



European Site Conservation Objectives: Supplementary advice on conserving and restoring site features

**Blackstone Point Special Area of Conservation (SAC)
Site Code: UK0030091**



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About this document

This document provides Natural England's supplementary advice about the European Site Conservation Objectives relating to Blackstone Point SAC.

This advice should therefore be read together with the SAC Conservation Objectives available [here](#).

You should use the Conservation Objectives, this Supplementary Advice and any case-specific advice given by Natural England when developing, proposing or assessing an activity, plan or project that may affect this site.

This Supplementary Advice to the Conservation Objectives presents attributes which are ecological characteristics of the designated species and habitats within a site. The listed attributes are considered to be those that best describe the site's ecological integrity and which, if safeguarded, will enable achievement of the Conservation Objectives. Each attribute has a target which is either quantified or qualitative depending on the available evidence. The target identifies as far as possible the desired state to be achieved for the attribute.

The tables provided below bring together the findings of the best available scientific evidence relating to the site's qualifying features, which may be updated or supplemented in further publications from Natural England and other sources. The local evidence used in preparing this supplementary advice has been cited. The references to the national evidence used are available on request. Where evidence and references have not been indicated, Natural England has applied ecological knowledge and expert judgement. You may decide to use other additional sources of information.

In many cases, the attribute targets shown in the tables indicate whether the current objective is to 'maintain' or 'restore' the attribute. This is based on the best available information, including that gathered during monitoring of the feature's current condition. As new information on feature condition becomes available, this will be added so that the advice remains up to date.

The targets given for each attribute do not represent thresholds to assess the significance of any given impact in Habitats Regulations Assessments. You will need to assess this on a case-by-case basis using the most current information available.

Some, but not all, of these attributes can also be used for regular monitoring of the actual condition of the designated features. The attributes selected for monitoring the features, and the standards used to assess their condition, are listed in separate monitoring documents, which will be available from Natural England.

These tables do not give advice about SSSI features or other legally protected species which may also be present within the European Site.

If you have any comments or queries about this Supplementary Advice document please contact your local Natural England adviser or email HDIRConservationObjectivesNE@naturalengland.org.uk

About this site

European Site information

Name of European Site	Blackstone Point Special Area of Conservation (SAC)
Location	Devon
Site Map	The designated boundary of this site can be viewed here on the MAGIC website
Designation Date	1 April 2005
Qualifying Features	See section below
Designation Area	7.81 ha
Designation Changes	N/A
Feature Condition Status	Details of the feature condition assessments made at this site can be found using Natural England's Designated Sites System
Names of component Sites of Special Scientific Interest (SSSIs)	Blackstone Point SSSI
Relationship with other European or International Site designations	Adjacent to Start Point to Plymouth Sound and Eddystone SAC

Site background and geography

Blackstone Point is located on the South Devon Coast between the Erme and Yealm estuaries. The site lies on the cliff slopes and raised beach of overlain quaternary and periglacial deposits, which provides the ideal habitat for the shore dock *Rumex rupestris*. The underlying geology of the site consists of slates from the Dartmouth Group of the Lower Devonian period. This provides the freshwater seepage habitats, which are needed by the shore dock communities. The site lies in the South Devon National Character Area ([NCA 151](#))

About the qualifying features of the SAC

The following section gives you additional, site-specific information about this SAC's qualifying features. These are the natural habitats and/or species for which this SAC has been designated.

Qualifying Species:

- **S1441. *Rumex rupestris*; Shore dock**

Shore dock *Rumex rupestris* grows on rocky, sandy and raised beaches, shore platforms and the lower slopes of cliffs, and rarely in dune slacks. Plants can be found growing in isolation on the strand-line, through to tall-herb perennial communities at the base of flushed cliffs. However, it occurs only where a constant source of freshwater, running or static, is available. It is most commonly found growing by the side of streams entering beaches, on oozing soft-rock cliffs, and in rock clefts where flushing occurs. Populations of shore dock are known to fluctuate according to the severity of winter storms.

