

Site Improvement Plan

Burnham Beeches

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK0030034 Burnham Beeches SAC

Site description

Burnham Beeches is an example of Atlantic acidophilous beech forests in central southern England. It is an extensive area of former beech wood-pasture with many old pollards and associated beech *Fagus sylvatica* and oak *Quercus spp.* high forest. Surveys have shown that it is one of the richest sites for saproxylic invertebrates in the UK. It also retains nationally important epiphytic communities, including the moss *Zygodon forsteri*.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Air Pollution: risk of atmospheric nitrogen deposition	Threat	H9120 Beech forests on acid soils	Implementation of nutrient management strategy	Not yet determined
2 Public Access/Disturbance	Pressure/Threat	H9120 Beech forests on acid soils	Continuation of the access management strategy in the National Nature Reserve (NNR)	City of London Corporation, Natural England, South Bucks District Council
3 Habitat fragmentation	Pressure	H9120 Beech forests on acid soils	Provision of clear advice to local planning authorities	City of London Corporation, Forestry Commission, Natural England, South Bucks District Council
4 Deer	Pressure/Threat	H9120 Beech forests on acid soils	Provision of advice to landowner on deer management	Forestry Commission, Natural England, Landowner(s)
5 Species decline	Pressure/Threat	H9120 Beech forests on acid soils	Implementation of specific management to promote future veteran trees	City of London Corporation, Forestry Commission, Natural England
6 Invasive species	Threat	H9120 Beech forests on acid soils	Develop a survey and monitoring strategy, and implement control measures as necessary	City of London Corporation, Forestry Commission, South Bucks District Council, Landowner(s), National Trust/Dorneywood Trust

Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Air Pollution: risk of atmospheric nitrogen deposition

Epiphytic lichen communities are sensitive to nutrient deposition, promoting the growth of nutrient-tolerant species and reducing overall lichen diversity. Improvements have been achieved in terms of SO₂ and particulate deposition in the area but NO₂ and ammonia deposition levels remain high. Nitrogen deposition may also be affecting tree health, resulting in changes in tree canopy structure and other effects.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Control, reduce and ameliorate atmospheric nitrogen impacts	Not yet determined	2014-20	Site Nitrogen Action Plan	Not yet determined	Not yet determined	Not yet determined

2 Public Access/Disturbance

Veteran trees are vulnerable to damage as a result of soil compaction due to trampling or vehicle movements in their root zone.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Implement the access management strategy	Not yet determined	2015-25	National Nature Reserve (NNR) management plan	National Nature Reserve (NNR) running costs	City of London Corporation	Natural England, South Bucks District Council

3 Habitat fragmentation

There is high pressure for new housing development in the vicinity of Burnham Beeches which risks isolating the site from the surrounding countryside.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A	Input to forward development planning.	Staff time	2015-25	Advice	Staff time	Natural England	City of London Corporation, South Bucks District Council

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
3B	Support woodland habitat management and woodland creation in surrounding area.	Not yet determined	2015-25	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS)	Forestry Commission	Natural England

4 Deer

Deer are numerous in the northern parts of the site and causing adverse impacts on tree regeneration and ground flora composition.

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4A	Implementation of deer management strategy.	Staff time	2015-25	Advice	Not yet determined	Natural England	Forestry Commission, Landowner(s)

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
4B	Implementation of deer management strategy.	£20,000	2015-25	Non-Natural England funded site management plan	LEADER (RDPE)	Forestry Commission	Natural England, Landowner(s)

5 Species decline

The number of veteran trees at the site is declining and there is a significant age gap between these and the next generation of future veterans. This could have significant impacts on habitat availability for specialised saproxylic invertebrates.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5A	Implementation of veteran tree management strategy.	£50,000	2015-25	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	Rural Development Programme (RDPE)	City of London Corporation	Forestry Commission, Natural England

6 Invasive species

Oak processionary moth is now well-established in sites close to Burnham Beeches. If it reaches Burnham Beeches control measures could pose a threat to native invertebrate populations. And as current control methods are very expensive it could result in reduced funding for habitat management.

Work has been undertaken to reduce the presence of Rhododendron across the site but it is abundant in many adjacent properties and work will be required to prevent re-colonisation. It is of particular concern as it acts as host for the pathogen causing sudden oak death (which also affects beech).

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Implementation of invasive species monitoring	Not yet determined	2015-20	Bio-security plan	Not yet determined	City of London Corporation	Forestry Commission, South Bucks District Council, Landowner(s), National Trust/ Dorneywood Trust
6B	Implementation of invasive species control plan	£15,000	2016-25	Invasive Control Plan: Invasive Species Control Programme	Natural England (NNR running costs), Volunteering	City of London Corporation	Forestry Commission, South Bucks District Council, Landowner(s), National Trust/ Dorneywood Trust

<i>Action</i>	<i>Action description</i>	<i>Cost estimate</i>	<i>Timescale</i>	<i>Mechanism</i>	<i>Funding option</i>	<i>Delivery lead body</i>	<i>Delivery partner(s)</i>
6C	Continue the policy of eradication of <i>Rhododendron ponticum</i> .	Not yet determined	2015-25	Invasive Control Plan: Invasive Species Control Programme	New Environmental Land Management Scheme (NELMS), England Woodland Grant Scheme (EWGS)	City of London Corporation	Forestry Commission, Landowner(s), National Trust/ Dorneywood Trust

Site details

The tables in this section contain site-relevant contextual information and links

Qualifying features

#UK Special responsibility

Burnham Beeches SAC

H9120 Atlantic acidophilous beech forests with Ilex and sometimes also *Taxus* in the shrublayer (*Quercion robri-petraeae* or *Ilici-Fagenion*)

Site location and links

Burnham Beeches SAC

Area (ha) **382.76** Grid reference **SU949855** [Map link](#)

Local Authorities Buckinghamshire

Site Conservation Objectives [European Site Conservation Objectives for Burnham Beeches SAC](#)

European Marine Site conservation advice [n/a](#)

Regulation 33/35 Package [n/a](#)

Marine Management Organisation site plan [n/a](#)

Water Framework Directive (WFD)

The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RBMP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.

Burnham Beeches SAC

<i>River basin</i>	Thames RBMP
<i>WFD Management catchment</i>	Colne
<i>WFD Waterbody ID (Cycle 2 draft)</i>	n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Burnham Beeches SAC	Burnham Beeches SSSI

National Nature Reserve (NNR)	
Burnham Beeches SAC	Burnham Beeches NNR

Ramsar	
Burnham Beeches SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Burnham Beeches SAC	n/a

Other relevant documents and links	
	Burnham Beeches NNR & SAC Local Management Plan 2010-2020

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	15/12/2014	

www.naturalengland.org.uk/ipens2000

