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LAND ADJACENT TO BROOK HOUSE, SALISBURY ROAD, TOTTON, HAMPSHIRE

ECOLOGICAL APPRAISAL & PHASE 1 BAT SURVEY

DRAFT REPORT

OCTOBER, 2021

LAND ADJACENT TO BROOK HOUSE, SALISBURY ROAD, TOTTON, HAMPSHIRE ECOLOGICAL APPRAISAL & PHASE 1 BAT SURVEY

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LAND ADJACENT TO BROOK HOUSE, SALISBURY ROAD, TOTTON, HAMPSHIRE ECOLOGICAL APPRAISAL & PHASE 1 BAT SURVEY

SUMMARY

Species Ecological Consultancy was instructed by Gale Homes Limited to undertake an Ecological Appraisal of land at Brook House, Salisbury Road, Totton, Hampshire. It is proposed to demolish the outbuildings on site and build new residential properties. The Proposals Site itself largely comprises outbuildings and part of a large, landscaped garden with planting beds and mature, vegetated boundaries including mature trees. The site does not contain any sites of designated ecological value but there are designated sites nearby. It is considered that subject to appropriate mitigation that there will be no impact upon these designated sites from the proposals.

As well as mature boundsary vegetation, the Site also contains some limited ruderal vegetation habitat of Negligible value for nature conservation and these habitats potentially supports breeding birds and terrestrial insects of Low value. Though some habitat on Site is suitable to support common reptiles and amphibians, this habitat is small in size and is physically isolated from other areas of similar habitat. It is therefore considered unlikely that common reptiles will occur here. No evidence of badgers using the Site was recorded.

Gaps are present into some of the buildings on Site, into weatherboarding and at the eaves on an outbuilding which may give access to bats. Low numbers of bat droppings were also recorded stuck to the weather-boarding below an access gap. There is thus the potential for bats to roost within some of the buildings on Site. Best practice is therefore for bat emergence/re-entry surveys of the buildings to be undertaken in order to fully evaluate bat use of the Site. It is thus recommended that these are undertaken. As there is the potential for breeding birds to occur on Site, it is best practice that any buildings are demolished and any vegetation removal is undertaken outside the bird breeding season – March to July inclusive or following a negative breeding bird check by a qualified ecologist.

Planning policy now requires that all potential development sites enhance the biodiversity of the Site. It is recommended that new native species vegetation planting, including trees, is installed to enhance the foraging and commuting habitat present for wildlife along the Western and Northern boundaries of the Site to connect up with off-site vegetation and that measures are taken to control any external lighting proposed to minimise light pollution. It is recommended that these measures are implemented.

LAND ADJACENT TO BROOK HOUSE, SALISBURY ROAD, TOTTON, HAMPSHIRE ECOLOGICAL APPRAISAL & PHASE 1 BAT SURVEY

1. INTRODUCTION

Overview

- 1.1 Species Ecological Consultancy was instructed by Gale Homes Limited to undertake an Ecological Appraisal of land adjacent to Brook House, Salisbury Road, Totton, Hampshire. It is proposed to demolish the outbuildings on Site and to redevelop the Site for housing.
- 1.2 The aim of this survey was to undertake a walkover survey to broadly assess the ecological features present, to consider whether important habitats are on site and whether protected species may be present. From this survey recommendations can be made as to whether further ecological surveys are necessary to inform the site proposals. As the Site contains buildings, a Phase 1 Bat Survey is required to assess whether any of the buildings present has the potential to support bats. This survey was also therefore undertaken.

Site Location

1.3 The site is part of a garden of a large residential property with mature, vegetated boundaries and some mature trees (**Photos 9 & 10**), that is set back from Salisbury Road, Totton – the A36 (**Photo 1**). Within the garden there is a number of timber outbuildings (**Photos 2 & 17**). Moderate-aged vegetation runs along the Southern and Western boundaries of the Site with short-mown, improved grassland extending off-site to the North and East (**Photo 6**). The Site stands in a rural situation on the fringes of Totton, Hampshire on a busy major road and just South of Junction 2 of the M27 motorway. Brook House and the remainder of its large garden lie to the East and North of the property (see **Photo 1**). Some detached houses on large plots, land used by a haulage firm and agricultural and pasture fields surround the Site. Further to the east lies Testwood Lakes SNCI, a nature reserve run by Hampshire and Isle of Wight Wildlife Trust, and associated native habitats. It is proposed to demolish the outbuildings and to redevelop the Site for housing.

