

Parkland and wood pasture

(substantial review in 2004)



1. A Definition

The parklands and wood pastures included within this Action Plan are ancient places, some of which date back to mediaeval times or even further. Their often elegant and grand surroundings, with their associated country houses, estates and castles are a distinctive element of both the natural and historic heritage of the County.

Parklands and wood pastures range in character from the well-drained environments of the mediaeval deer parks in the east of the county, through to the wetter wood pastures in the north and west. Predominantly lowland, they comprise old trees, sometimes - and ideally - mixed with younger trees of various ages, and shrubs within a matrix of grazed pastures.

2. Why an Action Plan?

Parklands and wood pastures, due to their long standing, provide a continuity of habitat established over centuries. This has allowed plant and animal communities of great richness and diversity to develop, many of which are found in few other habitats. The original forest cover of Britain

was a wood pasture and so this key habitat type provides a direct link with the wildwood, with this habitat constituting Devon's remaining "old growth".

Many ancient parklands and their associated country houses are open for public enjoyment and contribute to the local tourist economy. Such sites need to be managed to maintain their unique landscape and biological character, as well as the fabric of the buildings which stand in their midst.

However, many sites now consist solely of very old trees, with few younger specimens in place to replace them, and thus the continuity of the special habitats they support is threatened. Disintegration of the canopy and inappropriate planting are additional factors causing degradation of the habitat. The wood pasture regime, of raising a timber crop on land retained also for the production of livestock, is seldom practiced any longer, threatening the very existence of this ancient environment. In addition, land management practices, particularly intensive farming, all too often promote damage to tree roots leading to decline and death of important trees.

Parklands and wood pastures are not only valuable resources of biodiversity, but are also of great historical significance, and this double interest affords these environments a special place in Devon's natural and cultural heritage.

3. Characteristic wildlife



The main fabric of parklands and wood pastures are the trees - often several centuries old and mainly oak, but also beech, ash and other long-lived species. It is thought that the oak supports more species of organism than any other tree in Britain and this is especially true of those open-grown specimens in parkland, which, over time, have developed particularly rich communities of invertebrates, lichens, mosses and fungi. The soils surrounding the trees often have been undisturbed by cultivation for similarly long periods and themselves support rich and diverse communities of soil and leaf-litter dwelling fungi and invertebrates, and a grass sward rich in flowering plants. Decaying heartwood in living trees, as well as dead and fallen limbs provide habitats to a specialised invertebrate fauna which feed on

decaying wood.

Parklands and wood pastures are perhaps best known to the naturalist for the rich assemblages of lichens which grow on the bark of the trees, and the clean air of Devon is one factor which has allowed a particularly large number of species to live here. In wood pasture sites with a boulder-strewn floor, as occurs on the edge of Dartmoor, grazing of long vegetation exposes these substrates to the light and provides additional habitats for lichens and mosses.

Mammals also make their home in parkland trees, including several species of bat, for which the crevices in split trunks provide ideal safe roosting sites, as well as providing the high densities of insects that bats rely on, especially high when grazing stock are present, their dung attracting swarms of insects.

A variety of birds use parklands and wood pastures for nesting and feeding; invertebrate-rich bark provides food for tits, tree-creepers and woodpeckers, while other species, such as flycatchers and redstarts catch insects from open perches of the lower canopy.

4. Special species

The following species of conservation concern are associated with lowland parkland and wood pasture in Devon. Species marked (p) are 'Species of Principal Importance in England' (NERC Act, S.41).

- **Mammals**: Greater horseshoe bat (p), lesser horseshoe bat (p), Bechsteins's bat (p)
- **Birds**: Spotted flycatcher (p), redstart, green woodpecker, barn owl
- **Butterflies**: High brown fritillary (p), pearl-bordered fritillary (p)
- **Beetles**: Stag beetle (p), noble chafer (p), blue ground beetle (p), hornet rove beetle, hornet longhorn, six-spotted longhorn
- **Other insects**: hornet, tiger crane fly *Ctenophora flaveolata*
- **Vascular plants**: Sessile oak, Devon whitebeam *Sorbus devoniensis*
- **Lichens**: *Schismatomma graphidioides* (p), *Lobaria amplissima*, *Lobaria virens*, *Physcia clementei*, southern grey physcia *Physcia tribacioides* (c), Francis' green-blue lichen *Zamenhofia rosei*
- **Fungi**: *Piptoporus quercinus* (p), *Clitocybe geotropa*, *Hygrocybe brevispora*, *H. miniata*, *H. schultzeri*, *H. strangulata*, *Leucopaxillus giganteus*, *Stropharia aurantiaca*, *Ganoderma resinaceum*

