

Site Improvement Plan

Bath & Bradford on Avon Bats

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)

UK0012584 Bath & Bradford on Avon Bats SAC

Site description

The SAC as a whole supports 15% of the UK population of Greater Horseshoe bats *Rhinolophus ferrumequinum*, internationally-significant populations of Lesser Horseshoe *Rhinolophus hipposideros* and Bechstein's bats *Myotis bechsteinii*.

The SAC comprises four component sites: Brown's Folly, Box Mine, Winsley Mines, and Combe Down and Bathampton Down Mines. These are distributed over a wide geographical area to the south and east of Bath and have different known bat usages, which over the whole of the SAC include breeding, hibernation, swarming and dispersal. The sites are all abandoned limestone mines and some include areas of supporting habitat: broadleaved woodland and species rich calcareous grassland. The surrounding landscape provides feeding and commuting opportunities between the component SSSIs, other SAC sites and other undesignated roosts which is vital in supporting the bats throughout their life cycle. Features of significance within the wider landscape are watercourses, woodland, grazed pasture, hay meadows, hedgerows, linear trees and scrub.

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 Planning Permission: general	Pressure/ Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Produce and promote advice and guidance on development control and strategic planning	Bath and North East Somerset Council, Cotswolds AONB, Environment Agency, Forestry Commission, Natural England, Wildlife Trust(s), Wiltshire Council, Bat Conservation Trust
2 Change in land management	Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Provide information regarding appropriate management of habitat for bats	Cotswolds AONB, Forestry Commission, Local Authority(ies), Natural England, Wildlife Trust(s), Bat Conservation Trust, Voluntary conservation organisation(s), Local nature partnership
3 Direct impact from third party	Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Reduce vandalism and impacts of recreational activities	Natural England, Landowner(s), Parish Council(s), Local constabulary(ies), Local recreation group(s)

4 Feature location/ extent/ condition unknown	Threat	S1323 Bechstein`s bat	Investigate Bechstein's bat to improve knowledge of local population activity	Forestry Commission, Local Authority(ies), Natural England, Wildlife Trust(s), Bat Conservation Trust, Consultant, Local records centre(s), Local bat group(s), Researcher(s)
5 Offsite habitat availability/ management	Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Investigate bat species use of surrounding habitat	Forestry Commission, Local Authority(ies), Natural England, Wildlife Trust(s), Bat Conservation Trust, Consultant, Local records centre(s), Local bat group(s), Researcher(s)
6 Public Access/Disturbance	Pressure/ Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Review access arrangements and implement improved management of access	Forestry Commission, Natural England, Landowner(s), Local constabulary(ies), Local user group(s), Local public, Local recreation group(s)
7 Change to site conditions	Pressure/ Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Investigate the stability of mine and cave systems and feasibility for stabilisation	Natural England, Volunteers, Landowner(s), Bat Conservation Trust, Local bat group(s)
8 Inappropriate designation boundary	Threat	S1303 Lesser horseshoe bat, S1304 Greater horseshoe bat, S1323 Bechstein`s bat	Review series of SAC sites and consider new sites for notification	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 Planning Permission: general

There is currently difficulty in determining cumulative impacts of development across such a wide area and across local authority boundaries, including operations carried out under an European Protected Species license. This applies to both the developments themselves and the surveys which are needed to inform the planning application process. There is currently no formal way of assessing the cumulative impacts of "high disturbance" level surveys (e.g. mist netting, harp trapping, radiotracking) being carried out outside the SAC boundary which may have cumulative impacts on the features of the SAC. Similarly, there is no formal way of assessing cumulative impacts on the SAC from permissions granted by the different competent authorities.

<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>
1A	Produce and promote advice and guidance to: inform strategic planning; enable developers to take full account of the SAC at the outset; steer consultants towards an appropriate level of bat survey.	Staff time	2015-20	Advice	Staff time	Natural England	Bath and North East Somerset Council, Cotswolds AONB, Forestry Commission, Wildlife Trust(s), Wiltshire Council, Bat Conservation 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>
1B	Each Competent Authority to maintain a list of current plans and projects. Consider feasibility of developing a single list to be used as a 'one-stop-shop' resource to help assess potential cumulative impacts on the SAC from permissions granted by all relevant competent authorities.	Staff time	2015-17	Advice	Staff time	Natural England	Bath and North East Somerset Council, Environment Agency, Forestry Commission, Wiltshire 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>
1C	Develop database of "high disturbance" level surveys (e.g. mist netting, harp trapping, radiotracking) granted under licence across the wider area of the SAC, to be considered along with other plans and projects to help assess cumulative effects on the SAC (to be co-ordinated with action above).	Staff time	2015-17	Advice	Staff time	Natural England	n/a

2 Change in land management

Land ownership is fragmented and management has lapsed, particularly around the urban fringe of Bath.