Culverting of streams, coastal defence, and boat-ramp construction on beaches have altered many of the shore dock's former localities, making them unsuitable for its survival by separating perennial vegetation at the bases of cliffs from the strand-line community and interfering with the natural geomorphological processes of slumping cliffs and streams entering beaches. Visitor pressure appears to be a significant factor in the decline of shore dock at several sites. A high proportion of the UK localities for this plant are owned by conservation bodies or public authorities, so favouring the maintenance and enhancement of populations at these localities. Other measures to promote species recovery have also been undertaken, including its attempted reintroduction at three sites in Devon and Cornwall.

Rumex rupestris is one of Europe's most threatened endemic vascular plants. Outside the UK, it is restricted to the coastal margins of Normandy and Brittany in France and Galicia in Spain, where it is declining and in low numbers. The UK is the world stronghold for this species.

In the UK, *Rumex rupestris* is currently known from about 40 locations in south-west England and Wales. The species is extinct in the former easternmost part of its range in Dorset. Several new colonies have been found in recent years as a result of systematic surveys of coastlines with suitable habitat in south-west England and south and west Wales. Population size varies greatly between sites, with the largest colonies supporting 50-100 individuals, most others (especially those on rocky shores) generally holding fewer than ten individuals, and several sites comprising single plants. The total UK population is estimated to comprise <650 plants.

Table 1: Supplementary Advice for Qualifying Features: S1441. *Rumex rupestris*; Shore dock

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Population (of the feature)	Population abundance	Maintain the abundance of the population at a level which is above 21 plants/clumps, whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent.	<p>This will ensure there is a viable population of the feature which is being maintained at or increased to a level that contributes as appropriate to its Favourable Conservation Status across its natural range in the UK. Due to the dynamic nature of population change, the target-value given for the population size or presence of this feature is considered to be the minimum standard for conservation/restoration measures to achieve. This minimum-value may be revised where there is evidence to show that a population's size or presence has significantly changed as a result of natural factors or management measures and has been stable at or above a new level over a considerable period (generally at least 10 years). The values given here may also be updated in future to reflect any strategic objectives which may be set at a national level for this feature.</p> <p>Given the likely fluctuations in numbers over time, any impact-assessments should focus on the current size of the site's population, as derived from the latest known or estimated level established using the best available data. This advice accords with the obligation to avoid deterioration of the site or significant disturbance of the species for which the site is designated, and seeks to avoid plans or projects that may affect the site giving rise to the risk of deterioration. Similarly, where there is evidence to show that a feature has historically been more abundant than the stated minimum target and its current level, the ongoing capacity of the site to accommodate the feature at such higher levels in future should also be taken into account in any assessment.</p> <p>Unless otherwise stated, the population size or presence will be that measured using standard methods, such as peak mean counts or breeding surveys. This value is also provided recognising there will be inherent variability as a result of natural fluctuations and margins of error during data collection.</p>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>King (2002 & 2006)</p> <p>McDonnell & King (2000)</p> <p>Natural England (2002, 2005, 2010)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)																					
			<p>Whilst we will endeavour to keep these values as up to date as possible, local Natural England staff can advise that the figures stated are the best available.</p> <p>The table below summarises recent surveys:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Plants / Clumps</th> <th>Survey</th> </tr> </thead> <tbody> <tr> <td>1999</td> <td>29</td> <td>McDonnell & King (2000)</td> </tr> <tr> <td>2002</td> <td>21</td> <td>Unpublished Natural England survey</td> </tr> <tr> <td>2005</td> <td>28</td> <td>Unpublished Natural England survey</td> </tr> <tr> <td>2010</td> <td>34</td> <td>Unpublished Natural England survey</td> </tr> <tr> <td>2011</td> <td>61</td> <td>A Byfield <i>pers. comm.</i></td> </tr> <tr> <td>2017</td> <td>28</td> <td>I. Bernalick <i>pers. comm.</i></td> </tr> </tbody> </table> <p>The site baseline is taken from the 2002 Natural England Survey. Although plant numbers have fluctuated slightly over the past two decades, population abundance has remained above the baseline.</p>	Year	Plants / Clumps	Survey	1999	29	McDonnell & King (2000)	2002	21	Unpublished Natural England survey	2005	28	Unpublished Natural England survey	2010	34	Unpublished Natural England survey	2011	61	A Byfield <i>pers. comm.</i>	2017	28	I. Bernalick <i>pers. comm.</i>	
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Population (of the feature)	Flowering/ fruiting performance	Ensure some plants should be flowering/fruiting each year. At each site the minimum requirement should be >20 flowering stems present at least once in each 5-year monitoring cycle.	<p>Even just one flowering/fruiting plant will often be found to have 10-15 flowering stems producing potentially prodigious quantities of seed (5,000-20,000 seeds on a large multi-stemmed plant). Weather conditions (winter storms, cold spring, and summer drought) can limit seed production in any one year, but poor fruiting in two or three in every five is unlikely to be a problem.</p> <p>See table summarising recent observations on flowering/fruiting in the 'Population structure' attribute, above. Flowering/ fruiting performance appears to have been relatively stable over the previous two decades.</p>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>King (2002)</p> <p>McDonnell & King (2000)</p> <p>Natural England (2002, 2005)</p>																					