Policy and Legislation

1.4 Nature conservation in the UK is protected by legislation, principally under the Amended Habitats Regulations: The Conservation of Habitats and Species (Amendment)(EU Exit) Regulations 2019. Further information is provided in **Appendix 1**. The Government's stance on biodiversity is set out in The National Planning Policy Framework (July, 2021) and includes how biodiversity policy is expected to be applied in order to achieve sustainable development. The environment is considered a core component of sustainable development and the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- · recognising the wider benefits of ecosystem services;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to, being put at
 unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air,
 water or noise pollution or land instability.
- 1.5 To protect and enhance biodiversity and geodiversity, plans should:
 - distinguish between the hierarchy of international, national and locally designated sites, allocate land with the least environmental or amenity value, where consistent with other policies; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries;
 - identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

2. METHODOLOGY

Zone of Influence

Impact Assessment in the UK and Ireland (2018) require consideration of the Zone of Influence of any development proposals rather than just a defined 'site' as ecological impacts can extend offsite. The guidelines refer to '...the areas/(ecological) resources that may be affected by the biophysical changes caused by a development, both in the construction and operational phases'. Thus this Ecological Appraisal considers ecological features that may be affected off-site as well as features that may only be affected at the site level.

Desk-top Survey

2.2 A search was undertaken to gather any known ecological information with respect to the Zone of Influence. Internet resources such as MAGIC and NBN were consulted and details of any statutorily designated sites were obtained from Natural England. Online aerial mapping was also consulted in evaluating the survey area. A biological records search was undertaken with Hampshire Biodiversity Information Centre (HBIC).

Walkover Survey

2.3 A walkover survey of the site was undertaken on 6th August, 2021 by Dr Matthew J. Clarke of Species Ecological Consultancy in order to assess the ecological value of the site. The likely presence of protected species and habitats was considered in order to inform the proposals. Features listed below were considered.

Vegetation

2.4 The main habitat types and features present within the study area were assessed and noted along with the presence of any notable species and habitat indicators such as unimproved grassland or ancient woodland indicator species. A preliminary assessment of the structure, quality and management was also made.

Mammals

Badgers

2.5 An assessment of the survey area was made for the presence of badgers and for habitat suitable to support this species. This includes a preliminary search for setts, latrines, footprints and well-marked routeways across the site. Suitable habitats include woodland, hedgebanks and grassland. Any features of value recorded were mapped.

Bats

2.6 The presence and quality of habitat suitable for roosting by bats within the survey area was assessed. This included any buildings, trees or underground structures present and an assessment of the habitat for its potential as bat foraging and commuting habitat. As buildings are present on Site, a Phase 1 Bat Survey was also undertaken of these buildings to assess whether roosting bats may be present. This is best practice (Bat Conservation Trust, 2016).

Amphibians

2.7 The presence of amphibians was considered and an assessment of the suitability of the habitats present for amphibians made. The survey area was searched for waterbodies and any potential refuge sites for amphibians checked where possible.

Reptiles

2.8 Habitat present suitable for reptiles was noted, mapped and its quality assessed. This includes areas used for foraging, basking and breeding such as longer, tussocky grassland, waterbodies, banks, rubble piles and compost heaps. Any reptiles seen on site were also recorded.

Birds

2.9 Any birds seen on site were recorded and an assessment made of the value of the habitats on site to support birds.

<u>Invertebrates</u>

2.10 An assessment of the habitats within the survey area for their suitability to support invertebrates was made. Any readily identifiable invertebrates present were recorded.

3. RESULTS AND EVALUATION

Desk-top Search

3.1 The site does not hold any statutory nature conservation designations but there are statutory and non-statutory designated sites within the Zone of Influence. This includes a number of designated Sites of European and National nature conservation value:

European Value

Solent & Southampton Water SPA

This site comprises an area of estuary with shingle bars, sandbanks and mudbanks. This area supports an internationally important assemblage of birds. During the breeding season the area regularly supports Mediterranean gull *Larus melanocephalus* (15.4% of the GB breeding population), Little term *Sterna albifrons* (2% of the GB breeding population), Roseate tern *Sterna dougallii* (Europe breeding) (3.1% of the GB breeding population), Common tern *Sterna hirundo* (Northern/Eastern Europe - breeding) (2.2% of the GB breeding population) Sandwich tern *Sterna sandvicensis* (1.7% of the GB breeding population).

