Annex to Habitat Regulations Assessment -Chichester Harbour AONB Management Plan

Chichester Harbour Conservancy

Paul Tiplady 11 February 2019



Chichester Harbour Management Plan 2019-2024 An Integrated Coastal Zone Management Plan for the Trust Port and Area of Outstanding Natural Beauty

Habitat Regulations Assessment Details of the European Sites within and close to Chichester Harbour

The Solent Site Improvement Plan (SIP) covers the Solent Maritime SAC, Solent and Southampton Water SPA, Portsmouth Harbour SPA and Chichester and Langstone Harbours SPA.

The Solent is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime with double tides, as well as for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive areas of intertidal mudflats, often supporting eelgrass *Zostera spp.* and green algae, saltmarshes and natural shoreline transitions, such as drift line vegetation.

All four species of cordgrass found within the UK are present within the Solent and it is one of only two UK sites with significant amounts of the native small cordgrass *Spartina maritima*. The rich intertidal mudflats, saltmarsh, shingle beaches and adjacent coastal habitats, including grazing marsh, reedbeds and damp woodland, support nationally and internationally important numbers of migratory and over-wintering waders and waterfowl as well as important breeding gull and tern populations.

Issues ¹		Mitigation measures
1 Public access / disturbance	Many human activities in the area can disturb birds. This includes activities such as: walking; dog walking; bird watching; boating; kayaking; kite surfing; hang gliding; paramotors; jet skis; wildfowling; model helicopters/aircraft; boat mooring, and Hovercraft. Recreational activities can also affect annual vegetation of drift lines and the vegetation of stony banks.	Reduce disturbance through access management, awareness raising and wardening
2 Coastal squeeze	Habitats are being lost as they are squeezed between rising sea levels and hard coastal defences that are maintained. There is a direct impact due to loss of the SAC habitats such as saltmarsh. There is also an impact on birds due to the loss of habitat for feeding, roosting and breeding. In some areas, rising sea levels will result in coastal grasslands being lost to more saline grasslands, thus losing habitat for some breeding waders of the waterbird assemblage.	Investigate options to create alternative habitat
3 Fisheries: commercial	Dredges (inc. Hydraulic), Benthic trawls and seines and Shore-based activities are categorised as 'Red'	Introduce appropriate management

¹ Identified in the Natural England Site Improvement Plan; in priority order

marine and estuarine	for these interest features and specifically the sub- features: Intertidal muddy sand communities; Subtidal eelgrass Zostera marina beds. Towed gear, hand gathering of shellfish, bait digging and aquaculture are the main fishery activities in this site.	measures where required and ensure compliance
4 Water pollution	Water pollution affects a range of habitat and bird species at the site through eutrophication and toxicity. Sources include both point source discharges (including flood alleviation / storm discharges) and diffuse water pollution from agriculture / road runoff, as well as historic contamination of marine sediments, primarily from copper and Tributyltin. Environment Agency flood event discharge consents allow untreated waters to be discharged which end up in the SAC and are likely to have a negative impact. There is a threat of spillage from Oil Transportation and Transfer and by the usage by Ships & Pilotage.	Implement actions in the Diffuse Water Pollution Plan, and investigate further pollution
5 Changes in species distribution	Many waders and wildfowl are decreasing in the Solent probably as they move north and east under national trends. Some fish, such as Sand eels, may be moving their breeding grounds resulting in less food availability for breeding terns. Invertebrate populations in the intertidal muds are changing and this may disadvantage some wintering wader species. Desmoulin's Whorl Snail has decreased dramatically. Areas of salt-marsh are eroding and decreasing resulting in decreasing breeding gulls and terns as their habitat decreases and decreasing plant species of salt-marshes.	Investigate the causes of change
6 Climate change	Climate change has impacts upon coastal species, in that gull and tern colonies are more frequently washed out with raising sea levels when storm surges cause flooding to habitats.	Investigate the effects of climate change
7 Change to site conditions	There is an increasing loss of salt-marsh in much of the Solent for reasons unknown, and this needs to be investigated.	Investigate the reasons for change
8 Invasive species	The highest risk pathways through which marine INNS are introduced and then spread have been identified as: commercial shipping (through release of ballast water, and biofouling on hulls); recreational boating (through biofouling on hulls); aquaculture (through contamination of imported or moved stock or escaped stock in the case of the pacific oyster), and natural dispersal.	Implement the management options to control invasive non-native species (INNS)
9 Direct land-take from development	Private sea defences are causing disruption to the natural processes of allowing erosion to move sediments around the SAC.	Option appraisal for private coastal defences