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Population (of the feature)	Metapopulation size and structure	Maintain both the geographical extent/limits of each metapopulation and the number of colonies/sites contained within it.	<p>Each colony in relation to its nearest neighbours and other colonies will form groups or clusters which function as a larger metapopulation. Some (usually outlying and very small) populations may 'come and go'. Natural losses are acceptable, but the aim should be to ensure that, over the medium to long term, local losses are more or less offset by re/colonisation at other sites.</p> <p>Following their surveys in 1999 and looking at data from previous years, McDonnell & King (2000) noted a pattern of larger metapopulations in South Devon, between Wembury and Bigbury and Bolt Tail and Start Point. King (2006) noted that sites are scattered along the coastline with many miles between some of them and suggested that the Devon and Cornwall populations could be considered as two metapopulations, one at Penhale Sands and Gear Sands and one occupying locations between Lands' End and Start Point. Limited genetic investigations have suggested gene flow between western and eastern populations may be limited, and metapopulations have been suggested for:</p> <ul style="list-style-type: none"> • Tregiffian and Lamorna • Trebarvah to Stackhouse Cove • Roseland Peninsula • Polruan to Looe • Whitsand Bay • Wembury to Bigbury • Bolt Tail to Start Point <p>Shore dock at Blackstone Point would therefore be part of the 'Wembury to Bigbury' metapopulation although no recent analysis has been undertaken.</p> <p>In 2005, 5 colonies were recorded within the site (unpublished Natural England survey). In 2010, <i>Rumex rupestris</i> was recorded in 12 locations at the top of the shore platform on the west side (unpublished Natural England survey). It was recorded in 8 locations within the site in 2017 (I. Bernalick <i>pers. comm.</i>). Shore dock plants have also been recorded outside of the site's boundary.</p>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>King (2006)</p> <p>McDonnell & King (2000)</p> <p>Natural England (2005, 2010)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)																		
Population (of the feature)	Population structure	Maintain a 'healthy' and viable population as indicated by the presence of plants of different ages, with flowering/fruited plants, vegetative plants, 'youngsters' and seedlings all present.	<p>When censusing for shore dock, separate counts should be kept of flowering/fruited and vegetative mature plants and seedlings/youngsters. Mature plants do not flower/fruit every year, and elderly plants may cease flowering several years before finally succumbing. Plants are said to live for ten or more years, although most are lost some years before they reach old age.</p> <p>The table below summarises recent observations on flowering/fruited:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Flowering / Fruited plants</th> <th>Survey</th> </tr> </thead> <tbody> <tr> <td>1999</td> <td>'Substantial population of fruited plants and clumps'</td> <td>McDonnell & King (2000)</td> </tr> <tr> <td>2001</td> <td>'Healthy population with many flowering spikes and abundant fruited'</td> <td>King (2002)</td> </tr> <tr> <td>2002</td> <td>5</td> <td>Unpublished Natural England survey</td> </tr> <tr> <td>2005</td> <td>18 (89 flowering spikes)</td> <td>Unpublished Natural England survey</td> </tr> <tr> <td>2017</td> <td>19 (76 fruited branches)</td> <td>I. Bennalick <i>pers. comm.</i></td> </tr> </tbody> </table> <p>Although plant numbers have fluctuated slightly over the past two decades, both vegetative and flowering plants have been present when the site has been monitored.</p>	Year	Flowering / Fruited plants	Survey	1999	'Substantial population of fruited plants and clumps'	McDonnell & King (2000)	2001	'Healthy population with many flowering spikes and abundant fruited'	King (2002)	2002	5	Unpublished Natural England survey	2005	18 (89 flowering spikes)	Unpublished Natural England survey	2017	19 (76 fruited branches)	I. Bennalick <i>pers. comm.</i>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>King (2002)</p> <p>McDonnell & King (2000)</p> <p>Natural England (2002, 2005)</p>