Over winter this area regularly supports 51,361 waterfowl (5 year peak mean 1991/2 – 1995/6). Including Brent goose *Branta bernicla bernicla*, Teal *Anas crecca*, Common ringed plover *Charadrius hiaticula* and Black-tailed Godwit *Limosa limosa islandica*. Further information is provided in **Appendix 2**.

Solent Maritime Special Area of Conservation (SAC)

This site is designated as of European nature conservation importance due to the presence of a number of features which have a significant presence here:

- Sandbanks which are slightly covered by sea water all the time;
- Estuaries for which this is considered to be one of the best areas in the United Kingdom;
- Mudflats and sandflats not covered by seawater at low tide;
- Coastal lagoons;
- Annual vegetation of drift lines which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares;
- Perennial vegetation of stony banks;
- Salicornia and other annuals colonising mud and sand;
- Spartina swards (Spartinion maritimae) for which this is one of only two known outstanding localities in the United Kingdom, which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares;
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) for which this is considered to be one of the best areas in the United Kingdom;

- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) for which the area is considered to support a significant presence;
- *Vertigo moulinsiana* for which the area is considered to support a significant presence.

Further information is provided in **Appendix 2**.

Solent & Southampton Water RAMSAR

The area covered by this designation extends from Hurst Spit to Gilkicker Point along the south coast of Hampshire and along the north coast of the Isle of Wight. The site comprises of estuaries and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, saltmarsh, reedbeds, damp woodland, and grazing marsh. The diversity of habitats support internationally important numbers of wintering waterfowl, important breeding gull and tern populations and an important assemblage of rare invertebrates and plants. Further information is provided in **Appendix 2**.

National Value

Lower Test Valley SSSI

This site comprises the upper estuary of the River Test and exhibits a gradation from salt through brackish to freshwater conditions. It consists of one of the most extensive reed *Phragmites* beds on the south coast with flanking unimproved meadowland intersected by numerous tidal creeks and flooded on high water spring tides.

The brackish grassland in the south of the site supports a varied flora with several species characteristic of salt marsh habitat, for example, sea arrow-grass Triglochin maritima, sea aster Aster tripolium and sea milkwort Glaux maritima. The rare bulbous foxtail Alopecurus bulbosus, a species whose distribution is rapidly contracting, occurs here, together with other uncommon species such as brookweed *Samolus valerandi*, spike-rush *Eleocharis uniglumis*, and the hybrid saltmarsh grass *Puccinellia Krusemaniana*. Further information is provided in **Appendix 2**.

Eling & Bury Marshes SSSI

This Site of Special Scientific Interest embraces two dissimilar saltmarshes and their intervening intertidal mudflats at the head of Southampton Water. Eling Great Marsh is a 13 ha grazed saltmarsh with a close sward of Saltmarsh-grass *Puccinellia maritima* with creeping bent *Agrostis stolonifera* and red fescue *Festuca rubra* sub-dominant. The marsh margins have in places been colonised by cord-grass *Spartina anglica*. That the present sward is derived by grazing from a more varied, mixed saltmarsh plant community is suggested by the occurrence, apparently in relict populations, of such characteristic saltmarsh plants as thrift *Armeria maritima*, sea purslane *Halimione portulacoides* and sea

aster *Aster tripolium*. Eling Great Marsh is the only Puccinellia saltmarsh on the central south coast. Further information is provided in **Appendix 2**.

County/Local Value

Testwood Lakes SNCI (Site of Nature Conservation Importance)

Testwood Lakes is a nature reserve with lakes, grassland and woodland within the Test Valley managed by the Hampshire & Isle of Wight Trust. A great variety of bird species is present including waterfowl. Testwood Lakes lie to the East of the Site.

Walkover Survey

Site Overview

3.2 The proposals site comprises outbuildings, an area of hoggin-type compacted material forming a driveway and part of a large garden mainly comprising short-mown, improved grassland. A medium-sized, timber garage stands in the South-West corner of the site that is used for storing building materials (**Photo 3**). A long, thin, timber building runs to the north of the garage along the western boundary of the Site (**Photo 17**). Moderate-aged and mature vegetation lies within the remainder of the garden of Brook House, to the North and East of the Site (**Photos 4 & 6**). The Site stands in a rural situation on the fringes of Totton, Hampshire and just South of Junction 2 of the M27 motorway. The Site is set back slightly from a layby that runs parallel with Salisbury Road, the A36, a very busy major road, in front of the Site. Some detached houses on large plots, land used by a haulage firm and agricultural and pasture fields surround the Site.

