NORFOLK BIODIVERSITY ACTION PLAN

LOWLAND WOOD-PASTURE AND PARKLAND

Ref 2/H1	Tranche 2	Habitat Action Plan 1
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DEFINITION

Wood-pasture can be defined as a land use combining trees and grazing animals (either stock or deer) where often (not always):

- The trees are old and at low density;
- The trees are frequently managed by pollarding;
- The grazing tends to be long and sustained, leading to a different structure and species composition than ungrazed woods in similar soils.

This action plan also deals with parkland, which contains ancient trees.

1. CURRENT STATUS

Physical and Biological Status

- Lowland wood-pasture and parkland as we know them today are products of historic land management. Typically, they consist of open-grown or high forest trees (often pollards) at various stocking densities in a matrix of grazed grassland, heathland and/or in woodland. The trees are often large and ancient. Tree management has helped produce these characteristic trees of great age. Often such trees are part of our cultural heritage, and they have been described as cultural icons in ever changing landscapes.

- Wood-pastures vary between very open and very dense, and three broad types are found:

  - Grazed high forest with woodland type flora;
  - 'Parkland' with a ground flora showing few woodland elements;
  - Grazed coppice in which livestock are temporarily excluded until the regrowth is out of reach.

  Wood-pastures that are no longer grazed are termed 'former wood-pastures'.

- In Norfolk, there are both the remnants and the active practice of a tradition of using the same land to grow trees and graze animals. Today this land is defined as wood-pasture (s*ilva pastillis*).

- Today's wood-pastures have evolved through a complex series of changes:

  - In the course of the eleventh, twelfth and thirteenth centuries, wood-pasture appears to have developed into three types of pasture: wooded commons; deer parks; and wooded forests. Wood-pasture could also be converted to woodland if grazing were eliminated, either deliberately or through neglect.

- Forests are almost non-existent in Norfolk. The only one mentioned in medieval documents is at Castle Rising, where the reference to a forest has more to do with the legal entitlement of the owners, the Howards, to have deer on the heath and woodland of the area, and to impose fines for breach of Forest byelaws.

- Another type of medieval wood-pasture was the deer park. Over seventy medieval deer parks have been identified in Norfolk. However, only one was recorded in Domesday, at Costessey: their numbers increased rapidly during the twelfth and thirteenth century. Deer parks often seem to have been mature woodland, with large rides and glades. Parks had to provide food and shelter for deer, and as such would have to have had a substantial number of trees, but at the same time have offered large amounts of grazing, both as pasture, but also from the trees and shrubs as well. Many parks were enclosed by means of a ditch or bank, often with an oak paling.

- Deer parks are mentioned in a number of early records:

  - *"The extent* (at Qwynburgh*) includes 7 acre pasture called "le Parrok", a park with deer"*.

  - *"The extent of Hockering includes a park and….that of Swanton a park".*

  - *"A park with deer….a rent for hunting called huntingsylver".*

  - *"The extent of* (the manor of Costessey) *includes a park with deer, worth £13 6s 8d".*

  - *At Earsham "….the extent includes a several pasture called "Halledyke", a park without deer, woods called "Overhagh" and "Cucroft" alder-groves called "Ocoldfen", "Westfen" and "Sledergate"…. .*

- Some deer parks are still traceable in the landscape. The open spaces in the deer park were frequently called "*Le Laund*", and this has left traces in the landscape as at Lound Wood on the Tittleshall/Mileham border. If the location of medieval parks in Norfolk is plotted, it is noticeable that the majority lie in the "woodland crescent". The main exception is the heath area north of Norwich where scrubby woodland is likely to have existed. The existence of a deer park was also an important social statement. Thus in 1240 in Gimingham, it was stated:

  - *"To the Sheriff of Norfolk. Contrabreve to permit William May, the King's Huntsman, to take as many bucks as he can at Gimingham both in the foreign wood and in the park, without destruction and detriment, and to receive the venison that William will deliver to him, and to cause it to be well salted and carried to Westminster".*

- Only a few wooded commons are recorded in Norfolk in the medieval period, one example being at Aylmerton, and another at Pulham.