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Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting habitat: extent and distribution	Distribution of supporting habitat	Maintain the distribution and continuity of the feature and its supporting habitat, including where applicable its component vegetation types and associated transitional vegetation types, across the site	<p>A contraction in the range, or geographic spread, of the feature (and its component vegetation) across the site will reduce its overall area, the local diversity and variations in its structure and composition, and may undermine its resilience to adapt to future environmental changes. Contraction may also reduce and break up the continuity of a habitat within a site and how well the species feature is able to occupy and use habitat within the site. Such fragmentation may have a greater amount of open edge habitat which will differ in the amount of light, temperature, wind, and even noise that it receives compared to its interior. These conditions may not be suitable for this feature and this may affect its viability.</p> <p>Habitat niches exist across the site, particularly at the top of rocky ledges and platforms, between large boulders. Vegetated sea cliff, which supports shore dock is found throughout the site (Natural England 2002).</p>	Natural England (2002)
Supporting habitat: extent and distribution	Extent of supporting habitat	Maintain the total extent of the habitats which support the feature at: 7.81 hectares	<p>In order to contribute towards the objective of achieving an overall favourable conservation status of the feature at a UK level, it is important to maintain or if appropriate restore the extent of supporting habitats and their range within this SAC. The information available on the extent and distribution of supporting habitat used by the feature may be approximate depending on the nature, age and accuracy of data collection, and may be subject to periodic review in light of improvements in data.</p> <p>The habitats known to support <i>Rumex rupestris</i> are upper parts of sandy or rocky shores and the lower parts of sea cliffs, sites where head deposits are found behind beaches, raised beaches, or wave-cut platforms, and more rarely on wet cliff-edges, strandlines and in damp slacks in sand dune systems. Shore dock requires a constant supply of freshwater, so is frequently found growing where streams debouch onto the shore, on oozing soft-rock cliffs in clefts and gullies, and where freshwater trickles across wave-cut platforms (McDonnell and King, 2000).</p>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>McDonnell & King (2000)</p> <p>Natural England (2002)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			There is little detailed information available to determine the extent of the habitat suitable for <i>Rumex rupestris</i> colonisation. In addition <i>Rumex rupestris</i> habitat is dynamic and may move in response to natural factors. The target has therefore been set to the area of the whole site. It has been estimated (using aerial photography) that approximately 2.8ha of vegetated sea cliff habitat may support this species within the site (unpublished Natural England survey in 2002), with further suitable habitat and possible shore dock plants outside of the site boundary. In 2002, the shore dock population was reported to cover approximately 0.14ha.	
Supporting habitat: structure / function	Habitat structure: regeneration/ colonisation niches	Maintain the availability of regeneration niches to aid seedling establishment within a sandy/gravelly/rocky substrate within rooting distance of freshwater trickles and seepages, or close to where streams debouch onto the shore.	<p>Suitable habitats include sand, gravel or shingle beach-heads, rocky wave-cut platforms, oozing sea-cliffs and (rarely) dune slacks. Sea-borne seed dispersal aids mobility within and between sites: seed washed into the sea during high spring tides, freshwater 'spate' or winter storms can find itself being thrown up onto patches of suitable but currently unoccupied habitat elsewhere.</p> <p>Comprehensive surveys conducted in 1999 and 2000 along the South Devon and Cornwall coasts indicated that there were many potentially suitable locations for shore dock colonisation (McDonnell & King 2000; Neil <i>et al.</i> 2001). McDonnell and King (2000) described the earthy cliffs and boulders around Blackstone Point as good potential habitat, with freshwater seepages visible between boulders and 'abundant crevices at the base of earthy cliffs'.</p>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>McDonnell & King (2000)</p> <p>Neil <i>et al.</i> (2001)</p>
Supporting habitat: structure / function	Hydrological regime	Maintain presence and supply of freshwater as surface or subsurface seepages, streams or dune-slacks with seasonally high water table.	Note that on some beach-head colonies freshwater may be 'hidden' (i.e. below the surface), meaning that 'surface' conditions could appear unsuitable even though freshwater seepages lie within rooting distance of the plants. A year-round supply of freshwater may be crucial, so anything that limits or removes that supply could be detrimental (e.g. lowering of water table, re-direction of surface watercourses or flow rate reduction).	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>McDonnell & King (2000)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			<p>McDonnell and King (2000) noted the presence of freshwater seepages that were visible between boulders within the site.</p> <p>During the 2010 condition assessment survey there were no large streams present but freshwater trickles were found, taking their natural course. In places, rocks at the top of the shore platform were permanently wet with freshwater seeping from the cliffs above.</p>	