Habitat Survey

- 3.3 The habitats present within or immediately bordering the proposals site are limited and include:
 - Buildings;
 - Hedgerows;
 - Hardstanding;
 - Scrub and ruderal vegetation;
 - Broadleaved trees.

Buildings

3.4 Buildings comprise a good proportion of the Site. Two timber outbuildings and a portacabin stand within the Western part of the Site. The Timber Garage (**Photo 2**) and the adjacent

portacabin are generally well-sealed but the Bow Shed/Mower Shed (**Photo 17**) has some gaps into its structure which may allow wildlife access.

Hedgerows

3.5 Mature hedgerows run along the Southern boundary of the Site and partially along the Western boundary of the Site. To the Southern boundary a mature Oak tree *Quercus robur* stands within the hedgerow and Cherry Laurel *Prunus laurocerasus*, Bramble *Rubus fruticosus* agg., Ivy *Hedera helix* and Hawthorm *Crataegus monogyna* are also present. Between the driveway for Brook House and the Site in the South-East corner is a rather sorry looking Cypress *Cupressus* sp. hedgerow amongst other shrubs including Hazel *Corylus avellana*.

Hard-standing

3.6 Part of the Site comprises an area of compacted hoggin-type material that forms a driveway in front of the Timber Garage within the mown lawn area (**Photo 2**).

Broadleaved trees

3.7 A mature Oak *Quercus robur* tree stands within the Southern boundary of the Site alongside the layby with the A36 (**Photos 10 & 11**). A medium-aged American Handkerchief Davidia involucrata tree stands in front of the Bow Shed/Mower Shed within the mown lawn (**Photo 5**).

Ruderal Herbs and Scrub

3.8 Between the Timber Garage and the Southern hedgerow has become overgrown with ruderal herbs and scrub including Bramble *Rubus fruticosus* agg., Hedge Bindweed *Calystegia sepium* and Common nettle *Urtica dioica* (**Photo 8**).

Protected Species

Vegetation

Desk-top Search

3.9 No records of notable and protected plant species are known for the Site but there is such a plant very nearby, known from Brookes Hill – Butchers Broom *Ruscus aculeatus*. This species is listed on Annex 5 of the EU Habitats Directive. A record of Green-winged orchid *Anacamptis morio* is held for Stonyford, Ower, 707m from the Site and this species is listed in the IUCN Red Data Book as 'Vulnerable'. Common Stonewort *Chara vulgaris* and Smaller lattice-moss *Cinclidotus fontinaloides* are known from Testwood Lakes 400m away and Lesser pondweed *Potamogeton pusillus* 600m away from the Site. Common Stonewort is a Hampshire species considered Scarce in South Hampshire and a County Scarce species. Smaller Lattice-moss is also a County Scarce species.

Walkover Survey

3.10 The Site comprises several outbuildings and part of a large, mature garden. Much of the Site is short-mown, improved grassland with occasional mature shrubs and flowers. The grassland is improved with Creeping buttercup *Ranunculus repens*, White clover *Trifolium repens* and Bugle *Ajuga reptans*. Some of the garden flower beds have become overgrown with native plant species and the land between the Timber Garage and the Southern hedgerow now contains scrub and ruderal vegetation including bramble, Common nettle and thistles. The boundaries to the West and South of the Site are largely untidy, mature hedgerows with trees and this is particularly so to the South of the Site. The hedgerow to the West of the site appears to be largely Cherry laurel. This vegetation is considered to be of Site nature conservation value only.

Mammals

Bats

Desk-top Survey

- 3.11 No bat records are held for the Site. Ten species of bat, and potentially eleven species, have been recorded foraging within agricultural fields 263m to the North of the Site: Noctule *Nyctalus noctula*, Leisler's *Nyctalus leisleri*, Serotine *Eptesicus serotinus*, Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, a Long-eared species of bat *Plecotus* sp., Nathusius' Pipistrelle *Pipistrellus nathusii*, a Myotis species of bat *Myotis* sp., Barbastelle *Barbastella barbastellus*, Greater Horseshoe *Rhinolophus ferrumequinum* and an unidentified species of bat. Greater Horseshoe and Barbastelle bat are considered rare.
- 3.12 To the South-West of the Site 316m away, near Brooke's Wood, a small Common Pipistrelle bat roost has been recorded where seven bats have been recorded emerging. Eight species of bat have been recorded foraging 806m to the South of the Site on the East side of the A326: Barbastelle, Serotine, a Myotis species of bat, Noctule, Nathusius' Pipistrelle, Common Pipistrelle, Soprano Pipistrelle and Greater Horseshoe bat.