5. Parkland and wood pasture distribution in Devon

The following table lists major examples of wood pastures and parklands in Devon, including ownership and current management type (but see 'Current extent', below):

| Site | Owner | Type | District | Natural Area |
|---------------------|---------|------|-------------------|--------------|
| Arlington | NT | P | North Devon | E |
| Ashclyst Forest | NT | WP | East Devon | R |
| Bicton | private | P | East Devon | R |
| Blachford Park | private | P | South Hams | S |
| Bridwell | private | P | Mid Devon | R |
| Buckland Abbey | NT | P | West Devon | S |
| Clovelly | private | P/WP | Torrige | C |
| Dartington | private | P | South Hams | S |
| Dunsland | NT | P | Torrige | C |
| Eggesford | private | P | Mid Devon | C |
| Escot | private | P | East Devon | R |
| Filleigh | private | WP | North Devon | E |
| Flete | private | P | South Hams | S |
| Huish Estate | private | WP | Torrige | C |
| Killerton | NT | P | East Devon | R |
| Knightshayes | NT | P | Mid Devon | R |
| Lupton | private | P | South Hams | S |
| Luscombe Castle | private | P | Teignbridge | R |
| Mamhead | private | P | Teignbridge | R |
| Parke | NT | P | Teignbridge & DNP | D |
| Polsloe | M.O.D. | P | Exeter City | R |
| Poltimore | private | P | Exeter | R |
| Powderham Deer Park | private | P/WP | Teignbridge | R |
| Rosemoor | RHS | P | Torrige | C |
| Saltram | NT | P | Plymouth City | S |
| Shobrooke Park | private | P | Mid Devon | R |
| Shute Deer Park | private | WP | East Devon | B |
| Stover Park | DCC | P | Teignbridge | R |
| Tawstock | private | P | North Devon | C |
| Ugbrooke | private | P/W | Teignbridge | R |
| Umberleigh | private | P | Torrige | C |
| Whiddon Deer Park | NT | WP | Teignbridge & DNP | D |
| Youlston | private | P | North Devon | C |

Abbreviations:

Type: p=parkland; wp=wood pasture; w=woodland

Natural Area: B=Blackdowns; C=Culm; D=Dartmoor; E=Exmoor and the Quantocks; R=Devon Redlands; S=South Devon

6. Current extent (2009)

In 1998, Devon was estimated to hold 1753 hectares of this habitat and that nationally there was between 10-20,000 hectares, though it was acknowledged that, in reality, the extent of the resource was largely unknown.

A significant step to more accurately quantifying the extent of the habitat was taken in 2007, with the development of the Provisional Inventory of Parkland, Wood Pasture and Veteran Tree Sites in Devon. This inventory identified 209 potential parkland and wood pasture sites, covering an area of 4063 hectares, though these figures should be regarded as provisional as the study was largely desk-based and involved little ground truthing. However, it seems clear that there is a great deal more of this habitat in Devon than previously estimated.

7. Current problems for parkland and wood pasture in Devon

- A lack of young trees to replace older ones that have fallen or become senescent, threatening the continuity of the habitat on which many animal and plant communities rely.
- Changes in agricultural practices, from the cessation of grazing to over-grazing and intensification: including ploughing and re-seeding to improve pasture productivity, conversion to arable farmland, and inappropriate use of herbicides and fertilisers. In particular, ploughing and the use of agro-chemicals over the tree roots may weaken the trees and can lead to death. Also, where cultivation is close to the trees slurry spreading causes eutrophication on tree trunks and bark which changes the nature of the lichen flora to more nutrient tolerant species.
- The removal of old trees and dead wood for reasons of aesthetic appearance or public safety.
- Increased recreation pressures and the associated disturbance to stock and wildlife, erosion and vandalism, including damage to bracket fungi.
- Agricultural tenancy agreements, which do not provide adequate protection for pasture woodland, or which allow the spreading of slurry and other fertilisers onto land (and associated problems of trunk eutrophication, damage to soil structure and loss of protection of tree roots by mycorrhizal fungi).
- Wood pasture and parkland trees becoming engulfed in dense scrub or woodland through inappropriate planting, a loss of grazing animals or the lack of other appropriate management.