Supporting habitat: structure / function	Soils, substrate and nutrient cycling	Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal: bacterial ratio, within typical values for the supporting habitat	Soil supports basic ecosystem function and is a vital part of the natural environment. Its properties strongly influence the colonisation, growth and distribution of those plant species which together form vegetation types, and therefore provides a habitat used by a wide range of organisms. Soil biodiversity has a vital role to recycle organic matter. Changes to natural soil properties may therefore affect the ecological structure, function and processes associated with the supporting habitat of this Annex II feature.	
Supporting habitat: structure / function	Vegetation structure and composition	Maintain the characteristic vegetation communities which support the features	<p>Vegetation composition can be very variable, depending on habitat.</p> <p>Typical associates of <i>Rumex rupestris</i> include <i>Agrostis stolonifera</i>, <i>Atriplex spp.</i>, <i>Beta vulgaris ssp. maritima</i>, <i>Carex otrubae</i>, <i>Festuca rubra</i>, <i>Phragmites australis</i>, <i>Potentilla anserina</i>, <i>Pulicaria dysenterica</i>, <i>Raphanus maritimus</i>, <i>Samolus valerandii</i>, <i>Sonchus arvensis</i> and <i>Tripleurospermum maritimum</i> (King 2006).</p> <p>Shore dock does not easily fit into the National Vegetation Classification (NVC), with few consistent affinities (David 1999; King 2006). Shore dock has been found to occur in MC8 <i>Festuca rubra</i> - <i>Armeria maritima</i> maritime grassland and in MG12 <i>Festuca arundinacea</i> grassland (David 1999; King 2006). The species may also occur in MG11 <i>Festuca rubra</i> – <i>Agrostis stolonifera</i> – <i>Potentilla anserina</i> grassland, particularly MG11b <i>Atriplex prostrata</i> sub-community, which is typical of disturbed and saline environments (King 2006).</p>	<p>David (1999)</p> <p>King (2006)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting habitat: structure / function	Vegetation succession and maintenance of early-succession communities	Maintain supporting habitat in an open, sparsely vegetated early-successional condition.	A range of 'natural' and 'anthropogenic' factors may help in maintaining habitat patches at an early-successional stage. Many factors that may be advantageous 'in moderation' could be detrimental in larger doses, but determining 'safe' and 'unsafe' levels may be difficult and are probably site-specific (dependent on topography, exposure, substrate, etc). Aim should be to maintain open vegetation, so any shift towards more closed/tall/rank communities should be avoided as far as possible.	
Supporting processes (on which the feature and/or its supporting habitat relies)		Maintain the feature's ability, and that of its supporting habitat, to adapt or evolve to wider environmental change, either within or external to the site	<p>This recognises the increasing likelihood of supporting habitat features to absorb or adapt to wider environmental changes. Resilience may be described as the ability of an ecological system to cope with, and adapt to environmental stress and change whilst retaining the same basic structure and ways of functioning. Such environmental changes may include changes in sea levels, precipitation and temperature for example, which are likely to affect the extent, distribution, composition and functioning of a feature within a site. The vulnerability and response of features to such changes will vary. Using best available information, any necessary or likely adaptation or adjustment by the feature and its management in response to actual or expected climatic change should be allowed for, as far as practicable, in order to ensure the feature's long-term viability.</p> <p>The overall vulnerability of this SAC to climate change has been assessed by Natural England (2015) as being moderate, taking into account the sensitivity, fragmentation, topography and management of its supporting habitats. This means that this site is considered to be vulnerable overall but moderately so. This means that some adaptation action for specific issues may be required, such as reducing habitat fragmentation, creating more habitat to buffer the site or expand the habitat into more varied landscapes and addressing particular management and condition issues. Individual species may be more or less vulnerable than their habitat itself. In many cases, change will be inevitable so appropriate monitoring would be advisable.</p>	Natural England (2015)