10 Biological resource use	Gull egg collecting occurs in some places, and wildfowling occurs in several places. These activities are likely to be disturbing to breeding and wintering birds even though they are currently licensed / consented.	Appropriate egg collection licensing
11 Change in land management	Changes to land management are likely to occur in areas where tidal flaps/sluices are altered and this results in changes to water levels or salinity of that land. Some sluices are failing, which may also result in changes to water levels or salinity of land. Some ditches and drains are neglected and this can cause difficulties in land management, resulting in changes.	Ensure appropriate ditch management, and assess the effects of tidal sluice operation
12 Inappropriate pest control	Predator control is decreasing, resulting in increased predation by foxes etc. and this is the likely cause of decrease in successful breeding of gulls and terns.	Increase control of foxes
13 Air pollution: impact of atmospheric nitrogen deposition	Nitrogen deposition exceeds site relevant critical loads. Locally observed effects are unknown.	Reduce the impacts of air pollution
14 Hydrological changes	Percolation of sea water through sea walls is causing saline intrusion into non-saline grassland habitats and changing them.	Review abstraction licenses
15 Direct impact from 3 rd party	Off-roading is causing damage to some areas of grassland. Private sea defences are causing disruption to the natural movement processes of natural materials along the coast. Military helicopters cause disturbance to wintering birds. House boats are unlicenced and have the potential to cause damage to intertidal habitats. Fly grazing is causing issues affecting large areas of Chichester Harbour.	Assess the activities and their effects
16 Extraction: non-living resources	Shingle extraction for aggregates may have an adverse impact upon intertidal fauna and flora, and may affect the movement of coastal sediments that would in turn have an impact upon intertidal habitats.	Investigate the extent and impact of shingle extraction

Solent Maritime SAC

Site details

Unitary Authority	Extra-Regio, Hampshire and Isle of Wight, Surrey, East and West Sussex
Centroid ²	ST834688
SAC EU code	UK0012584

 $^{^2}$ This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

Status	Special Area of Conservation
Area (ha)	11243.12

General site character

Marine areas, Sea inlets (14%)

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (59%)

Salt marshes, Salt pastures, Salt steppes (23%)

Coastal sand dunes, Sand beaches, Machair (0.5%)

Shingle, Sea cliffs, Islets (3%)

Broad-leaved deciduous woodland (0.5%)

Conservation objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Annex I habitats that are a primary reason for selection of this site

Estuaries

Spartina swards

Atlantic salt meadows

Annex I habitats present as a qualifying feature, but not a primary reason for site selection

Sandbanks which are slightly covered by sea water all the time

Mudflats and sandflats not covered by seawater at low tide

Coastal lagoons * Priority feature

Annual vegetation of drift lines

Perennial vegetation of stony banks

Salicornia and other annuals colonizing mud and sand

"Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")"

Annex II species that are a primary reason for selection of this site

N/A

Annex II species present as a qualifying feature, but not a primary reason for site selection

Desmoulin's whorl snail

Chichester and Langstone Harbours SPA / RAMSAR

Site details

Unitary Authority	Extra-Regio, Hampshire and Isle of Wight, Surrey, East and West Sussex
Latitude	50.80638889
Longitude	-0.92
SPA EU code	UK9011011

Status	Special Protection Area
Area (ha)	5810.95

General site character

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (63%)

Salt marshes, Salt pastures, Salt steppes (21.5%)

Improved grassland (11.7%)

Humid grassland, Mesophile grassland (1.7%)

