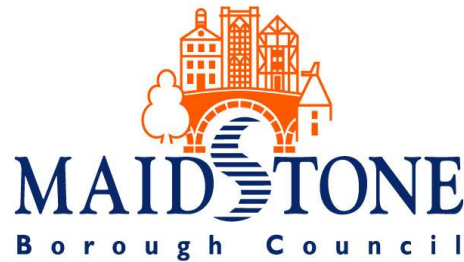


# **Maidstone's Biodiversity Strategy**

A Local Biodiversity Action Plan

Phase 1: 2009 – 2014

## **HAP 4: Lowland Beech and Yew Woodland**



## Lowland Beech and Yew Woodland Action Plan

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## Lowland Beech and Yew Woodland Action Plan

### Description

- 1.1 Beech and yew woodland spans a range of soil and topographical conditions and the association of beech with yew tend to be most frequent on calcareous sites. These woods have been managed historically as coppice, coppice with standards, wood-pasture, high forest and minimum intervention. They are often found as intricate mosaics with other woodland communities.
- 1.2 Calcareous beech and yew woodland forms perhaps 40% of the UK total for this habitat type. The canopy can include mixtures of beech, ash, sycamore (non-native), yew and whitebeam. Oak is less common than in the other beechwoods, and pure stands of yew occur in places. This type occurs in the Borough on the chalk scarps of the North Downs, for example at Wouldham to Detling Escarpment SSSI.
- 1.3 Beech woodland on neutral-slightly acidic soils comprises about 45% of the UK total for this habitat. It is found on heavier soils (pH 7 to 4) and often where the drainage is poor or impeded. Stands tend to be dominated by beech, but oak *Quercus robur* and sometimes *Q. petraea* is a common associate. It occurs in (but is not confined to) the High and Low Weald.
- 1.4 Acidic beech woodland forms the remaining 15% of the habitat type in the UK and is usually found on light sandy or sometimes gravelly soils that are well drained (pH 3.5 to 4.5). Holly is the main under storey species, less often yew, with oak being the common canopy associate. Typical sites are found on the Greensand Ridge in Kent.
- 1.5 In the United Kingdom beech is considered native only in southern England and southern Wales. Beech would certainly have spread naturally to other areas of the British Isles had forest fragmentation not impeded its progress.
- 1.6 The main corresponding National Vegetation Classification (NVC) plant communities associated with this habitat type are;
  - W12 *Fagus sylvatica* - *Mercurialis perennis* woodland (base-rich soils)
  - W13 *Taxus baccata* - Yew stands
  - W14 *Fagus sylvatica* - *Rubus fruticosus* woodland (mesotrophic soils)
  - W15 *Fagus sylvatica* - *Deschampsia flexuosa* woodland (acidic soils)
- 1.7 Lowland Beech and Yew woodland is often associated with characteristic uncommon or rare plants including box *Buxus sempervirens*, red helleborine *Cephalanthara rubra*, coralroot bitter-cress *Cardamine bulbifera*, and bird's nest orchid *Neottia nidus-avis*.

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- 1.8 Lowland beech and yew woodland is an important habitat for a number of priority species including devil's bolete fungus *Boletus satanus*, a hedgehog fungus *Hericeum erinaceum*, the knothole moss *Zygodon forsteri*, the dormouse *Muscardinus avellarius* and the pearl bordered fritillary butterfly *Boloria euphrosyne*.

### National status

- 2.1 There are no precise data on the total extent of native lowland beech and yew in the UK. In the late 1980s the Nature Conservancy Council estimated the total extent of ancient semi-natural woodland of this type at between 15,000 and 25,000 ha which with recent beech woodland brings the total area to about 30,000ha.
- 2.2 Lowland beech and yew woodland has declined in area by clearance and replanting with non-native species over the last 50 years.