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting processes (on which the feature and/or its supporting habitat relies)	Air quality	Restore concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).	<p>The supporting habitat of this feature is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition (including food-plants) and reducing supporting habitat quality and population viability of this feature.</p> <p>Critical Loads and Levels are recognised thresholds below which such harmful effects on sensitive UK habitats will not occur to a significant level, according to current levels of scientific understanding. There are critical levels for ammonia (NH₃), oxides of nitrogen (NO_x) and sulphur dioxide (SO₂), and critical loads for nutrient nitrogen deposition and acid deposition. There are currently no critical loads or levels for other pollutants such as Halogens, Heavy Metals, POPs, VOCs or Dusts. These should be considered as appropriate on a case-by-case basis. Ground level ozone is regionally important as a toxic air pollutant but flux-based critical levels for the protection of semi-natural habitats are still under development. It is recognised that achieving this target may be subject to the development, availability and effectiveness of abatement technology and measures to tackle diffuse air pollution, within realistic timescales.</p> <p>Target set to Restore because current nitrogen deposition exceeds the critical load for shore dock supporting habitat (APIS accessed on 05/11/18).</p>	More information about site-relevant Critical Loads and Levels for this SAC is available by using the 'search by site' tool on the Air Pollution Information System (www.apis.ac.uk).
Supporting processes (on which the feature and/or its supporting habitat relies)	Conservation measures	Maintain the management measures (either within and/or outside the site boundary as appropriate) which are necessary to Maintain the structure, functions and supporting processes associated with the feature and/or its supporting	Active and ongoing conservation management is needed to protect, maintain or restore this feature at this site. Further details about the necessary conservation measures for this site can be provided by contacting Natural England. This information will typically be found within, where applicable, supporting documents such as Natura 2000 Site Improvement Plan, site management strategies or plans, the Views about Management Statement for the underpinning SSSI and/or	<p>David (1999)</p> <p>English Nature (2005)</p> <p>McDonnell & King (2000)</p> <p>Natural England (2014a)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		habitats.	<p>management agreements.</p> <p>Shore dock is protected under Schedule 8 of the 1981 Wildlife and Countryside Act (David 1999). In 1999, 48% of known shore dock sites in Devon and Cornwall were within SSSIs (McDonnell and King, 2000). The population at Blackstone Point is within the Blackstone Point SSSI.</p> <p>The Site Improvement Plan for Blackstone Point SAC reported no issues affecting shore dock and therefore no site improvement measures were required (Natural England 2014a).</p>	
Supporting processes (on which the feature and/or its supporting habitat relies)	Grazing pressure	Where vegetation is not kept open by other means (exposure, ground instability, storm events, etc), maintain a grazing regime which is extensive in nature with cattle the dominant grazing animal.	<p>Low levels of grazing likely to be acceptable, but this should not be viewed as a primary way of keeping habitat patches open - in any case, grazing not an option on many. Intensive grazing likely to be damaging.</p> <p>Grazing is not the principal method of keeping habitat patches open. Grazing pressure is thought to be low, with few areas grazed. It is not considered to be at a level that would adversely impact upon the site's features (Natural England 2005 & 2014).</p>	<p>Natural England (2005)</p> <p>Natural England (2014b)</p>
Supporting processes (on which the feature and/or its supporting habitat relies)	Habitat dynamics: coastal erosion and accretion	Maintain the operation of natural coastal processes and deliberately accept coastal instability, erosion and accretion to maintain suitable conditions for the feature	<p>Allowing coastal processes with minimal human intervention is probably crucial for this species; anything that tends to lessen the impact of coastal processes, especially if it leads to greater shoreline stability, is likely to be detrimental to its long-term survival. Plants being buried under a cliff-fall or lost following a winter storm might seem damaging to the plant's survival, but it is this very dynamism that helps to maintain and create new colonisation niches.</p> <p>The site consists of rocky wave cut platforms with large boulders backed by cliffs of head material (McDonnell & King 2000).</p> <p>In 2010 the habitat within the site was found to be in good condition, being maintained by 'natural coastal processes</p>	<p>This attribute will be periodically monitored as part of Natural England's site condition assessments.</p> <p>McDonnell & King (2000)</p> <p>Natural England (2010)</p> <p>Natural England (2014a & 2014b)</p>