Broad-leaved deciduous woodland (0.8%)

Conservation objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Annex I habitats that are a primary reason for selection of this site n/a

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a "Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")"

Annex II species that are a primary reason for selection of this site $\ensuremath{\text{N/A}}$

Annex II species present as a qualifying feature, but not a primary reason for site selection

Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

Tadorna tadorna: Common shelduck (Non-breeding)

Anas penelope; Eurasian wigeon (Non-breeding)

Anas crecca; Eurasian teal (Non-breeding)

Anas acuta; Northern pintail (Non-breeding)

Anas clypeata; Northern shoveler (Non-breeding)

Mergus serrator, Red-breasted merganser (Non-breeding)

Charadrius hiaticula; Ringed plover (Non-breeding)

Pluvialis squatarola; Grey plover (Non-breeding)

Calidris alba; Sanderling (Non-breeding)

Calidris alpina alpina; Dunlin (Non-breeding)

Limosa lapponica; Bar-tailed godwit (Non-breeding)

Numenius arquata; Eurasian curlew (Non-breeding)

Tringa totanus: Common redshank (Non-breeding)

Arenaria interpres; Ruddy turnstone (Non-breeding)

Sterna sandvicensis; Sandwich tern (Breeding)

Sterna hirundo; Common tern (Breeding)

Sterna albifrons; Little tern (Breeding)

Waterbird assemblage

Solent and Southampton Water SPA / RAMSAR

Site details

Unitary Authority	Hampshire and Isle of Wight
Latitude	50.74027778
Longitude	-1.525833333
SPA EU code	UK9011061
Status	Special Protection Area
Area (ha)	5401.12

General site character

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (47.7%)

Salt marshes, Salt pastures, Salt steppes (18.2%)

Humid grassland, Mesophile grassland (17.1%)

Shingle, Sea cliffs, Islets (10.2%)

Bogs, Marshes, Water fringed vegetation, Fens (3.4%)

Coastal sand dunes, Sand beaches, Machair (2.8%)

Broad-leaved deciduous woodland (0.6%)

Conservation objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Annex I habitats that are a primary reason for selection of this site N/A

Annex I habitats present as a qualifying feature, but not a primary reason for site selection

Annex II species that are a primary reason for selection of this site

N/A

Annex II species present as a qualifying feature, but not a primary reason for site selection

Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

Anas crecca; Eurasian teal (Non-breeding)

Charadrius hiaticula; Ringed plover (Non-breeding)

Limosa limosa islandica; Black-tailed godwit (Non-breeding)

Larus melanocephalus; Mediterranean gull (Breeding)

Sterna sandvicensis; Sandwich tern (Breeding)

Sterna dougallii; Roseate tern (Breeding)

Sterna hirundo; Common tern (Breeding)

Sterna albifrons; Little tern (Breeding)

Waterbird assemblage

Portsmouth Harbour SPA / RAMSAR

Site details

Unitary Authority	Hampshire and Isle of Wight
Latitude	50.82805556
Longitude	-1.125555556
SPA EU code	UK9011051
Status	Special Protection Area
Area (ha)	1249.6

General site character

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (85%) Salt marshes, Salt pastures, Salt steppes (14%) Humid grassland, Mesophile grassland (1%)

Conservation objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Annex I habitats that are a primary reason for selection of this site $\ensuremath{\text{n/a}}$

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a

Annex II species that are a primary reason for selection of this site $\ensuremath{\mathsf{N}}\slash\ensuremath{\mathsf{A}}$

Annex II species present as a qualifying feature, but not a primary reason for site selection

Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

Mergus serrator, Red-breasted merganser (Non-breeding)

Calidris alpina alpina; Dunlin (Non-breeding)

Limosa limosa islandica; Black-tailed godwit (Non-breeding)

Solent and Isle of Wight Lagoons SAC

The Solent and Isle of Wight Lagoons SAC on the south coast of England encompasses a series of coastal lagoons, including percolation, isolated and sluiced lagoons. The site includes a number of lagoons in the marshes in the Keyhaven – Pennington area, at Farlington Marshes in Langstone Harbour, behind the sea-wall at Bembridge Harbour and at Gilkicker, near Gosport.