- The invasion of unwanted non-native species, such as rhododendron and knotweed.
- Conflicts between management objectives: nature conservation versus those of landscape and historic feature conservation.
- The lack of knowledge and appreciation of the habitat leading to inappropriate management.

8. Recent changes in extent (1998)

The extent of habitat loss in Devon is difficult to determine, but from comparisons with other habitats it is likely that well over 50% of working wood pasture and parkland has been lost to either scrub woodland and/or to arable/improved grassland over the last 50 years. Very often the picture is not one of loss, but rather degradation and neglect that as led to the habitat losing its essential character and wildlife interest.

9. Current site protection

The following parklands and wood pastures are SSSIs, which affords statutory legal protection from potentially damaging operations: Arlington, Dunsland, Ugbrooke, Whiddon Deer Park.

National Trust owns many parklands and wood pasture sites in Devon (see table above), which means that the land cannot normally be either sold or compulsorily purchased without the involvement of parliament.



10. Current positive initiatives for parkland and wood pasture

- Countryside Stewardship agreements have been established at many parkland/wood pasture sites in Devon, including Arlington, Killerton, Ugbrooke, Parke, Powderham, Shobrooke, Luscombe Knightshayes, Saltram, Buckland Abbey and Parke. Management prescriptions include re-seeding of old arable land reversion to pasture, to reduce eutrophication and extensive grassland management.
- The Ancient Tree Forum has been established specifically to promote an interest in and concern for trees past their commercial maturity. It is working to establish best management of veteran tree sites. The ATF is working in partnership with the Woodland Trust to promote conservation of ancient trees and there is a current project – the Ancient Tree Hunt – documenting trees around Britain.
- Environmentally Sensitive Areas (ESA) agri-environment scheme has some wood pasture sites under sympathetic management agreements, including Whiddon Deer Park in the Dartmoor ESA.
- Forestry Authority provides Forestry Practice Advice to owners of woodlands, and wood pastures, which includes advice on enhancing woodlands for conservation purposes.
- National Trust is undertaking extensive restoration of former pasture enclosures to wood pasture in Ashclyst Forest.
- Under Task Force Trees and the Countryside Agency's Historic Parks and Gardens grant scheme, restoration plans for storm damaged landscapes were produced and implemented at sites including Powderham, Shobrooke, Luscombe Castle and Ugbrooke.
- English Heritage produces a Register of Historic Parks and Gardens.
- Devon Garden Trust and the County Records Office hold information on parklands.
- Sites and Monuments records held by Devon County Council Historic Environment Section and by the Unitary Authorities have some information on medieval and other parks.
- Devon FWAG organised an Ancient Tree Event for landowners at Shobrooke Park in 2004.
- The Silvanus Trust has initiated a survey of the veteran trees in the Tamar Valley.

11. Biodiversity planning context

National BAP Context

Habitat of principal importance in England (NERC Act, S.41):

- Wood-pasture and parkland

Current national BAP targets can be viewed on the [Biodiversity Action Reporting System](#) (BARS).

Regional Plan Context

Regional targets for priority BAP habitats can be found on the website of [Biodiversity South West](#).

12. Biodiversity objectives and targets for parkland and wood pasture in Devon

Objective 1

Maintain at least the current extent, distribution and condition of parkland and wood pasture in Devon, ensuring that the management of surviving sites acknowledges and incorporates the biological value of parkland and wood pasture as well as historical, cultural and agricultural aspects.

Targets:

- All existing Countryside Stewardship and ESA agreements for parkland and wood pasture sites transferred to Higher Level Environmental Stewardship.
- A further 15 sites in Higher Level Environmental Stewardship by 2010.

Objective 2

Extend and improve knowledge of the resource of parkland and wood pasture in Devon, its constituent communities and species, and management options for conservation and enhancement.

Targets:

- An inventory of all surviving or part-surviving sites including biological assessment and management recommendations) to be produced by 2012.