- The commons of medieval Norfolk took a variety of forms. The extent of the commons is difficult to visualise from the twenty-first century, because huge acreages were lost during the early nineteenth century as a result of Parliamentary enclosure. However, an examination of Faden's map of Norfolk of 1797 gives an indication of the extent of commons in the medieval period.

- Most of these commons probably existed from before the Norman conquest. However, it should be recognised that some commons were created in the middle ages, such as those at Westacre; here the prior enclosed the existing common in 1343, but the licence stipulated the laying out of a new one at Fersfield, where the great common was laid out in about 1500 to compensate for the loss of the former common when Kenninghall Park was expanded. Nevertheless, a pre-Norman origin for most commons in Norfolk is generally accepted, not least because so many seem to have been shared between parishes. This common usage of land would appear to pre-date the sophisticated organisation of the manorial system.

- The frequent woodland names of commons also suggest that the commons were often of wood-pasture origin, such as Wood Green in Long Stratton and Stubbs Green in Loddon. Many commons which were originally wood-pasture slowly turned into treeless commons as a result of over-grazing. Some, such as Fritton Common, still retain a few ancient pollards, whereas others retain no evidence of their former wooded function. A well documented example of a wood becoming an open common is that of Mousehold Heath in Norwich. In Domesday book, the area was a huge wood *"for 1200 swine"*, yet by 1236, the area was more open heath than woodland.

- Much of the parkland we see today is quite different to its medieval origins. New species of trees and shrubs have been introduced into this country and there have been fashions for designed landscapes. This rich variety of historic landscapes has created a wealth of habitats and niches for wildlife. These are often of interest for invertebrates (especially the saproxylics), epiphytes, bryophytes, fungi, bats and woodland birds.

National Status

- There are no reliable statistics either nationally or for Norfolk, nor have the current rates of degradation or loss of this type of habitat been surveyed accurately. A national figure of 35,100 ha is given for wood-pasture and parkland in the UK Biodiversity Action Plan.

- This habitat is better represented in lowland Great Britain than elsewhere in Europe, although scattered examples are to be found throughout Europe. Parklands may be a seed pool for distinctive local phenotypes. These areas are of outstanding European importance.

Norfolk Status

- Norfolk has a rich heritage of wood-pasture and parkland. Early maps and documents describe the county as having vast numbers of free-standing trees in pastures and parks.

- Low woodland-pasture and parkland habitats may be identified as containing a range of National Vegetation Classification (NVC) stand types. In Norfolk, the following are likely to occur.

  - *Quercus robur – Pteridium aquilinum – Rubus fruiticosus* woodland (W10).

  - *Quercus robur – Betula spp – Deschampsia flexuosa* woodland (W16).

  - *Fraxinus excelsior – Acer campestre Mercuralis* woodland (W8).

- Wood-pasture is known to be of primary importance to eight national priority species that occur in Norfolk and for a number of saproxylic Coleoptera (deadwood beetles) and Diptera (flies).

- Research by Leicester University into DNA of ancient trees has made it possible to identify the likely geographical origin of Britain's oak trees. As a result of genetic mutation and the different post-glacial colonisation of Britain and Europe, the oaks of East Anglia were found to be a unique variant, raising important biodiversity implications. Norfolk has both pendunculate and sessile oak. The sessile is largely confined to the Cromer-Holt ridge, and is a nationally important concentration of former wood-pasture.

2. CURRENT FACTORS CAUSING LOSS OR DECLINE IN NORFOLK

- Wood-pasture and parkland in the county is affected by numerous direct or indirect factors. These include:

  - Change of ownership and the severance of house from the parkland;
  - Diminishing tree cover in wood-pasture and parklands;
  - A lack of structural and age diversity;
  - Oak mildew, especially after re-pollarding;
  - Lack of maintenance for newly planted trees;
  - A lack of new pollarding of maiden trees within a location of veteran pollards. (Pollards are not a feature in post-medieval parks.);
  - Unsympathetic tree surgery (often due to Health and Safety implications and concerns for public safety);
  - The removal of too much deadwood;
  - Direct loss of the habitat through change to other land uses, eg arable farming, golf courses, road building, expansion of villages, commercial encroachment, and the colonisation of secondary woodland;
  - Destruction and improvement of the grassland component – drainage, re-seeding, etc;
  - Lower water tables and pollution;
  - Not using local genotype where appropriate;
  - Reduction in low intensity grazing has led to a decline in the floristic value of woodland pasture;
  - Use of fertilisers, herbicides and insecticides;
  - Animal stocking densities – too high or too low. For example, damage to trees by cattle, bark stripping, root damage, soil compaction and poaching under tree canopies;
  - Ploughing too close to trees;

- Cutting away lower branches; these are the first on the tree to produce a deadwood habitat;

- Bracken and other invasive species;

- Fire – related to excessive bracken;

- Wilful damage to fragile habitats: hollow trees and standing deadwood.