### Local status

- 3.1 The 2003 Kent Habitat survey indicates 84 ha of this habitat in the Borough, although this is probably a slight underestimate.
- 3.2 Of the 84ha of beech and yew woodland in the Borough 80% is notified as Sites of Special Scientific Interest (SSSI), with a further 5% in Local Wildlife Sites (LWS). This means that in total only 15% of this resource in borough is not currently designated.
- 3.3 Approximately 87% of the lowland beech and yew woodland within SSSI in the borough is currently on target to be in a favourable or unfavourable recovering condition by 2010. This is falling short of the 95% Public Service Agreement target to improve the condition of SSSIs.
- 3.4 Approximately 64% of the 4ha of lowland beech and yew woodland within LWS is under or has been under an environmental stewardship specifically for woodland areas in the last five years.
- 3.5 MBC own part of the lowland beech and yew woodland within the SSSI Wouldham to Delting Escarpment (unit 13), however an agreement with Kent Trust for Nature Conservation (Kent Wildlife Trust) in 1997 was formed that they would be the custodians for the site and would work to enhance and protect the flora and fauna of the site.

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3.5 Currently 76 ha (90%) of lowland beech and yew woodland identified within the Kent Habitat Survey 2003 is in a favourable condition.

### Factors causing decline in biodiversity

- 4.1 Beech and yew woodland has been less affected than other woodland types by replanting with conifers and clearance for agriculture because of the productive value of beech high forest and the relatively poor soils with which it is often associated. Changes in the composition and structure of lowland beech and yew woodland are however occurring. The main factors affecting the habitat are seen to be as follows.
- 4.2 Grey squirrels strip the bark from beech trees (between 10 and 40 years old) which can result in tree death, disruption of normal age structure and shifts in species composition; rabbits can also cause damage (bark stripping and eating regeneration) in some beech and yew areas. Deer browsing on seedlings and saplings is a widespread problem, which limits capacity for regeneration.
- 4.3 Locally, invasive species that replace beech and yew woodland composition include sycamore, rhododendron, Turkey oak *Quercus cerris* and cherry laurel *Prunus laurocerasus*.
- 4.4 The predominance of the older age classes in much beech high forest has increased the susceptibility of the beech population to damage from droughts and storms.
- 4.5 Lack of interest, expertise and incentives amongst some owners results in much beech and yew woodland being unmanaged, or managed unsympathetically.
- 4.6 Addition of nutrients and other chemicals from nearby intensively farmed land.
- 4.7 Fragmentation of the habitat as a result of development.
- 4.8 Climate changes resulting in some species of vegetation and associated fauna expanding range and populations, whilst others may decline.
- 4.9 Air pollution may cause susceptibility of beech trees to disease and damage to epiphyte populations. Atmospheric deposition of nitrogen resulting in nutrient enrichment and changes in ground flora with vigorous, ubiquitous species succeeding at the expense of species characteristic of systems with low nutrient availability.

## Lowland Beech and Yew Woodland Action Plan

### Current national action

- 5.1 Lowland Beech and Yew woodland is currently targeted by the Forestry Commission English Woodland Grant Scheme to assist with management and enhancement.
- 5.2 Felling licences from the Forestry Authority (FA) are normally required if the woods are not managed under plans approved by them.

### Funding resources

- 6.1 Funding via the Forestry Commission English Woodland Grant Scheme for the management, enhancement and creation via expansion of woodland is available.

### National plan objectives and actions

- 7.1 The UK-BAP Lowland Beech and Yew Woodland Habitat action plan objectives and targets cover habitat conservation, restoration and expansion. The UK-BAP Lowland Beech and Yew Woodland Habitat action plan objectives and targets cover habitat conservation, restoration and expansion. The plan aims to maintain the current extent, quality and distribution and in addition, achieve favourable condition of 65% of Lowland Beech and Yew Woodland habitat in England by 2015. The plan also targets the re-establishment of 21% of Lowland Beech and Yew Woodland by re-stocking at important sites in England by 2015.