<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>
2A	Provide information to land managers about appropriate management of roosting, foraging and commuting habitat for bats, including management changes needed to account for longer-term impacts such as climate change and ash dieback.	£200,000	2015-20	Advice: Education & awareness raising	Local Authority, Heritage Lottery Fund (HLF), Conservation and Enhancement Scheme (CES), Forestry Commission, Agri-environment scheme, Magnificent Meadows Project, West of England B-Lines Project, Bathscapes Landscape Partnership, AONB Sustainability Development Fund	Natural England	Cotswolds AONB, Forestry Commission, Local Authority(ies), Wildlife Trust(s), Bat Conservation Trust, Voluntary conservation organisation(s), Local nature partnership

<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 small-scale grants to land managers where Natural England grant schemes are not available.	£70,000	2015-20	Mechanism not identified / develop mechanism	Magnificent Meadows Project, West of England B-Lines Project, Horsecombe Vale Project, Bathscapes Landscape Partnership, AONB Sustainability Development Fund	Natural England	Cotswolds AONB, Local Authority(ies), Wildlife Trust(s), Voluntary conservation organisation(s), Local nature partnership

3 Direct impact from third party

One-off acts of vandalism or impacts of recreational pursuits could have a devastating effect if done in close proximity to roosting bats. There have been impacts at Brown's Folly, Box Mine and Bathampton Down Mines, specifically from third parties gaining access for inappropriate purposes.

<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	Set up system of local community involvement to report acts of vandalism and damage to mines/mine entrances: "Mine Watch" Wardens.	Staff time	2015-17	Mechanism not identified / develop mechanism	Staff time	Natural England	Landowner(s), Parish Council(s), Local constabulary(ies), Local recreation group(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>
3B	Use the SSSI Notification Review process to determine whether notification amendments are required for un-notified entrances and un-notified areas within mines, and possible grilleing.	Staff time	2015-20	Designation strategy: Notification Amendment	Staff time	Natural England	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>
3C	Develop and implement an Interpretation Strategy to increase public awareness and help to manage visitor pressure at component SSSIs.	£6,000	2016-18	Conservation and Enhancement Scheme (CES)	Not yet determined	Natural England	Landowner(s)

4 Feature location/ extent/ condition unknown

There is a lack of knowledge about the population of Bechstein's bat within the SAC and its relationship to roosts within the wider landscape. There is very little data to show which component sites are used by Bechstein's and in what way, and even less foraging/commuting data. This is a risk because it is difficult to determine the impacts of plans and projects on Bechstein's bat.

<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	Carry out a data gathering project and field survey of Bechstein's bat to improve knowledge base of the species.	£30,000	2015-20	Investigation / Research / Monitoring	Research project, Other stakeholder(s) contributions	Natural England	Forestry Commission, Local Authority(ies), Wildlife Trust(s), Bat Conservation Trust, Consultant, Local records centre(s), Local bat group(s), Researcher(s)

5 Offsite habitat availability/ management

There is a lack of knowledge as to usage of the wider landscape by the SAC species. For example whether there are certain critical bat corridors which link the component sites, other bat SAC sites or non-designated roosts, or particularly important areas or routes used for feeding, 'swarming' or other activity between sites is unknown. Lack of knowledge compromises the ability to respond appropriately to threats such as development pressure and opportunities such as the use of agri-environment schemes in locations that will most greatly benefit 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>
5A	Carry out a data gathering project (all three species) to establish 'hot spots' for bats and gaps in knowledge; use vegetation maps to predict important bat corridors and habitats across the wider SAC area and ground-truth these through bat survey methodologies.	£65,000	2015-20	Investigation / Research / Monitoring	Heritage Lottery Fund (HLF), Research project, Other stakeholder(s) contributions	Natural England	Forestry Commission, Local Authority(ies), Wildlife Trust(s), Bat Conservation Trust, Consultant, Local records centre(s), Local bat group(s), Researcher(s)

6 Public Access/Disturbance

It is very difficult to close the sites to public access, potentially causing disturbance. This is a pressure in terms of continuous long-term disturbance by visitors, however the sites are managed in such a way that it does not present a significant pressure unless the volume and frequency of visitors were to increase. The threat to the sites come from one-off events such as: fire juggling near to the maternity colony; use of aerosol spray paints underground; use of fuel of any type underground, and bonfires at the mine entrances.