Buildings

Timber Garage

3.13 The timber garage is a relatively new, close-boarded, detached, timber double garage with double garage doors and is largely very well sealed from access by wildlife (**Photos 13 & 14**). The roof is covered with roofing felt and has a slight pitch, descending to the rear. A slight gap is present where the roofing felt is turned over at the eaves but this is unlikely to provide sufficient enough space for a roosting cavity. To the Southern aspect and to a lesser degree on the northern aspect, there are some overhanging pieces of hardboard on the soffit that are warped and may give access to a limited cavity behind them. The building is currently used for storage of building materials and is generally clean and in regular use. No bats or evidence of their presence was found within the building or externally on the structure.

- 3.14 Internally the rooms are well sealed from wildlife entry (**Photos 15 & 16**) and are lit by windows to the West side which would deter bats from roosting here in any event (**Photo 8**). There is a timber framework that is relatively clean and clear of external debris which suggests there are limited gaps into the structure. Thick, foam, insulation-board lines the ceiling and the building is currently unheated. Hence the building will fluctuate in temperature with the external environment to some degree. This environmental variability is likely to make the space less attractive to bats which need a constant temperature to survive for much of the year. There is no loft space.
- 3.15 No bats or evidence of their presence was found within the Timber Garage building or externally on the structure. It is considered that this building has a Low potential for supporting a bat roost.
 - Bow Shed/Mower Shed
- 3.16 A large, timber shed is present along the Western boundary of the Site (**Photos 15 & 16**) that is long and thin. The building has split uses, part being used to store the ride on lawnmower and other garden machinery (**Photo 32**) and part used by the owner to make bows for his archery hobby (**Photo 32**). The structure is clad with timber weatherboarding panels generally in good condition but is starting to show signs of wear: some felt has come off the roof and there is some damage to the eaves on the east side.
- 3.17 Internally the shed is full of contents and thus difficult to fully survey for bats and evidence of their presence. There is vertically stacked, stored timber within the centre of the building, garden machinery to the north of the building (**Photo 26**) and the bow-making workshop to the South of the building (**Photos 24 & 25**) which has timber cladding on the walls and ceiling, has a linoleum floor with rugs and is thus relatively clean. The inside is tightly boarded. No bats or signs of their presence were found within the building.
- 3.18 Externally there is a number of gaps which may give wildlife access into the structure of the building. There are warped weather-boards which give access to a cavity behind, though some of these cavities are insulated, some are not or have lost their insulation allowing access to the structure (Photos 20 & 21). Gaps are also present around some of the window frames which may allow access and there are gaps where different sections of the timber building meet together (Photos 18 & 19). Gaps are also present into the eaves at the soffits (Photos 22, 31 & 32).
- 3.19 Low numbers of Pipistrelle-type droppings were found stuck to the weatherboarding below a gap between timber panels on the front of the Bow Shed side of the building (**Photo 30**). It is thus `considered very likely that a bat has entered or emerged from a cavity into the building structure here.
- 3.20 It is considered that this building on Site has a High potential to support a bat roost.

Trees

3.21 An Oak tree in the Southern hedgerow has some damaged limbs and is overgrown with the hedgerow and is difficult to fully see to survey. It is considered to have a low potential to support a bat roost.

Commuting/Foraging Habitat

3.22 The site has mature lines of vegetation along Western and Southern boundaries of the Site as well as some mature shrub and ornamental trees within the centre of the garden. It is likely that should bats be present on Site, that this vegetation will provide foraging and commuting habitat through this area. It is therefore recommended that this vegetation is retained. Care should also be taken as part of the proposals to not light the mature vegetated boundaries of the Site and any external lighting should be cowelled downwards and facing away from these areas in order to prevent any impacts on bats.

Badgers

Desk-top Search

3.23 No badger records are held for the Site. Two badger records are held for the Zone of Influence of the proposals. One 447m away from the Site within the 1km grid square and one 985m away, North of Junction 2 of the barrier of the M27.

