

# Site Improvement Plan

## Epping Forest

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](mailto: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](mailto:enquiries@naturalengland.org.uk)

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

**UK0012720 Epping Forest SAC**

## Site description

Epping Forest is a large ancient wood-pasture with habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains, wet and dry heathland and scattered wetland. The semi-natural woodland is particularly extensive but the forest plains are also a major feature and contain a variety of unimproved acid grasslands.

## 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: impact of atmospheric nitrogen deposition	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H9120 Beech forests on acid soils	Establish a Site Nitrogen Action Plan	Natural England
2 Undergrazing	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths	Partnership agreement to ensure sufficient resources for appropriate grazing	Natural England, Conservators of Epping Forest
3 Public Access/Disturbance	Pressure	H4010 Wet heathland with cross-leaved heath, H4030 European dry heaths, H9120 Beech forests on acid soils	Identify key areas and agree a plan to maintain SAC features	Natural England, Conservators of Epping Forest
4 Changes in species distributions	Threat	H9120 Beech forests on acid soils	Investigate tree health and recruitment in key areas to establish a baseline for monitoring. Agree actions and implement a management plan	Natural England, University(ies), Conservators of Epping Forest
5 Inappropriate water levels	Threat	H4010 Wet heathland with cross-leaved heath	Hydrological monitoring, and a possible water level management plan	Environment Agency, Natural England, City of London (Epping Forest)
6 Water Pollution	Threat	H4010 Wet heathland with cross-leaved heath	Investigate water quality run-off from roads, agree actions and implement a management plan	Essex County Council, Natural England, Conservators of Epping Forest

7	Invasive species	Threat	H4010 Wet heathland with cross-leaved heath	Investigate impact, agree actions and implement a management plan	Natural England, University(ies), The Heather Trust, Conservators of Epping Forest
8	Disease	Threat	H9120 Beech forests on acid soils	Investigate impact, agree actions and implement a management plan	Forestry Commission, Natural England, University(ies), Conservators of Epping Forest
9	Invasive species	Pressure/ Threat	H9120 Beech forests on acid soils	Investigate impact and review the current monitoring programme, agree actions and implement a management plan	Forestry Commission, Natural England, University(ies), Conservators of Epping Forest

## 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: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds site-relevant critical loads for ecosystem protection. Some parts of the site are assessed as in unfavourable condition for reasons linked to air pollution impacts.

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	Natural England	Not yet determined

### 2 Undergrazing

The quality and diversity of the SAC features requires targeted management best achieved through grazing to: minimise scrub invasion; minimise robust grass domination, and maximise the species diversity of heathland plant communities.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Ensure that sufficient resources are available for appropriate grazing levels to achieve and maintain favourable conservation status for SAC features. This requires funding and stock management.	Not yet determined	2015-20	Partnership agreement	Higher Level Stewardship (HLS)	Conservators of Epping Forest	Natural England

### 3 Public Access/Disturbance

Epping Forest is subject to high recreational pressure. There is a high general level of footfall in Epping Forest throughout the year, including periods of significant use, and resulting in a diverse range of impacts which include mountain biking and unmanaged fires. Population and visitor numbers are likely to continue to increase.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3A	Identify key areas that are subject to recreational impacts.	Not yet determined	2014-16	Investigation / Research / Monitoring	Local Authority	Conservators of Epping Forest	Natural England

<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>
<b>3B</b>	Agree and implement a site-specific recreational management plan to ensure SAC features are protected and maintained.	Not yet determined	2014-18	Partnership agreement	Local Authority	Conservators of Epping Forest	Natural England

#### 4 Changes in species distributions

Beech tree health and recruitment may not be coping sufficiently with environmental conditions to sustain its presence and representation within the SAC feature. This may be linked to climate change as well as other factors such as air quality, recreational pressure and water availability.