<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	Review access arrangements and implement improved management of access.	Staff time	2015-18	Advice: Negotiation	Staff time	Natural England	Forestry Commission, Landowner(s), Local constabulary(ies), Local user group(s), Local recreation group(s) (caving, underground exploration)

<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>
6B	Implement improved management of access.	Staff time	2015-18	Advice: Access Strategy	Staff time	Natural England	Landowner(s), Local constabulary(ies), Local recreation group(s) (caving, underground exploration), Local public

7 Change to site conditions

All component areas of the SAC have the potential risk of collapse as they are abandoned mines and their status with regards to stability is largely unknown. Mine instability is particularly relevant at entrances where a collapse could make it unusable by bats. A collapse is likely to alter the entrance dimensions thereby affecting ventilation, temperature and humidity within the mines, and/or may cause bats to be killed or become entrapped. Due to mine instability it is also difficult to monitor bats effectively.

<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>
7A	Investigate the stability of mine and cave systems and feasibility for stabilisation.	£10,000	2015-20	Investigation / Research / Monitoring	Not yet determined	Natural England	Landowner(s)
7B	Identify and implement options for stabilisation particularly at mine entrances.	£10,000	2015-20	Advice	Not yet determined	Natural England	Landowner(s)
7C	Ensure continued monitoring of bat populations and adapt methods as necessary in line with any changes to access provision.	Staff time	2015-20	Existing Local Project	Staff time	Natural England	Volunteers, Bat Conservation Trust, Local bat group(s)

8 Inappropriate designation boundary

Several undesignated sites support important populations of SAC bats. Some of these are under threat, and others are located in areas/landscapes where they could be offered greater protection and enhanced management of surrounding habitats if they were known to be special sites. Consultation zones for planning have been agreed far beyond the bounds of the current component sites, and evaluating the importance of new sites relative to the currently designated ones will validate and improve the series.

<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>
8A	Consider newly-discovered sites critical to SAC bat populations and designate as appropriate.	Staff time	2015-20	Designation strategy (SSSI)	Staff time	Natural England	n/a

Site details

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

Qualifying features

#UK Special responsibility

Bath & Bradford on Avon Bats SAC

S1303 *Rhinolophus hipposideros*: Lesser horseshoe bat

S1304 *Rhinolophus ferrumequinum*: Greater horseshoe bat

S1323 *Myotis bechsteinii*: Bechstein`s bat

Site location and links

Bath & Bradford on Avon Bats SAC

Area (ha) **107.16** Grid reference **ST834688** [Map link](#)

Local Authorities Bath and North East Somerset; Wiltshire

Site Conservation Objectives [European Site Conservation Objectives for Bath & Bradford on Avon Bats 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.

Bath & Bradford on Avon Bats SAC

River basin

[Severn RBMP](#)

WFD Management catchment

Bristol Avon & North Somerset Streams

WFD Waterbody ID (Cycle 2 draft)

n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)		
Bath & Bradford on Avon Bats SAC		Winsley Mines SSSI
		Combe Down & Bathampton Down Mines SSSI
		Box Mine SSSI
		Brown's Folly SSSI
National Nature Reserve (NNR)		
Bath & Bradford on Avon Bats SAC		n/a
Ramsar		
Bath & Bradford on Avon Bats SAC		n/a
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)		
Bath & Bradford on Avon Bats SAC		n/a
Other relevant documents and links		
Bath & Bradford on Avon Bats SAC		Wiltshire Council/Natural England/Bath and North East Somerset Council joint guidance for developers (not yet available on Wiltshire Council website) "Bat Special Areas of Conservation (SAC): Planning Guidance for Wiltshire"

<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	01/04/2015	

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