Objective 3

Restore areas of poorly managed and neglected parkland to good condition for wildlife.

Targets:

- Reinstatement of a regime of sympathetic management to 50% of existing degraded habitat by 2015.

Objective 4

Foster improved public understanding and awareness of the value of decaying wood as a wildlife habitat, and of the conservation importance of parklands and wood pastures in general.

Targets:

- Provision of interpretation at all sites with public access by 2010 (information boards, guided walks, other events, etc.).

Objective 5

Extend appropriate management into the wider landscape around old parklands and wood pasture to recreate more ecologically sustainable habitat for their wood pasture biological communities.

Targets:

- The landscape around at least three old parkland sites is in appropriate management by 2010.

13. Wider benefits from pursuing these objectives

The pursuit of the objectives and targets set out above will not only benefit the biodiversity of parklands and wood pastures. Conservation has wider benefits and advantages for society, by providing a resource which is the basis of many

aspects of the local economy, and by adding to the quality of life of the people of Devon in ways which are beyond financial measure. Thus enhancing the interests of biodiversity will also enhance the interests of society as a whole. Some of these wider benefits are as follows.

Parkland and wood pastures form landscapes of great antiquity and, apart from their value as a resource for biodiversity, are an important part of our cultural and historical heritage. Maintaining and enhancing the character of these environments for biodiversity will also ensure that the landscape character of these stately sites will endure.

Parklands and wood pastures are often associated with country estates with buildings of historical and architectural interest. These two aspects to an estate should be mutually conserved and enhanced in order to maintain their appeal to visitors, and thereby enhance local economies.

14. Priority or indicative actions for parkland and wood pasture in Devon

| Action | Key Partners |
|---|--|
| 1. Ensure due consideration is given to parkland and wood pasture in all relevant policies in Local Development Frameworks and Community Strategies. | DCC; LAs; EN; ATF/WT |
| 2. Ensure Local Planning Authorities make due consideration to PPG9 and Regional Planning Guidance in their planning role particularly in relation to parkland, wood pasture and veteran trees. | LAs; DWT; EN; ATF; WT |
| 3. Promote the designation of areas of parkland and wood pasture as County Wildlife Sites. | DWT; DCC; ATF; WT |
| 4. Produce an inventory of old parkland and wood-pasture sites in Devon | DCC; EN; DWT; DBRC; ATF; WT |
| 5. Ensure that parkland and wood pastures are appropriately managed through incentive schemes (CS, ESA, Environmental Stewardship, WGS) and plans are in place for restoration of neglected/degraded sites. | DEFRA; FA; NT; EN; ATF; WT; FWAG |
| 6. Provide advice to landowners of management of parkland and wood pasture for wildlife conservation and enhancement. | ATF; DEFRA; FA; LAs; NPAs; FWAG |
| 7. Conduct biological surveys. Monitor at the beginning, during and at the end of management operations and ensure that site and species records are passed to Devon Biodiversity Records Centre. | DEFRA; DBRC; DWT; DBG; DIF; DA; EN; NT; NPAs; LAs; ATF; WT |
| 8. Increase the wider public's appreciation and understanding of parkland and wood pasture and its proper management (including dead wood habitat) through publications, articles, on-site interpretation and events. | DWT; ATF; WT; EN; EH; DEFRA; FWAG; NT |
| 9. Establish a Devon Branch of the Ancient Tree Forum. | NT; ATF; WT; FWAG |

Parkland and Wood Pasture Action Plan Champion - National Trust

Abbreviations used in text and table

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| ATF | Ancient Tree Forum |
| BAP | Biodiversity Action Plan |
| CS | Countryside Stewardship |
| DA | Devonshire Association |
| DBG | Devon Bat Group |
| DBRC | Devon Biodiversity Records Centre |
| DIF | Devon Invertebrate Forum |
| DWT | Devon Wildlife Trust |
| EH | English Heritage |
| EN | English Nature |
| FA | Forestry Authority |
| FWAG | Farming and Wildlife Advisory Group |
| LAs | Local Authorities |
| NPA | National Park Authorities |
| NT | National Trust |
| DEFRA | Department of Environment, Food and Rural Affairs |
| RHS | Royal Horticultural Society |
| WT | Woodland Trust |