Walkover Survey

3.24 No badger setts were recorded on the proposals Site itself but there are very limited mammal paths present within the boundary vegetation on the east side of the Site. It is considered that these paths may have been created by a range of medium-sized mammal species and not exclusively badgers. To the rear of the Bow Shed/Mower Shed is a mammal run being used where good cover is present (**Photo 33**).

Dormice

Desk-top Search

3.25 No records for Dormice are held for the Site. However, a single record of a Dormouse is held for 263m away from the site to the North, along a mature hedgerow.

Walkover Survey

3.26 The Site includes part of a large mature garden that has boundary vegetation along the Southern boundary and part of the Western boundary. The vegetation along the Southern boundary is suitable for use by Dormice but it is limited in size and plant species diversity, fronts onto a major road and is broken through off-site by the driveways for Brook House and the haulage yard next door. A section of the Western boundary just off-site is also close-board

fencing and so the connectivity of the hedgerow is not maintained. The fields to the west of the Site are arable crops with a clear boundary strip with no planting around them and to the East is the short mown grassland within the remainder of the garden of Brook House. Both these habitats are unsuitable for Dormice. It is therefore considered unlikely that Dormice would be present here.

Birds

Desk-top Search

- 3.27 As Testwood Lakes Nature Reserve lies within the search area a large number of bird records is held within 400 and 600m to the East of the Site totalling 697 records. The nearest records for the site are held for 200m away from the Site and include records for Hobby *Falco Subbuteo*, Little Ringed Plover *Charadrius dubius* and Barn owl *Tyto alba*.
- 3.28 The site offers suitable limited habitat for breeding and foraging birds with trees, shrubs and scrub present (**Photos 8 & 10**), mainly to the boundaries of the site to the South and West. The buildings on Site also offer suitable bird nesting habitat as there are some gaps around the boarding on some of the outbuildings where birds could gain access to the internal structure (**Photo 19**).
- 3.29 All breeding birds and their nests are protected by UK law. It is thus best practice to demolish the outbuildings and undertake any vegetation clearance works required, outside the bird breeding season March-July inclusive or following several negative breeding bird checks by a qualified ecologist. The season may also extend outside this period in good years however.

Reptiles

Desk-top Search

3.30 No records of reptiles are held for the Site. A single record for Grass Snake is held for the Zone of Influence of the proposals for Testwood Lakes, 600m away to the East of the Site.

Walkover Survey

- 3.31 All UK reptiles are protected from killing and injury by law and it is thus best practise to identify where reptiles may occur on site through survey and to ensure that they are safeguarded.
- 3.32 The site itself largely comprises short mown, improved grassland and buildings which do not provide suitable foraging habitat for reptiles but the Western and Southern part of the site does however contain some mature vegetation where there is some scrub dominated by bramble and nettles. Connectivity of the Site with the landscape is however low here and there are breaks in this boundary vegetation where agricultural field entrances and property

driveways break through the hedgerows. The Southern hedgerow also fronts onto a major road the noise and vibration from which would likely dissuade reptiles from using this area. It is considered unlikely that the Site supports common reptiles.

Amphibians

Desk-top Search

3.33 No records of amphibians are held for the Site or for the Zone of Influence of the proposals.

Common amphibians are protected from sale in the UK and from inhumane killing under animal welfare laws.

Walkover Survey

3.34 The site itself largely comprises short-mown, improved grassland and buildings and this does not provide suitable habitat for foraging amphibians. No waterbodies are currently present on Site. The eastern boundary of the Site and the South-eastern part of the Site does have some mature vegetation, where there is some scrub dominated by bramble and nettles. There are overgrown flowerbeds and limited overgrown hedgerow to the front of the Site which may offer common amphibians including Common frog *Rana temporaria* and Common Toad *Bufo bufo* foraging and refuging habitats (**Photos 8 & 10**).

Terrestrial Insects

Desk-top Survey

3.35 No records of invertebrates are held for the Site. Testwood Lakes Nature Reserve lies within the Zone of Influence of the proposals and hence, there is a good number of invertebrate records held totalling 71 records. Nearest to the Site the dragonflies Downy emerald *Cordulia aenea* and Common darter *Sympetrum striolatum* are recorded 400m away from the Site. Silver-washed Fritillary, Small Heath *Coenonympha pamphilus*, Willow Bent-wing *Phyllocnistis saligna* and Cinnabar *Tyria jacobaeae*, are all Lepidoptera also known at this distance from the Site.