3. CURRENT ACTION IN NORFOLK

- Species such as bats and some birds which utilise ancient trees are fully protected under the Wildlife and Countryside Act 1981. This also gives some protection to their place of shelter.

- The Norfolk Parks and Gardens Survey, a joint project between Norfolk County Council and the Centre of East Anglian Studies, has recorded some of Norfolk's medieval parks. The Norfolk Veteran Tree Survey, sponsored by Norfolk County Council and English Nature, has also recorded many of the sites.

- A Heritage Tree Survey covering both Norfolk and Suffolk was launched in 2005, with the financial support of the Heritage Lottery Fund. This is a joint project between the Norfolk and Suffolk County Councils.

- In Norfolk, one area of wood-pasture at Felbrigg has been given statutory conservation status. Some sites have been designated Sites of Special Scientific Interest (SSSIs). Others are protected by Tree Preservation Orders (TPOs), Conservation Areas or are within Special Landscape Areas and/or Areas of Outstanding Natural Beauty.

- Those sites which are County Wildlife Sites have some protection through the local planning authorities' development plans. TPOs and Conservation Area Status may also be responsible for the protection of some wood-pasture and parkland.

- Felbrigg is an SSSI known particularly for its fungal interests, which are believed to be second only to those of Holkham in terms of importance. These interests were being lost through woodland spread. Around 1995, the National Trust embarked on a programme of creating some 20ha of wood-pasture at Felbrigg. Some of the site had been wood-pasture that tumbled down to woodland over time, while other areas were woodland planted during the twentieth century.

- A report on the landscape history of heaths and wood-pasture has recently been prepared by Norfolk County Council and the School of History at the University of East Anglia.

4. ACTION PLAN OBJECTIVES AND TARGETS

National

- Maintain the current extent (35,100 ha) 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 2,500 ha 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.

Regional

- Maintain 100% of existing.

- Restore 250ha by 2010.

- Create/expand 18 key sites by 2010.

Norfolk

- Maintain the existing extent of wood-pasture.

- Create/expand 40 ha of wood-pasture by 2010.

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	NATIONAL ACTION	NORFOLK ACTION	RESPONSIBLE AGENCIES		TIMETABLE				
			Lead	Partner	2004	2005	2006	2007	2008
5.1	**Policy and Legislation**								
5.1.5	When reviewing existing incentive schemes (eg 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.	Encourage agri-environment schemes and other initiatives that benefit wood-pasture and parkland. Improve the targeting of grants to assist in the appropriate management and expansion of areas of wood-pasture and parkland.	NCC	NE, FC, LAs	*	*	*	*	*
5.2	**Site Safeguard and Management**								
5.2.1	Ensure that SSSI coverage of important lowland wood-pasture and parkland sites is adequate through periodic review of the series.	Maintain adequate extent of SSSI coverage of wood-pasture and parkland sites through periodic review of Norfolk sites.	NE	NWT, NCC	*	*	*	*	*
		Maintain adequate extent of CWS coverage of wood-pasture and parkland sites through periodic review of Norfolk sites.	NCC/ NWT		*	*	*	*	*
5.2.3	Encourage applications to buy and manage appropriate sites from potential funding sources.	Encourage applications to buy and manage appropriate sites from potential funding sources.	NCC	ALL	*	*	*	*	*

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			Lead	Partner	2004	2005	2006	2007	2008
5.2.4	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.	Promote the use of long-term heritage landscape management plans (20yr+) by wood-pasture and parkland owners, aimed at integrating the diversity of species and structure, to benefit conservation and other management objectives.	NCC	NE, FC		*	*	*	*
		Prepare management plans and grant aid documentation for wood-pasture and parkland sites as required.	NCC	NE, NWT, FWAG, Wood-land for Life Steering Group	*	*	*	*	*
		Subject to owner agreement, undertake condition surveys and management proposals of wood-pasture utilising the County Wildlife System as an ongoing project.	NCC/ NWT	NE, FC	*	*	*	*	*