### Local plan objectives and actions

- 8.1 The Kent LBAP Lowland Beech and Yew Woodland Habitat action plan objectives and targets concentrate on the improvement of designated sites and creation of the habitat. Within SSSIs it seeks wherever feasible, favourable status for all lowland beech and yew woodland habitat by 2020. Within LWS the plan seeks favourable status for 25% of this habitat by 2020, increasing to 50% by 2026. The plan also targets the re-establishment of 45 ha by 2020 and an additional 22 ha by 2026.

## Lowland Beech and Yew Woodland Action Plan

### Maidstone's objectives

9.1 Maidstone's objectives are;

- 1. Maintain the current extent and quality of Lowland Beech and Yew Woodland.**
- 2. Ensure positive management of lowland beech and yew woodland.**
- 3. Re-stock lowland beech and yew woodland by identifying priority areas for increasing the area of this habitat into arable, improved grassland or other species poor areas or where there is a significant non-native component.**

## Lowland Beech and Yew Woodland Action Plan

### Objectives and targets

**Objective 1: Maintain the current extent and quality of Lowland Beech and Yew Woodland Habitat**

**Target 1: Maintain 84 ha (as identified by the Kent Habitat Survey 2003) by 2026.**

BYW	ACTION	TARGET START DATE	TARGET END DATE	KEY EXTERNAL PARTNERS	PROGRESS
1.	Ensure that Maidstone's Local Development Framework contain policy to protect Lowland Beech-Yew Woodland.	2009	2010	ALL	
2.	Ensure that significant beech-yew woods not designated SSSI are made Local Wildlife Sites (LWS)	2009	2014	KWT	
3.	Target woodland environmental management schemes at all beech-yew woodland sites	2009	2014	FC	
4.	Develop recording methods within the environmental schemes for woodlands to record when the habitat could be classified as beech-yew priority habitat	2009	2014	ALL	Need for recording/monitoring system to be set up as determined by Steering Group. Opportunity for community engagement.



## Lowland Beech and Yew Woodland Action Plan

**Objective 2: Ensure positive management of Lowland Beech and Yew Woodland Habitat**

**Target 2: Ensure the positive management of 45 ha by 2014, 48 ha by 2020 and 49 ha by 2026.**

LCG	ACTION	TARGET START DATE	TARGET END DATE	KEY EXTERNAL PARTNERS	PROGRESS
5.	Ensure that all Lowland beech-yew woods identified in the Kent Habitat Survey 2003 are under an environmental stewardship or have been under an environmental stewardship in the last 10 years.	2009	2026	FC	

## Lowland Beech and Yew Woodland Action Plan

**Objective 3: Identify priority areas for increasing the area of this habitat through planting new woodlands and altering the structure of existing woodlands with a significant non-native component.**

**Target 3: Expand areas of lowland beech-yew woodland habitat at key sites by 11 ha by 2014 and by 13 ha by 2019 (Total Area: 13 ha by 2026).**