<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>
<b>4A</b>	Investigate Beech tree health and beech sapling recruitment in core areas to establish a baseline for monitoring and consider adequacy for community sustainability.	Not yet determined	2016-20	Investigation / Research / Monitoring	Not yet determined	Conservators of Epping Forest	Natural England, University(ies)

<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>
<b>4B</b>	Agree and implement a management plan to promote beech tree conservation and sapling recruitment, review conservation objectives and/or a plan for different tree species to be able to take the place of beech if necessary.	Not yet determined	2018-20	Partnership agreement	Local Authority	Conservators of Epping Forest	Natural England, University(ies)

#### 5 Inappropriate water levels

Wet heath is dependent on suitable ground water levels. There is a threat of prolonged drying out through climate change.

<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>
<b>5A</b>	Implement a hydrological investigation for key wet heathland areas.	Not yet determined	2017-19	Investigation / Research / Monitoring	Water Framework Directive (WFD)	Environment Agency	Natural England, City of London (Epping Forest)

<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>
<b>5B</b>	Agree and implement a ground water level management plan for wet heathland areas, if necessary.	Not yet determined	2019-20	Water Level Management Plan	Not yet determined	Environment Agency	Natural England, City of London (Epping Forest)

## 6 Water Pollution

Surface run-off of poor quality water from roads with elevated levels of pollutants, nutrients and salinity may be affecting wet heath, probably mostly around the edges.

<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>
<b>6A</b>	Investigate the impact of poor quality water run-off from roads on wet heath communities.	Not yet determined	2018-20	Investigation / Research / Monitoring	Not yet determined	Conservators of Epping Forest	Essex County Council, Natural England

<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>
<b>6B</b>	Agree and implement a surface run-off management plan for wet heathland areas, if necessary.	Not yet determined	2020-22	Partnership agreement	Local Authority	Conservators of Epping Forest	Essex County Council, Natural England

## 7 Invasive species

Heather beetle has locally impacted on some heathland areas. Vigilance is required to survey it and increase awareness of its likely effects and signs of impact.

<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>
<b>7A</b>	Investigate how significant the impact of the spread of heather beetle has been on the wet and dry heathland areas of Epping Forest.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Conservators of Epping Forest	Natural England, University(ies), The Heather Trust

## 8 Disease

Tree diseases such as *Phytophthora* present a real threat to Beech.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>8A</b>	Investigate whether the current monitoring programme of tree diseases is adequate.	Not yet determined	2015-16	Investigation / Research / Monitoring	Not yet determined	Conservators of Epping Forest	Forestry Commission, Natural England, University(ies)
<b>8B</b>	Following the study agree and implement appropriate management measures for core areas supporting Beech SAC communities.	Not yet determined	2016-20	Partnership agreement	Not yet determined	Conservators of Epping Forest	Forestry Commission, Natural England, University(ies)

## 9 Invasive species

Grey squirrel is not currently known to be significantly affecting tree health or regeneration, but there is a need to retain vigilance and perhaps consider increased awareness of the likely effects and signs of impact.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
<b>9A</b>	Investigate what impact grey squirrels have on tree health and/or regeneration and its possible further impact on the Atlantic acidophilous beech woodland feature.	Not yet determined	2016-18	Investigation / Research / Monitoring	Not yet determined	Conservators of Epping Forest	Forestry Commission, Natural England, University(ies)
<b>9B</b>	Following study, agree appropriate management measures and implement.	Not yet determined	2018-20	Partnership agreement	Not yet determined	Conservators of Epping Forest	Forestry Commission, Natural England

## Site details

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

### Qualifying features

#UK Special responsibility

#### Epping Forest SAC

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

H4010 Northern Atlantic wet heaths with *Erica tetralix*

S1083 *Lucanus cervus*: Stag beetle

H4030 European dry heaths

### Site location and links

#### Epping Forest SAC

Area (ha) **1604.95**      Grid reference **TQ399959**      [Map link](#)

Local Authorities      Essex

Site Conservation Objectives      [European Site Conservation Objectives for Epping Forest 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.*

### **Epping Forest SAC**

River basin

[Thames RBMP](#)

WFD Management catchment

London

WFD Waterbody ID (Cycle 2 draft)

GB106038027930

## Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Epping Forest SAC	Epping Forest SSSI

National Nature Reserve (NNR)	
Epping Forest SAC	n/a

Ramsar	
Epping Forest SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Epping Forest SAC	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.1	12/12/2016	

[www.naturalengland.org.uk/ipens2000](http://www.naturalengland.org.uk/ipens2000)

