

Site Improvement Plan

Singleton and Cocking Tunnels

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)

UK0030337 Singleton and Cocking Tunnels SAC

Site description

Singleton and Cocking Tunnels are two disused brick built railway tunnels in West Sussex running between Midhurst and Chichester. The tunnels provide ideal microclimates and protection for hibernating bats. The site is one of the best hibernacula in the UK and features hundreds of bats and a diversity of species including Bechstein's and Barbastelles. Horseshoe bats, and the last resident Greater mouse-eared bat in the UK are also present.

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 Habitat connectivity	Pressure	S1308 Barbastelle bat, S1323 Bechstein`s bat	Further investigation of bat movements and requirements	National Trust, Natural England, Sussex Wildlife Trust, Bat Conservation Trust, Sussex Bat Group
2 Habitat fragmentation	Pressure	S1308 Barbastelle bat, S1323 Bechstein`s bat	Investigate movements and requirements of bats to aid future tailored management	National Trust, Natural England, Sussex Wildlife Trust, Bat Conservation Trust, Sussex Bat Group
3 Public Access/Disturbance	Threat	S1308 Barbastelle bat, S1323 Bechstein`s bat	Investigate impacts of the proposed cycle routes on bats	Natural England, South Downs National Park Authority
4 Air Pollution: risk of atmospheric nitrogen deposition	Threat	S1323 Bechstein`s bat	Investigate effects of atmospheric nitrogen on the site	Natural England
5 Public Access/Disturbance	Pressure/Threat	S1323 Bechstein`s bat	Investigate present light levels and assess their impact and alleviate if necessary	National Trust, Natural England, Sussex Wildlife Trust, Bat Conservation Trust, Sussex Bat Group

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 Habitat connectivity

The protected site is limited to the tunnels themselves and does not include the surrounding area which is used for commuting in and out of the tunnels, for foraging during periods of semi hibernation and for swarming in the autumn (directly outside the tunnel). More information on bat movements in the surrounding countryside could be used to better protect the integrity of the site. Additionally, disused railway tunnels to the north and south of the site have significant numbers of bats within them and probably form part of the suite of hibernacula used by bats in the area. It would also be useful to understand (through genetic analysis) how this site relates to other bat SACs in the southern part of the UK to ensure that they and the connecting habitats are managed appropriately to maintain favourable populations.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Identify further areas with suitable available, resotred or created habitat to provide winter foraging, summer/night/autumn swarming acitvty and connectivity to related sites.	£100,000	2015-20	Investigation / Research / Monitoring	EU LIFE	Local partnership	National Trust, Natural England, Sussex Wildlife Trust, Bat Conservation Trust, Sussex Bat Group

2 Habitat fragmentation

Land management in the surrounding countryside, eg through the destruction or inappropriate management of hedgerows and woodland, is likely to have an impact on the commuting routes the bats use in and out of the site.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
2A	Investigate movements and requirements of bats to aid future tailored management to enhance and reconnect commuting and foraging habitat in the wider countryside outside of the site and across other nearby related SACs designated for bats.	£100,000	2015-20	Investigation / Research / Monitoring	EU LIFE	Local partnership	National Trust, Natural England, Sussex Wildlife Trust, Bat Conservation Trust, Sussex Bat Group

3 Public Access/Disturbance

In the last ten years, there has been repeated suggestions that the tunnels should be reopened as a cycle route. This would be expected to cause disturbance to the bats.

<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	Proactively investigate impacts of the proposed cycle path on bat species in advance of plans being formally submitted, and seek suitable alternatives.	Not yet determined	2015-16	Investigation / Research / Monitoring	Not yet determined	South Downs National Park Authority	Natural England

4 Air Pollution: risk of atmospheric nitrogen deposition

Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site. This requires further investigation. The local effect on the Bechstein's bats hibernating in the tunnel is likely to be low.

<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	Further investigate potential atmospheric nitrogen impacts on the site features based on application of guidance from Chief Scientist Group Nitrogen Task and Finish Group.	Not yet determined	2015-17	Investigation / Research / Monitoring	Not yet determined	Natural England	n/a

5 Public Access/Disturbance

It is known that light pollution has an impact on both myotis species, ie Bechstein's and Horseshoe bats. The investigation would seek to identify what light levels are presently and deduce whether they are having an impact on bat movements/roosting availability in and around the SAC areas.

<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	Investigation of the impact of light pollution on the bat populations.	Not yet determined	2015-16	Investigation / Research / Monitoring	EU LIFE	Local partnership	National Trust, Natural England, Sussex Wildlife Trust, Bat Conservation Trust, Sussex Bat Group

Site details

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

Qualifying features

#UK Special responsibility

Singleton and Cocking Tunnels SAC	S1308 <i>Barbastella barbastellus</i> : Barbastelle bat
	S1323 <i>Myotis bechsteinii</i> : Bechstein`s bat

Site location and links

Singleton and Cocking Tunnels SAC

Area (ha) 2.45	Grid reference SU872144	Map link
Local Authorities	West Sussex	
Site Conservation Objectives	European Site Conservation Objectives for Singleton and Cocking Tunnels 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.

Singleton and Cocking Tunnels SAC

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

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Singleton and Cocking Tunnels SAC	Singleton & Cocking Tunnels SSSI

National Nature Reserve (NNR)	
Singleton and Cocking Tunnels SAC	n/a

Ramsar	
Singleton and Cocking Tunnels SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Singleton and Cocking Tunnels SAC	n/a

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	06/03/15	

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