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

Planning for the Future

Site Improvement Plan

St Austell Clay Pits

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)

UK0030282 St Austell Clay Pits SAC

Site description

This site consists of three discrete areas, that support important populations of the Schedule 8 liverwort Western Rustwort *Marsupella profunda.* All three areas are located within existing or extant china clay workings consisting of pits, spoil tips and granitic debris with sparse vegetation cover. At these locations *Marsupella profunda* is generally found growing on micaceous or clay waste substrates which are flat or gently sloping. Some patches occur on granitic boulders, usually where these are soft or crumbling.

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	Pressure/ Threat	S1390 Western rustwort	Proactive removal of scrub, and follow up treatment both within and outside of the SAC boundary	Cornwall Council, Natural England, Imerys Minerals Ltd
2 Invasive species	Pressure/ Threat	S1390 Western rustwort	Proactive removal of rhododendron and laurel and follow up treatment both within and outside of the SAC boundary	Cornwall Council, Natural England, Imerys Minerals Ltd
3 Change to site conditions	Pressure/ Threat	S1390 Western rustwort	Implement periodic and large-scale disturbance of ground both within and outside of SAC boundary for colonisation by *Marsupella profunda*	Cornwall Council, Natural England, Imerys Minerals Ltd
4 Habitat fragmentation	Pressure/ Threat	S1390 Western rustwort	Implementation of management strategy for Marsupella profunda at a landscape scale, in partnership with key land managers	Cornwall Council, Natural England, Imerys Minerals Ltd
5 Air Pollution: risk of atmospheric nitrogen deposition	Threat	S1390 Western rustwort	Further investigate the impacts of atmospheric nitrogen deposition	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 Inappropriate scrub control

Western Rustwort is a colonist of open disturbed ground that requires continual creation of new habitat otherwise it will be lost as existing habitats develop and competition from other plants increases. Shading out by a canopy of dominant species and scrub is detrimental in areas where *Marsupella profunda* occurs. In Mid-Cornwall almost all of the appropriate habitat for this species is produced by quarrying to extract china clay. Where extraction has ceased the species requires regular intervention, and scrub should be cleared and treated with herbicide at regular intervals.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1A	Implement a scrub control programme both within and outside of the SAC boundary.	£250,000	2015-19	Habitat creation / restoration strategy: Habitat restoration	Not yet determined	Natural England	Cornwall Council, Imerys Minerals Ltd

2 Invasive species

Non natives are present throughout the site - some to a greater extent. Rhododendron is present throughout the St Austell china clay works , creating a constant seed source moving into the site. Shading out by seedlings and mature plants is detrimental in areas where *Marsupella profunda* occurs. In Mid-Cornwall almost all of the appropriate habitat for this species is produced by quarrying to extract china clay. Where extraction has ceased the species requires regular intervention, and rhododendron and laurel should be cleared and treated with herbicide at regular intervals.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2A	Implement a rhododendron and laurel control programme both within and outside of the SAC boundary.	£158,650	2015-19	Habitat creation / restoration strategy: Habitat restoration	Not yet determined	Natural England	Cornwall Council, Imerys Minerals Ltd

3 Change to site conditions

Marsupella profunda is critically dependent on periodic and large-scale ground disturbance in order to ensure a continued supply of bare substrates for colonisation.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
3A	Implement periodic and large scale disturbance of ground both within and outside of SAC boundary to expose china clay for colonisation.	£25,000	2015-19	Major Landowner Group land ownership activities : Undertake Specific Management Works	Not yet determined	Natural England	Cornwall Council, Imerys Minerals Ltd

4 Habitat fragmentation

Marsupella profunda relies on the functioning of 'metapopulation' processes, with extinctions balancing recruitments. Losses outside of the SAC boundary will result in a local decline of this species and will also reduce the potential for re-colonisation of the SAC and agreed refugia sites located outside of the SAC boundary.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
4A	Implementation of landscape scale Conservation Strategy and monitoring programme agreed in 2012 by key landowners and other stakeholders.	£150,000	2015-19	Partnership agreement: Other	Not yet determined	Natural England	Cornwall Council, Imerys Minerals Ltd

5 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. Further investigation is recommended in order to confirm the actual ammonia levels within the SAC and to identify any potential large scale sources of ammonia (e.g. livestock housing, slurry lagoons, manure spreading, etc) in close proximity

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5A	Further investigate potential atmospheric nitrogen impacts on the site 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	

Site details

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

Qualifying features

#UK Special responsibility

St Austell Clay Pits SAC	S1390# *Marsupella profunda*: Western rustwort

Site location and links

St Austell Clay Pits SAC

Area (ha) **0.61** *Grid reference* **SX022549**	Map link
Local Authorities	Cornwall
Site Conservation Objectives	European Site Conservation Objectives for St Austell Clay Pits 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.

St Austell Clay Pits 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)	
St Austell Clay Pits SAC	St Austell Clay Pits SSSI

National Nature Reserve (NNR)	
St Austell Clay Pits SAC	n/a

Ramsar	
St Austell Clay Pits SAC	n/a

Special Areas of Conservation (SAC) and Special Protection Areas (SPA	
St Austell Clay Pits SAC	n/a

Version	*Date*	*Comment*
1.0	20/05/2015	