The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna including large populations of three notable species: the nationally rare foxtail stonewort *Lamprothamnium papulosum*, the nationally scarce lagoon sand shrimp *Gammarus insensibilis*, and the nationally scarce starlet sea anemone *Nematostella vectensis*.

Site details

Unitary Authority	Hampshire and Isle of Wight
Centroid	SZ608977
SAC EU code	UK0017073
Status	Special Area of Conservation
Area (ha)	37.93
General site character	·

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (91.7%) Salt marshes, Salt pastures, Salt steppes (8.3%)

Conservation objectives	Issues ³
Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;	 Hydrological changes Inappropriate weed control Coastal squeeze
The extent and distribution of qualifying natural habitats and habitats of qualifying species	4. Invasive species5. Air pollution: impact of
 The structure and function (including typical species) of qualifying natural habitats 	atmospheric nitrogen deposition
The structure and function of the habitats of qualifying species	
The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely	
The populations of qualifying species, and,	
The distribution of qualifying species within the site.	

Annex I habitats that are a primary reason for selection of this site Coastal lagoons * *Priority feature*

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a

Annex II species that are a primary reason for selection of this site $_{\mbox{\scriptsize NI}/\Delta}$

Annex II species present as a qualifying feature, but not a primary reason for site selection n/a

South Wight Maritime SAC

South Wight Maritime SAC is a naturally dynamic and diverse site on the south coast of the Isle of Wight. The west is dominated by exposed greensand bedrock and chalk cliffs and reefs while the eastern side is more sheltered with areas of sandstone and limestone. Large

³ Identified in the Natural England Site Improvement Plan; in priority order

boulder reefs are found in the south around Ventnor and St Catherine's Point. The site's large range of habitats results in a high diversity of marine communities, some of which are found in only a handful of locations throughout England.

The chalk cliffs and reefs around The Needles, Freshwater Bay and Culver Cliff represent some of the best in Britain and erosion has resulted in the formation of a series of caves that host rare algal species restricted to this type of habitat.

The subtidal chalk reefs support diverse assemblages of red seaweeds and sponges. Bembridge in the east is considered a transition zone between warmer waters in the west and cooler waters to the east and several species such as maerl and peacocks tail seaweed are thought to be at their most easterly distribution here. Bembridge has extensive flat limestone ledges hosting large numbers of algal species and burrowing molluscs, and naturally occurring lagoons between the ledges provide shelter for seagrass meadows to develop.

In Sandown Bay, the chalk reefs are covered by thin veneers of sediment which provide the ideal habitat for black bream to nest and the site is also visited by larger species, with thresher sharks and leatherback turtle sightings in the deep waters off St Catherine's Point.

Site details

Unitary Authority	Hampshire and Isle of Wight
Centroid	SZ462771
SAC EU code	UK0030061
Status	Special Area of Conservation
Area (ha)	19866.12

General site character

Marine areas, Sea inlets (96%)

Coastal sand dunes, Sand beaches, Machair (0.5%)

Shingle, Sea cliffs, Islets (1%)

Heath, Scrub, Maquis and Garrigue, Phygrana (1%)

Dry grassland, Steppes (1%)

Broad-leaved deciduous woodland (0.5%)

Conservation objectives	Issues
Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats The structure and function (including typical species) of qualifying natural habitats, and The supporting processes on which qualifying natural habitats rely	 Invasive species Inappropriate coastal management Public access / disturbance Physical modification Fisheries: commercial marine and estuarine

Annex I habitats that are a primary reason for selection of this site

Reefs

Vegetated sea cliffs of the Atlantic and Baltic coasts

Submerged or partially submerged sea caves

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a

Annex II species that are a primary reason for selection of this site $\ensuremath{\text{N/A}}$

Annex II species present as a qualifying feature, but not a primary reason for site selection n/a

Pagham Harbour SPA / RAMSAR

Pagham Harbour SPA is located South East of Chichester between Selsey and Bognor Regis and comprises an extensive central area of saltmarsh and tidal mudflats, with surrounding habitats including lagoons, shingle, open water, reed swamp and wet permanent grassland. All are supporting habitats for the breeding SPA bird species common tern and little tern and over-wintering brent goose and ruff.

