

# Site Improvement Plan

## Lower Bostraze & Leswidden

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)**

**UK0030064 Lower Bostraze & Leswidden SAC**

## Site description

The two discrete parts of this site, notified for the presence of a very rare liverwort, are located approximately 8 km west of Penzance. They are underlain by the Land's End granite, part of the Cornubian batholith. Zones within the granite, altered by kaolinisation, have been extensively worked for china clay until recent years. Both areas are located within disused china clay workings, consisting of pits, benches, spoil tips and granitic debris with sparse vegetation cover.

The site supports important populations of the internationally rare Western rustwort *Marsupella profunda*. Lower Bostraze supports the largest population in Britain outside the St Austell clay pits, and is the only surviving site in West Cornwall following its extinction at others. Populations outside Britain have never been documented in any detail, but it is globally rare. The plant became extinct at Leswidden during 2009-2011. Internationally, it is known from Portugal, the Canaries, Azores and Madeira, but it is rare throughout its range.

At Lower Bostraze and Leswidden, western rustwort is generally found growing on micaceous or clay waste substrates which are flat or gently sloping. Some patches occur on granitic rocks, usually where these are soft or crumbling. It appears to be a pioneer species, the largest populations being found on surfaces showing the early stages of colonisation by other bryophytes and by vascular plants.

## 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 Change to site conditions	Pressure/ Threat	S1390 Western rustwort	Devise and implement a site management plan. Source funding for habitat restoration and ongoing management. Secure a grant funded management agreement.	Natural England, Landowner(s), Plantlife
2 Impediment to management	Pressure	S1390 Western rustwort	Devise a Health & Safety Plan to Construction Design and Management standards.	Natural England, Landowner(s)

## 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 Change to site conditions

*Marsupella profunda* is a tiny liverwort that requires fresh exposures of china clay to provide new habitat for colonisation. Due to the abandonment of the quarry for commercial viability reasons, china clay is no longer exposed causing *Marsupella profunda* to be outcompeted by taller vegetation. Initial clearance of vegetation is required, with regular and ongoing maintenance to halt and reverse vegetation succession and expose fresh clay (possibly through the introduction of a small flock/herd of feral hardy sheep/goats). Dense scrub, steep quarry walls, embankments and deep open water prohibit safe access by machinery for management work without appropriate professional/technical supervision. Expert bryophyte advice/oversight will be required as this species is only identifiable using a hand lens and can easily be missed or mis-identified, and there is a high risk that without an adequately funded agreement, any capital investment will be wasted as the site gives way to further succession and loss of the feature.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
1A	Devise a site management plan specifying requirements for implementation and monitoring.	Staff time	2015-16	Advice: Negotiation	Not yet determined	Natural England	Landowner(s), Plantlife
1B	Implement vegetation management plan.	£55,000	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Natural England	Landowner(s), Plantlife
1C	Implement periodic disturbance, to expose china clay for colonisation by <i>Marsupella profunda</i> .	£10,000	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Natural England	Landowner(s), 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>
<b>1D</b>	Develop and implement an appropriate grazing regime, possibly using goats or mountain-type sheep.	£100,000	2015-20	Mechanism not identified / develop mechanism	Not yet determined	Natural England	Landowner(s), Plantlife
<b>1E</b>	Devise a Site Monitoring Plan with input from professional/expert bryologist. Annual survey of <i>Marsupella profunda</i> on site, plus ongoing management advice by a bryologist.	£7,500	2015-20	Investigation / Research / Monitoring	Not yet determined	Natural England	Landowner(s), Plantlife
<b>1F</b>	Source funding for habitat restoration and ongoing management using revenue and capital payments.	costs covered by actions 1A - 1E	2015-20	Mechanism not identified / develop mechanism	Rural Development Programme (RDPE), Conservation and Enhancement Scheme (CES), Grant in aid	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>
<b>1G</b>	Seek alternative management agreement options.	costs covered by actions 1A - 1E	2015-20	Mechanism not identified / develop mechanism	EU LIFE, Heritage Lottery Fund (HLF), Inter-Reg	Natural England	Landowner(s)

## 2 Impediment to management

The site has physical constraints and difficult access which make site management very challenging. Due to steep slopes, exposed quarry edges and deep water, scrub management operations will require a detailed health and safety plan. Because of the health and safety implications it is unlikely that the owner will agree to this being undertaken by volunteers, at least during the pioneer phase of 'site restoration'. Work required is more suitable to be undertaken by operators trained/certificated in the use of rope and line, chainsaws and herbicide application methods but this will involve a financial cost.

<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>2A</b>	Devise and implement a Health & Safety Plan to CDM standards.	£5,000	2015-16	Mechanism not identified / develop mechanism	Not yet determined	Natural England	Landowner(s)

## Site details

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

### Qualifying features

#UK Special responsibility

**Lower Bostraze & Leswidden SAC** S1390# *Marsupella profunda*: Western rustwort

### Site location and links

#### Lower Bostraze & Leswidden SAC

Area (ha) **2.33** Grid reference **SW384310** [Map link](#)

Local Authorities Cornwall

Site Conservation Objectives [European Site Conservation Objectives for Lower Bostraze & Leswidden 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.*

### Lower Bostraze & Leswidden SAC

River basin

[South West RBMP](#)

WFD Management catchment

West Cornwall and the Fal

WFD Waterbody ID (Cycle 2 draft)

n/a

## Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Lower Bostraze & Leswidden SAC	Lower Bostraze & Leswidden SSSI

  

National Nature Reserve (NNR)	
Lower Bostraze & Leswidden SAC	n/a

  

Ramsar	
Lower Bostraze & Leswidden SAC	n/a

  

Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Lower Bostraze & Leswidden SAC	n/a



<i>Version</i>	<i>Date</i>	<i>Comment</i>
1.0	30/07/2015	

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