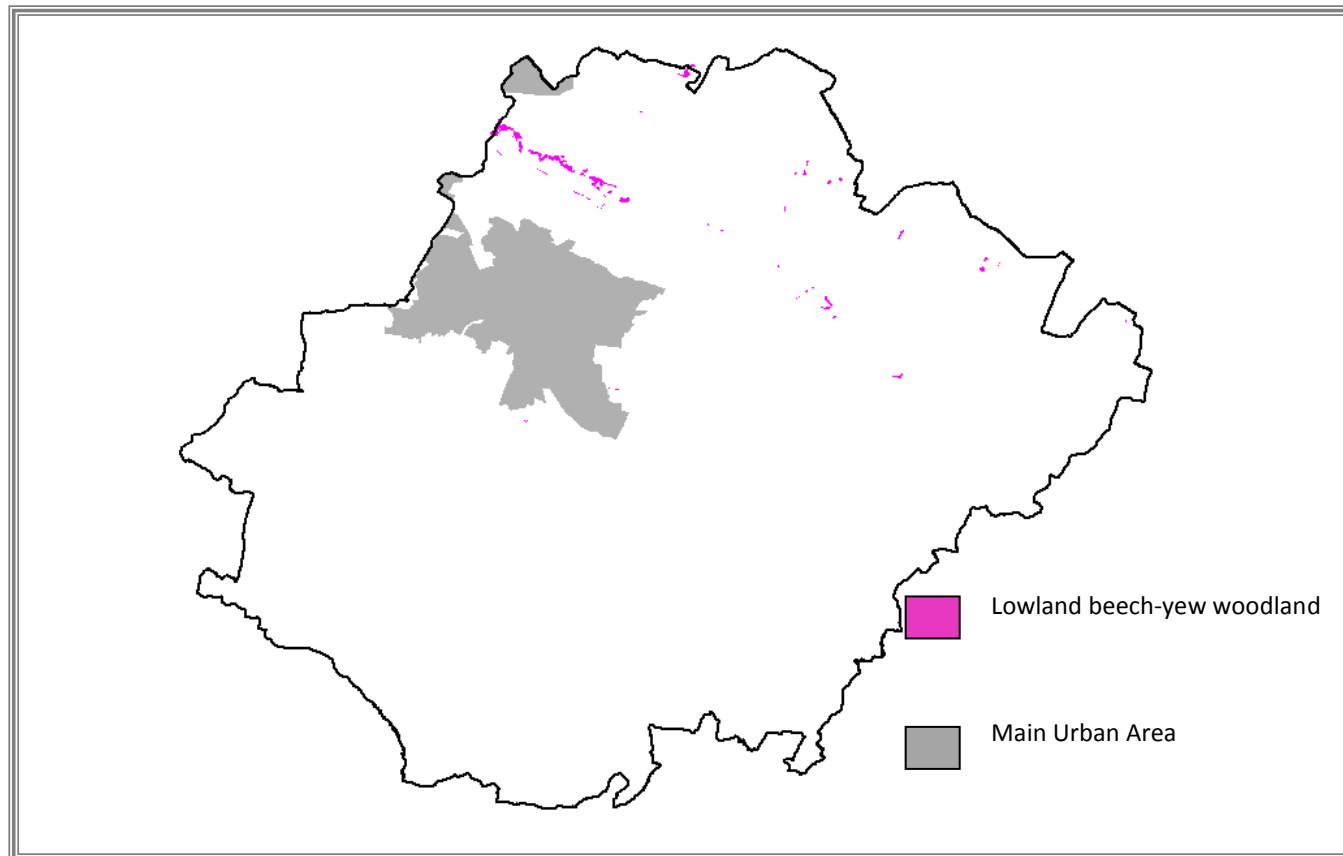
LCG	ACTION	TARGET START DATE	TARGET END DATE	KEY EXTERNAL PARTNERS	PROGRESS
6.	Use the SE opportunity map and the woodland statement maps/information to identify areas of opportunity for the planting of new beech-yew woodlands on species poor sites to increase connectivity.	2009	2026	FC	
7.	Target creation schemes for Lowland beech-yew woodland via environmental stewardships to areas identified through opportunity mapping	2009	2026	FC	
8.	Identify existing woodlands not currently classified as beech-yew woodlands with the potential to be incorporated into this habitat category through appropriate management.	2009	2026	FC	
9.	Encourage removal of non-native species from those woods identified above through development of management plans and grant aid.	2009	2026	FC NE	

## Lowland Beech and Yew Woodland Action Plan

### Lowland beech and yew woodland distribution

10.1 The distribution of Lowland Beech and Yew Woodland can be seen in figure 1.

Figure 1 Distribution of Lowland Beech and Yew Woodland in Maidstone Borough



Data Source: Kent Habitat Survey 2003