Species identified for possible future consideration include and Pintail and Black-tailed godwit. Most of the site is currently managed as RSPB local nature reserve.

Site details

Unitary Authority	Surrey, East and West Sussex
Latitude	50.76333333
Longitude	-0.760555556
SPA EU code	UK9012041
Status	Special Protection Area
Area (ha)	629.01

General site character

Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) (39.2%) Improved grassland (30.3)

Shingle, Sea cliffs, Islets (20.0%)

Salt marshes, Salt pastures, Salt steppes (5.2%)

Bogs, Marshes, Water fringed vegetation, Fens (2.8%)

Inland water bodies (Standing water, Running water) (1%)

Broad-leaved deciduous woodland (0.7%)

Marine areas, Sea inlets (0.6%)

n/a

Conservation objectives	Issues
 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; The extent and distribution of the habitats of the qualifying features The structure and function of the habitats of the qualifying features The supporting processes on which the habitats of the qualifying features rely The population of each of the qualifying features, and, The distribution of the qualifying features within the site. 	 Physical modification Public access / disturbance Water pollution Fisheries: commercial marine and estuarine Fisheries: recreational marine and estuarine Change in land management
Annex I habitats that are a primary reason for selection of this site	

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a

Annex II species that are a primary reason for selection of this site $\ensuremath{\mathsf{N}}/\ensuremath{\mathsf{A}}$

Annex II species present as a qualifying feature, but not a primary reason for site selection

Branta bernicla: Dark-bellied brent goose (Non-breeding)

Philomachus pugnax; Ruff (Non-breeding) Sterna hirundo; Common tern (Breeding) Sterna albifrons; Little tern (Breeding)

Butser Hill SAC

Butser Hill SAC is an extensive area of semi-natural dry grassland and dense yew woodlands, with smaller elements of chalk heath, deciduous woodland and mixed scrub. It is located within the South Downs National Park, in the east of Hampshire. Butser is the highest point in the National Park, and is situated on the chalk which also feeds the Oxenbourne tributary of the River Meon.

The chalk grassland component of the site is primarily CG2 Festuca ovina – Avenula pratense grassland, grazed by sheep and rabbits. The topography of the site is varied, with a wide range of slope gradients and aspects, which in turn generate conditions for high diversity of both vascular and lower flora. The lichen flora associated with chalk grassland is considered the richest in England, whilst a distinctive association of liverworts and mosses occurs on the north-facing slopes. The site supports a diversity of butterflies, and is notable for its population stronghold of Duke of Burgundy Hamearis lucina.

The calcareous yew woods are outstanding examples of a habitat with a very small representation in Britain. The occurrence of chalk grasslands and yew woodlands, alongside transitional habitat between them, combine to make this site of outstanding nature conservation importance.

Site details

Unitary Authority	Hampshire and Isle of Wight
Centroid	SU716197
SAC EU code	UK0030103
Status	Special Area of Conservation
Area (ha)	237.36

General site character

Heath, Scrub, Maquis and Garrigue, Phygrana (0.1%)

Dry grassland, Steppes (70%)

Broad-leaved deciduous woodland (5%)

Coniferous woodland (15%)

Mixed woodland (9.9%)

Conservation objectives	Issues
Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the	Inappropriate scrub control
	2. Undergrazing

Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;	Air pollution: impact of atmospheric nitrogen
The extent and distribution of qualifying natural habitats	deposition
The structure and function (including typical species) of qualifying natural habitats, and	
The supporting processes on which qualifying natural habitats rely	

Annex I habitats that are a primary reason for selection of this site

Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone

Taxus baccata woods of the British Isles; Yew-dominated woodland * Priority feature

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a

Annex II species that are a primary reason for selection of this site $\ensuremath{\mathsf{N}}\slash\mathsf{A}$

Annex II species present as a qualifying feature, but not a primary reason for site selection n/a

Kingley Vale SAC

Kingley Vale is one of the sites representing yew *Taxus baccata* woods on chalk, in the central southern part of its UK range. It has been selected primarily because of its size, as it is the largest area of yew woodland in Britain. In addition to the woodland, four nationally uncommon habitats are represented at the site: chalk grassland; chalk heath; juniper scrub and yew scrub.

