Improvement Programme for England's Natura 2000 Sites (IPENS)

Planning for the Future

Site Improvement Plan

Butser Hill

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)

UK0030103 Butser Hill SAC

Site description

Butser Hill SAC is an extensive area of semi-natural dry grassland and dense yew woodlands, with smaller elements of chalk heath, deciduous woodland and mixed scrub. It is located within the South Downs National Park, in the east of Hampshire. Butser is the highest point in the National Park, and is situated on the chalk which also feeds the Oxenbourne tributary of the River Meon.

The chalk grassland component of the site is primarily CG2 *Festuca ovina – Avenula pratense* grassland, grazed by sheep and rabbits.
The topography of the site is varied, with a wide range of slope gradients and aspects, which in turn generate conditions for high diversity of both vascular and lower flora. The lichen flora associated with chalk grassland is considered the richest in England, whilst a distinctive association of liverworts and mosses occurs on the north-facing slopes. The site supports a diversity of butterflies, and is notable for its population stronghold of Duke of Burgundy *Hamearis lucina*.

The calcareous yew woods are outstanding examples of a habitat with a very small representation in Britain. The occurrence of chalk grasslands and yew woodlands, alongside transitional habitat between them, combine to make this site of outstanding nature conservation importance.

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 Inappropriate scrub control	Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites)	Undertake a feasibility study to determine the most appropriate means of control	Hampshire County Council, Natural England, South Downs National Park Authority, Butterfly Conservation
2 Undergrazing	Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites)	Undertake a feasibility study to determine appropriate control of invasive scrub and grasses by grazing and/or mechanical means (including mowing or cutting).	Hampshire County Council, Natural England, South Downs National Park Authority, Butterfly Conservation
3 Air Pollution: risk of atmospheric nitrogen deposition	Threat	H6210 Dry grasslands and scrublands on chalk or limestone (important orchid sites), H91J0 Yew-dominated woodland	Further investigate the impacts of atmospheric nitrogen deposition	Hampshire County Council, Natural England, South Downs National Park Authority, Butterfly Conservation

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 Inappropriate scrub control

In some localised areas, chalk grassland is suffering from significant encroachment by bramble, gorse and other scrub, and there are indications that its extent is declining at the expense of the dense scrub. Shading effects from expansion of woodland and scrub will also cause a reduction in diversity in the sward. Hand cutting and stump treatment of scrub does occur already on the site but could be intensified in particular areas. Increased stocking with sheep or cattle in selected areas would help to overcome this as they could target young scrub. This issue applies to some areas of the site where chalk grassland occurs in patches amongst woodland. Chalk grassland restoration areas may also require these works in order to achieve Favourable Condition status. Butterfly Conservation have indicated a preference for a varied approach to scrub management; large-scale mechanical control is considered less favourable as it is delivering too uniform a sward to support the Duke of Burgundy (this is a SSSI notified feature at the site by way of an invertebrate assemblage feature).

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1A	Reduce the impacts of scrub incursion by undertaking a feasibility study. The aim of this would be to determine the most appropriate means of control including hand cutting, stump treatment/herbicidal application and intensificiation of grazing in specific areas, or introduction of grazing in areas where this does not presently occur. Scrub management should also ideally take into consideration the importance of the site for Duke of Burgundy butterfly and its supporting invertebrate assemblage.	Not yet determined	2014-15	Investigation / Research / Monitoring	Natural England	Hampshire County Council	Natural England, South Downs National Park Authority, Butterfly Conservation

2 Undergrazing

Condition assessment of some areas suggested that there were distinct areas where the sward height was tussocky and above target. Also, higher than target levels of leaf litter were reported. This suggests that grazing is uneven, or limited, across the site. The importance of rabbits as a grazing animal is noted, but the population has declined markedly due to disease outbreaks. Uneven grazing carries the risk of the sward becoming too tall and grass-dominated, shading out the forbs that are characteristic of the chalk grassland sward. Some areas are presently managed by mowing. Increased stocking with sheep or cattle in selected areas, including improved provision of grazing infrastructure such as drinking troughs, would help to overcome the problem by targeting specific areas. There is also evidence from the most recent condition assessment to suggest that scrub is encroaching into the sward. As with the 'Inappropriate scrub control' issue, grazing could help to reduce scrub incursion. Grazing is a suitable tool for delivery of improvements in condition in areas of former conifer plantation that have been cleared and targeted for chalk grassland restoration. There is an interest in low-intensity grazing with mixed livestock for invertebrate interest at the site (primarily Duke of Burgundy Butterfly).

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2A	Reduce the impacts of undergrazing by undertaking a feasibility study for management of invasive scrub and grasses. Determine the most appropriate means of control, including intensification of grazing in specific areas, stock selection and density, timing of grazing activity, introduction of grazing in areas where this does not presently occur, mechanical means of management including mowing or cutting. The site has historically had high grazing pressure from rabbits. Grazing management must account for the decline in their numbers. Grazing regime should also ideally take into consideration the importance of the site for Duke of Burgundy (and SSSI notified invertebrate assemblage).	Not yet determined	2015-16	Investigation / Research / Monitoring	Natural England, County Council	Hampshire County Council	Natural England, South Downs National Park Authority, Butterfly Conservation

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2B	HLS amendment may potentially be required; most likely additional capital works to enable suitable infrastructure to be installed, to support grazing with cattle (dependent on the outcome of action 2A).	Not yet determined	2015-16	Rural Development Programme for England (RDPE): Environmental Stewardship Higher Level Scheme (HLS)	Rural Development Programme (RDPE)	Natural England	Hampshire County Council, South Downs National Park Authority, Butterfly Conservation

3 Air Pollution: risk of atmospheric nitrogen deposition

Nitrogen deposition exceeds site relevant critical loads for the *Taxus baccata* woodlands and is approaching the upper critical load in the chalk grassland. Nitrogen enrichment impacts for chalk grassland can include: increase in tall grasses; decline in diversity; increased mineralisation; N leaching and surface acidification. Nitrogen enrichment impacts for *Taxus baccata* woodland include: changes in soil processes; nutrient imbalance; altered composition mycorrhiza and ground vegetation. Overall, this creates conditions less favourable to the characteristic vegetation of the SAC features. However, as the sensitive features (*Taxus baccata* woodlands) are considered to be in favourable condition this requires further investigation to determine the significance level of the threat.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
3A	Further investigate potential atmospheric nitrogen impacts on the site based on the application of guidance from the Chief Scientist's Group Nitrogen Task and Finish Group.	Not yet determined	2014-17	Investigation / Research / Monitoring	Not yet determined	Natural England	Hampshire County Council, South Downs National Park Authority, Butterfly Conservation

Site details

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

Qualifying features

#UK Special responsibility

Butser Hill SAC	H6210# Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)
	H91J0# *Taxus baccata* woods of the British Isles

Site location and links

Butser Hill SAC

Area (ha) **238.66** *Grid reference* **SU716197** Map link

Local Authorities	Hampshire
Site Conservation Objectives	European Site Conservation Objectives for Butser Hill 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 (RMBP) 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.

Butser Hill SAC

River basin	South East RBMP
WFD Management catchment	Arun & Western Streams
WFD Waterbody ID (Cycle 2 draft)	n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Butser Hill SAC	Butser Hill SSSI

National Nature Reserve (NNR)	
Butser Hill SAC	Butser Hill NNR

Ramsar	
Butser Hill SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Butser Hill SAC	n/a

Version	*Date*	*Comment*
1.0	18/12/2014	