from the Forestry Authority and other organisations and publications regarding all aspects of ancient woodland management. These include advice given locally through the statutory conservation agencies, the Farming and Wildlife Advisory Group, ADAS, the Countryside Advice and Information Service (Wales). The Forestry Commission's Arboricultural Advisory Service and English Heritage's Parks & Garden's Team of historians, landscape managers, ecologist and arboriculturalists can offer advice. The Ancient Tree Forum, an association of land managers, ecologists and arboriculturalists, provides advice, as do the voluntary and commercial sectors. The UK Forestry Standard and the Forestry Authority Guidelines for the management of semi-natural woodlands should be followed.

The British Lichen Society have produced a habitat management guide for lichens, including parklands and wood-pastures.

## **Action plan objectives and targets**

Maintain the current extent and distribution of the total resource of wood-pasture and parkland  
Maintain the current extent, distribution and condition of wood-pasture and parkland that is in favourable ecological condition.

Initiate in areas where examples of derelict wood-pasture and parkland occur a programme to restore 2,500ha to favourable ecological condition by 2010.

By 2002 initiate the expansion of 500 ha of wood-pasture or parkland, in appropriate areas, to help reverse fragmentation and reduce the generation gap between veteran trees

## **Proposed actions with lead agencies**

### **Policy and legislation**

Implement the conclusions of the 1994 review of Tree Preservation Orders (TPO), including amendments to the Town and Country Planning Act 1990, to offer appropriate protection to veteran/dead trees. (Action: DETR)

Examine felling consent/licensing policy to consider whether additional protection for parkland, wood-pasture and individual veteran trees is needed. (Action: FA)

Examine whether improvements should be made in safety legislation, with respect to liability on owners in the event of injury or damage resulting from old trees, and its interpretation to reduce any unnecessary felling of trees on safety grounds. (Action: DETR, FA)

If Annex I of the EC Habitats Directive is revised ensure that it provides adequate coverage of UK parklands and wood-pasture habitats and species assemblages. (Action: DETR, JNCC)

When reviewing existing incentive schemes (e.g. Countryside Stewardship, Woodland Grant Scheme/Woodland Improvement Grants, ESAs, Coed Cymru) attempt to ensure they enable and encourage the most appropriate management of parklands and wood-pasture, with their ancient trees. (Action: CCW, EN, FA, MAFF, SNH, SOAEFD, WOAD)

Promote modification of the Common Agricultural Policy to recognise and promote extensive pastoral systems, including wood-pasture. (Action: CCW, DETR, EN, MAFF, SNH, SOAEFD, WOAD)

Provide specific guidance about parklands, wood-pasture and individual veteran trees in Planning Policy Guidance notes (PPGs) by 2001. (Action: DETR, SNH, SOAEFD)

Review policy and practice regarding fencing of registered commons to allow reinstatement or control of grazing in wood-pasture commons, but without impediment to access by 2001. (Action: CC, DETR, FA, FE)

### **Site safeguard and management**

Ensure that SSSI coverage of important lowland wood-pasture and parkland sites is adequate through periodic review of the series. (Action: CCW, DETR, EN, SNH, SOAEFD, WO)

By 2004 designate those lowland wood-pasture sites approved by the EC as SACs under the Habitats Directive. (Action: CCW, DETR, EN, JNCC, SNH, SOAEFD, WO)

Encourage applications to buy and manage appropriate sites from potential funding sources. (Action: CC, CCW, EH, EN, SNH)

Encourage the development and implementation by 2004 of long-term integrated management plans for conservation and use of parklands and wood-pastures through agreements with site owners and in partnership with statutory wildlife, landscape and heritage agencies. (Action: CC, CCW, EN, FA, MAFF, SNH, SOAEFD, WOAD)

Promote re-establishment of grazing where appropriate in derelict wood-pasture and encourage the development of subsequent generations of veteran trees in all sites. (Action: CCW, EN, MAFF, SNH, SOAEFD, WOAD)

Promote the restoration of wood-pasture and parkland where old trees remain in former sites that are now arable fields or forestry plantations. (Action: CCW, FE, MAFF, WOAD)

By 2002 initiate programmes to expand parklands and wood-pasture sites in targeted areas. (Action: CC, CCW, EH, EN, FA, SNH)

Contribute to the implementation of relevant priority species action plans, through the integration of management requirements and advice, in conjunction with relevant steering groups. (Action: CCW, EN, MAFF, SNH, SOAEFD, WO)

Consider (re)establishment of key species dependent on veteran trees via translocation. (Action: CCW, EN, FA, FE, SNH)

### **Advisory**

Develop a handbook(s) on best practice in management of parklands and wood-pasture in relation to wildlife, heritage and landscape conservation. (Action: CCW, DETR, EN, FA, SNH)

Develop clear guidance on safety-related risk assessment and reasonable practice, in conjunction with relevant landowners and management groups. (Action: DETR, FA)

Encourage training in best practice in park and wood-pasture management for site owners, site managers, land-agents, foresters, arboriculturalists and also for advisors and incentive scheme managers. (Action: CCW, EN, FA, MAFF, SNH)

## International

Develop links with European organisations and programmes, such as the European Forestry Institute, the European Environment Agency and the European Centre for Nature Conservation to obtain estimates of the extent and distribution of comparable and related habitats, and exchange experience on research and management, by 2000. (Action: CCW, EN, FA, JNCC, SNH)

## Research and monitoring

Produce a comprehensive list of all parkland and wood-pasture sites with pointers to other data sources and evaluations relating to both the natural and cultural heritage of each site, by 2002. Make this information available, through a data catalogue linked to the National Biodiversity Network. (Action: CC, CCW, EHS, EN, JNCC, SNH)

Develop and implement methods to assess the condition of wood-pastures and parkland by 2000 and encourage standardised recording and monitoring of tree population age structure, survivorship and condition at key sites across the country in order to identify site specific and general trends. (Action: CCW, EHS, EN, FC, SNH)

Undertake a programme of targeted surveys of the biological interest of sites where lack of information is impeding their appropriate management, by 2005.

Ensure veteran tree recording is reflected in SSSI and Wildlife Site reporting and is input, as it becomes available, into local record centres as part of the National Biodiversity Network initiative. (Action: CCW, EN, FC, JNCC, SNH)

Develop and implement appropriate surveillance and monitoring programmes to assess progress towards action plan targets. (Action: CCW, EN, JNCC, SNH)

Encourage research into parkland and wood-pasture flora, including trees, and fauna in relation to tree and pasture management, including interactions and with invertebrates, fungi, soils, ground water levels and grazing animals and population dynamic studies. Ensure such research is co-ordinated with cultural heritage research. (Action: CCW, EH, EN, FC, SNH)

## Communications and publicity

Increase awareness of the national and international importance and vulnerability of wood-pasture and parklands by promotional literature and events and encourage celebration of parkland and wood-pastures via the arts and media. (Action: CCW, EH, EN, SNH)

Increase awareness of the value in protecting veteran trees where these may be threatened by felling, for safety reasons, and promote alternative solutions such as pollarding or tree surgery. (Action: CCW, EHS, EN, FA, LA, SNH)

## Costing

	Current expenditure	1st 5 yrs to 2003/2004	Next 10 yrs to 2013/2014
Current expenditure /£000/Yr	457.5		
Total average annual cost /£000/Yr		674.6	429.7
Total expenditure to 2004/£000		3373.0	
Total expenditure 2004 to 2014/£000			4297.4