Site details

Unitary Authority	Surrey, East and West Sussex
Centroid	SU824110
SAC EU code	UK0012767
Status	Special Area of Conservation
Area (ha)	200.94

General site character

Heath, Scrub, Maquis and Garrigue, Phygrana (25%) Dry grassland, Steppes (30%) Coniferous woodland (30%)

Mixed woodland (15%)

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Conservation objectives	Issues
 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of qualifying natural habitats and habitats The structure and function (including typical species) of qualifying natural habitats, and 	 Deer Undergrazing Agriculture: other Air pollution: impact of atmospheric nitrogen deposition

The supporting processes on which qualifying natural habitats rely

Annex I habitats that are a primary reason for selection of this site

Taxus baccata woods of the British Isles; Yew-dominated woodland * Priority feature

Annex I habitats present as a qualifying feature, but not a primary reason for site selection Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone

Annex II species that are a primary reason for selection of this site $\ensuremath{\mathsf{N}}/\ensuremath{\mathsf{A}}$

Annex II species present as a qualifying feature, but not a primary reason for site selection n/a

Rook Clift SAC

Rock Clift SAC is a *Tilio-Acerion* forest of slopes, screes and ravines, associated with rocky slopes on the base rich soils of the South Downs. This ancient woodland is dominated by large coppice stools of Large-leaved lime *Tilia platyphyllos*, together with Ash *Fraxinus excelsio*r and some Beech *Fagus sylvatica*. The presence of Large-leaved lime as a canopy dominant makes this woodland virtually unique. The site also supports a number of mollusc species, notably the Cheese snail *Helicodonta obvoluta*, and a rich bryophyte flora.

Site details

Conservation objectives	Issues
Broad-leaved deciduous woodland (100%)	
General site character	
Area (ha)	10.62
Status	Special Area of Conservation
SAC EU code	UK0030058
Centroid	SU820182
Unitary Authority	Surrey, East and West Sussex

Conservation objectives	Issues
Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;	 Deer Forestry and woodland management Large-leaved lime location/
The extent and distribution of qualifying natural habitats and habitats	extent/ condition unknown
The structure and function (including typical species) of qualifying natural habitats, and	
The supporting processes on which qualifying natural habitats rely	

Annex I habitats that are a primary reason for selection of this site

Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes * *Priority feature*

Annex I habitats present as a qualifying feature, but not a primary reason for site selection n/a

Annex II species that are a primary reason for selection of this site $\ensuremath{\text{N/A}}$

Annex II species present as a qualifying feature, but not a primary reason for site selection n/a

Singleton and Cocking Tunnels SAC

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.

Site details

Unitary Authority	Surrey, East and West Sussex	
Centroid	SU872144	
SAC EU code	UK0030337	
Status	Special Area of Conservation	
Area (ha)	1.88	
General site character Other land (including Towns, Villages, Roads, Waste places, N	lines, Industrial sites) (100%)	
Conservation objectives	Issues	
 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of the habitats of qualifying species The structure and function of the habitats of qualifying species The supporting processes on which the habitats of qualifying species rely The populations of qualifying species, and, The distribution of qualifying species within the site. 	 Habitat connectivity Habitat fragmentation Public access / disturbance Air pollution: impact of atmospheric nitrogen deposition 	
Annex I habitats that are a primary reason for selection of this site		
Annex I habitats present as a qualifying feature, but not a n/a Annex II species that are a primary reason for selection of n/a	•	

Barbastella barbastellus; Barbastelle bat Myotis bechsteinii; Bechstein`s bat



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