

Site Improvement Plan

Aston Rowant

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)

UK0030082 Aston Rowant SAC

Site description

Aston Rowant is classified as SAC because it supports one of the largest remaining populations of juniper in lowland Britain. It is selected as an example of juniper formations on the chalk in the south east of England. At this site juniper is present as part of a mixed scrub community but also occurs as isolated bushes in chalk grassland.

In common with most lowland populations of juniper, successful reproduction and survival of new generations of bushes is extremely rare and conservation is currently dependent upon significant levels of management intervention. The low level of reproductive success is the main threat to the feature at this site.

Aston Rowant also supports *Asperulo-Fagetum* beech forests although this is not a primary reason for classification as SAC.

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 Unsustainable on-site population or habitat	Pressure/Threat	H5130 Juniper on heaths or calcareous grasslands	Trialling of innovative techniques to manage juniper	Buckinghamshire County Council, Natural England, Volunteers, Plantlife
2 Changes in species distributions	Pressure	H5130 Juniper on heaths or calcareous grasslands	Improve the coordination of efforts to conserve juniper in the Chilterns	Buckinghamshire County Council, Chilterns AONB, Natural England, Plantlife
3 Deer	Pressure/Threat	H9130 Beech forests on neutral to rich soils	Provide advice and support to the landowner	Forestry Commission, Natural England, Chilterns Woodland Project
4 Conflicting conservation objectives	Pressure/Threat	H5130 Juniper on heaths or calcareous grasslands	Develop a revised management strategy for juniper	Buckinghamshire County Council, Natural England, Volunteers, Plantlife
5 Disease	Pressure/Threat	H5130 Juniper on heaths or calcareous grasslands	Prevent the introduction of <i>Phytophthora austrocedrae</i>	Buckinghamshire County Council, Natural England, Volunteers, Plantlife

6 Air Pollution: risk of atmospheric nitrogen deposition

Threat

H5130 Juniper on heaths or calcareous grasslands, H9130 Beech forests on neutral to rich soils

Investigate the potential impact of air pollution

Natural England

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 Unsustainable on-site population or habitat

Juniper reproduction on present day lowland sites is generally very rare and dependent upon either exceptional circumstances which provide new areas for colonisation close to existing populations or intensive management intervention. Conservation of the species in this context requires a new approach which avoids this dependency on exceptional and rare circumstances.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Trialling of innovative techniques to promote juniper establishment.	£30,000	2015-25	National Nature Reserve (NNR) management plan	Natural England (NNR running costs)	Natural England	Buckinghamshire County Council, Volunteers, Plantlife

2 Changes in species distributions

Habitat fragmentation and increasing isolation of juniper populations in the Chilterns means that prospects for maintenance of self-sustaining populations in the long-term is increasingly unlikely. This effect also reduces the prospects for maintenance of genetic variation across the local distribution of the species and wider population viability.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Coordination of action to protect juniper in the wider environment.	£60,000	2015-25	Species Recovery Programme	LIFE, Species Recovery Programme	Natural England	Buckinghamshire County Council, Chilterns AONB, Plantlife

<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>
2B	Provide support for habitat management in the wider environment to promote and protect juniper.	£60,000	2015-25	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS)	Natural England	Buckinghamshire County Council, Chilterns AONB, Plantlife

3 Deer

Despite control measures, deer are exerting negative impacts on the beech woodland in parts of the site. Some parts remain unaffected. There may be undesirable long-term impacts on woodland composition and there are significant implications for tree reproduction.

<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>
3A	Advise and support adjacent landowners to reduce impacts of deer through local deer management group.	£50,000	2015-25	Advice	New Environmental Land Management Scheme (NELMS)	Forestry Commission	Natural England, Chilterns Woodland Project

<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	Provide support for deer management infrastructure.	£48,000	2016-21	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, Chilterns Woodland Project

4 Conflicting conservation objectives

The context in which juniper grows at Aston Rowant has changed significantly over the past 100 years and management of large parts of the site is no longer compatible with maintenance of self-sustaining juniper. Much of the site went through a long period in the late 1800s and early 1900s with low levels of stock grazing after a long period of intensive sheep grazing. This provided ideal conditions for juniper establishment and spread. These conditions are very difficult to replicate and other conservation priorities mean that grazing is required across most of the site, which is incompatible with juniper seedling establishment. A clear long-term strategy which balances the conflicting conservation priorities is needed.

<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	Production of a revised juniper management plan	Not yet determined	2015	National Nature Reserve (NNR) management plan	Natural England (NNR running costs)	Natural England	Buckinghamshire County Council, Volunteers, Plantlife
<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 juniper management plan	Not yet determined	2015-25	National Nature Reserve (NNR) management plan	Natural England (NNR running costs)	Natural England	Buckinghamshire County Council, Volunteers, Plantlife

5 Disease

Phytophthora austrocedrae was first discovered in the UK in 2011 at sites in northern England. The disease infects juniper and can result in rapid decline and death of bushes. Risk of spread of the disease has resulted in advice to avoid transfer of plant material between sites. This means that a much reduced range of options for propagation and growing on of juniper in re-establishment programmes is now available.

<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>
5A	Develop new procedures to reduce the risk of accidental introduction of <i>Phytophthora austrocedrae</i>	Not yet determined	2015-25	National Nature Reserve (NNR) management plan	Natural England (NNR running costs)	Natural England	Buckinghamshire County Council, Volunteers, Plantlife

6 Air Pollution: risk of atmospheric nitrogen deposition

Nitrogen deposition exceeds critical loads but the site is considered to be in favourable condition. this requires further investigation. Air pollution may be exacerbating problems of competition for young juniper and low-growing bushes by promoting vigorous growth of surrounding vegetation. May also be reducing the availability of suitable sites for seedling establishment, i.e. bare ground and broken turf, by encouraging rapid establishment of vegetation cover.

<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>
6A	Further investigate the potential atmospheric nitrogen impacts on the site based on application of guidance from Chief Scientist Group Nitrogen Task and Finish Group	Not yet determined	2017	Investigation / Research / Monitoring	Not yet determined	Natural England	Not yet determined

Site details

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

Qualifying features

#UK Special responsibility

Aston Rowant SAC	H5130 Juniperus communis formations on heaths or calcareous grasslands
	H9130 <i>Asperulo-Fagetum</i> beech forests

Site location and links

Aston Rowant SAC

Area (ha) **127.75** Grid reference **SU727972** [Map link](#)

Local Authorities Buckinghamshire; Oxfordshire

Site Conservation Objectives [European Site Conservation Objectives for Aston Rowant 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.

Aston Rowant SAC

River basin

[Thames RBMP](#)

WFD Management catchment

Thame and South Chilterns

WFD Waterbody ID (Cycle 2 draft)

n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Aston Rowant SAC	Aston Rowant SSSI

National Nature Reserve (NNR)	
Aston Rowant SAC	Aston Rowant NNR

Ramsar	
Aston Rowant SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Aston Rowant SAC	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	27/10/2014	

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