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			<p>operating unconstrained' (2010 condition assessment).</p> <p>Some disturbance at the site was noted in 2014 in the form of landslides following storms (Natural England 2014b). Ian Bennalick surveyed the site in 2017 (I Bennalick 2018, <i>pers. comm.</i>) and noted the site appeared not to have been much affected by erosion from storms, with shore dock recorded in 8 locations.</p>	
Supporting processes (on which the feature and/or its supporting habitat relies)	Water quality/ quantity	Maintain water quality and quantity to a standard which provides the necessary conditions to support the feature	<p>For many SAC features which are dependent on wetland habitats supported by surface and/or ground water, maintaining the quality and quantity of water supply will be critical, especially at certain times of year during key stages of their life cycle. Poor water quality and inadequate quantities of water can adversely affect the availability and suitability of breeding, rearing and feeding habitats.</p> <p>Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the SAC Conservation Objectives but in some cases more stringent standards may be needed to support the SAC feature. Further site-specific investigations may be required to establish appropriate standards for the SAC. There is little evidence that water quality is an issue, but it is plausible that a nutrient-enriched water supply could lead to greater growth of more vigorous, taller-growing species, which in turn could out-compete the (lower-growing) shore dock.</p> <p>During the condition assessment survey in 2010, no algal growth was evident and it was noted that there were no developments above the cliffs or outfall pipes on the rocks that may affect water quality. Water quality at the site was found to be favourable for maintaining shore dock.</p>	This attribute will be periodically monitored as part of Natural England's site condition assessments .
Version Control Advice last updated: N/A				
Variations from national feature-framework of integrity-guidance: N/A				

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