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			Lead	Partner	2004	2005	2006	2007	2008
5.2.5	Promote re-establishment of grazing where appropriate in derelict wood-pasture and encourage the development of subsequent generations of veteran trees in all sites.	Utilise appropriate schemes to ensure better management.	ALL		*	*	*	*	*
5.2.6	Promote the restoration of wood-pasture and parkland where old trees remain in former sites that are now arable fields or forestry plantations.	Promote and implement the management and restoration of lowland wood-pasture and parkland on publicly-owned land, as examples of good management.	NCC	LAs, NT	*	*	*	*	*
		Publicise and encourage Capital Transfer Tax management agreements. Work with Natural England and landowners to achieve this.	NCC	ALL	*	*	*	*	*
5.2.8	Contribute to the implementation of relevant priority species action plans, through the integration of management requirements and advice, in conjunction with relevant steering groups.	Implement relevant priority species action plans through the integration of management requirements and advice.	ALL		*	*	*	*	*

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			Lead	Partner	2004	2005	2006	2007	2008
5.3	**Advisory**								
5.3.1	Develop a handbook(s) on best practice in management of parklands and wood-pasture in relation to wildlife, heritage and landscape conservation.	Produce guidance notes on the desired management of lowland wood-pasture and parkland for owners.	AWP	NWT, FWAG, NE, FC			*		
5.3.3	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.	Provide advice to owners and managers of wood-pasture and parkland concerning appropriate management, including advice on safety.	AWP	NCC, NE, FC, FWAG	*	*	*	*	*
		Examine TPO, felling consent/licensing policy to consider whether additional staff training in the protection of wood-pasture and parkland trees is needed.	LAs, FC	ALL		*	*	*	*
5.5	**Future Research and Monitoring**								
5.5.1	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.	Implement systems for recording the occurrence, distribution, management and composition of wood-pasture and parkland, and identify areas that are under threat.	NCC	NE, FC NBRC, HIS		*	*		
		Undertake research on past management regimes.	HIS	NCC					

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			Lead	Partner	2004	2005	2006	2007	2008
5.5.3	Undertake a programme of targetted surveys of the biological interest of sites where lack of information is impeding their appropriate management, by 2005.	Develop a small suite of demonstration wood-pasture and parkland sites where detailed structure, process and species monitoring is carried out to complement condition assessments adopted by the statutory agencies.	NE	NCC, FWAG, NWT, NT				*	
5.5.4	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.	Develop veteran tree recording in Norfolk and give records to NBRC.	NCC	ALL	*	*	*	*	*
5.5.5	Develop and implement appropriate surveillance and monitoring programmes to assess progress towards action plan targets.	Implement appropriate surveillance and monitoring programmes to assess progress towards action plan targets.	NE	FWAG, NCC, FC	*	*	*	*	*

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			Lead	Partner	2004	2005	2006	2007	2008
5.5.6	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.	Monitor progress of work to see if research is required.	ALL		*	*	*	*	*
5.6	**Communications and Publicity**								
5.6.1	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.	Host wood-pasture and parkland management days to include ancient tree management.	AWP	NCC, LAs, NE, FWAG, NT	*		*		*

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			Lead	Partner	2004	2005	2006	2007	2008
5.6.2	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.		AWP	ALL	*	*	*	*	*

Abbreviations

AWP	Anglian Woodland Project
BTO	British Trust for Ornithology
CLA	Country Landowners' Association
EEAOP	East of England Apple and Orchards Project
FC	Forestry Commission
FWAG	Farming and Wildlife Advisory Group
HIS	School of History, University of East Anglia
LAs	Local Authorities
NBRC	Norfolk Biological Records Centre
NCC	Norfolk County Council
NE	Natural England
NT	National Trust
NWT	Norfolk Wildlife Trust
RSPB	Royal Society for the Protection of Birds

NORFOLK DISTRIBUTION

MANAGEMENT GUIDANCE

(This guidance is a general summary; for more detailed information or advice, please consult the references or contacts below.)

REFERENCES

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