Walkover Survey

3.36 The majority of the Site comprises short-mown, improved grassland and thus does not offer a large amount of habitat for use by terrestrial insects. However, the mature vegetated boundaries which include some scrub, longer grassland and herbs under mature trees, particularly to the Southern boundary, will offer some foraging and refuge for a range of common insect species. The Site is considered to be of Site value only for terrestrial insects.

4. **CONCLUSIONS & RECOMMENDATIONS**

Designated Sites

4.1 There are no protected sites of ecological value on the site but there are sites of nature conservation value nearby to the site. Measures to prevent excessive noise and dust should be taken as part of the demolition of the building on Site to prevent negative impacts upon these Designated Sites of value nearby. It is considered that if these measures are undertaken these Designated Sites will not be affected by the proposals.

Ecological Receptors

4.2 The Site proposed for development largely comprises outbuildings and short-mown, improved grassland with some moderately-aged vegetation to the Western and Southern boundaries of the Site. A limited amount of scrub and ruderal vegetation also occurs to the South of the Site. These habitats are considered of Site nature conservation value.

Bats

4.3 Potential for roosting bats is present in the outbuildings on Site and so bat emergence/reentry surveys are required to meet best practice, to inform on whether roosting bats are present and to inform the planning application. It is recommended that these surveys are undertaken.

Common Reptiles and Amphibians

4.4 Though the Site does include some habitat considered suitable for use by common reptiles and amphibians, the habitat available is just too small to support viable populations of these species and is isolated by breaks in the Southern hedgerow for the main entrance to Brook House and by a close-board fence along the Western boundary just off-site. It is considered unlikely that common reptiles will occur on the Site. A low number of common amphibians may be present within the Southern hedgerow on Site and associated scrub and ruderal vegetation. It will therefore be necessary to undertake destructive search of any suitable habitat for common amphibians proposed for removal prior to construction.

Breeding Birds

4.5 Mature vegetation on the Southern and Western boundaries offers suitable habitat for breeding birds and this is considered of Low nature conservation value. Breeding bird species are protected by UK law and thus should any suitable habitats be proposed for removal then these should be removed outside the bird breeding season: March to July inclusive, and may extend outside this period in good years. Should this not be possible, then vegetation removal may be undertaken following several negative breeding bird checks by a qualified ecologist.

Phase 1 Bat Survey

- 4.6 Overall there is a significant number of gaps into the Bow Shed/Mower Shed building and thus bats can gain access to the structure. The outbuilding has gaps into the eaves and up behind weather-boarding on the front of the building. As bats can be very elusive, where a building has the potential to support bats it is best practice that bat emergence/re-entry surveys are undertaken between May and September (Bat Conservation Trust, 2016).
- 4.7 A low number of Pipistrelle-type bat droppings was found stuck below a weather-board on the outside of the Bow Shed/Mower Shed below a gap into a cavity within the wall. It is thus considered highly likely that a bat has entered this cavity and that bats are roosting within this building. Where potential for bat roosting is present in a building then best practice (Bat Conservation Trust, 2016) requires bat emergence/re-entry surveys are undertaken to more fully evaluate the bat status of the building. As the buildings on Site are considered to have potential for bat roosting, bat emergence/re-entry surveys are required between May and September to meet best practice. Two of these surveys are required between May and August. It is recommended that these surveys are undertaken.
- 4.8 The Site has some limited mature, vegetation on the Southern and Western boundaries. This potentially provides good foraging and commuting habitat for bats in conjunction with offsite vegetation and should be retained. Wildlife corridors and connective habitat are now highlighted within English planning policy as being of value and should be retained as part of any proposals.

Biodiversity Enhancement

4.9 Planning policy now requires that all potential development sites enhance the biodiversity of the Site and by November 2023 all proposals sites will be required by law to include a 10% biodiversity gain in addition to any necessary ecological mitigation required for the Site. It is recommended that the vegetation on the boundaries of the Site is retained and that new native species planting is installed to enhance the foraging and commuting habitat present for wildlife along the Western and Northern boundary of the Site and that measures are taken to control any external lighting proposed to minimise light pollution. It is recommended that these measures are implemented.

5. REFERENCES

Bat Conservation Trust. 2016. *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London. 3rd edition.

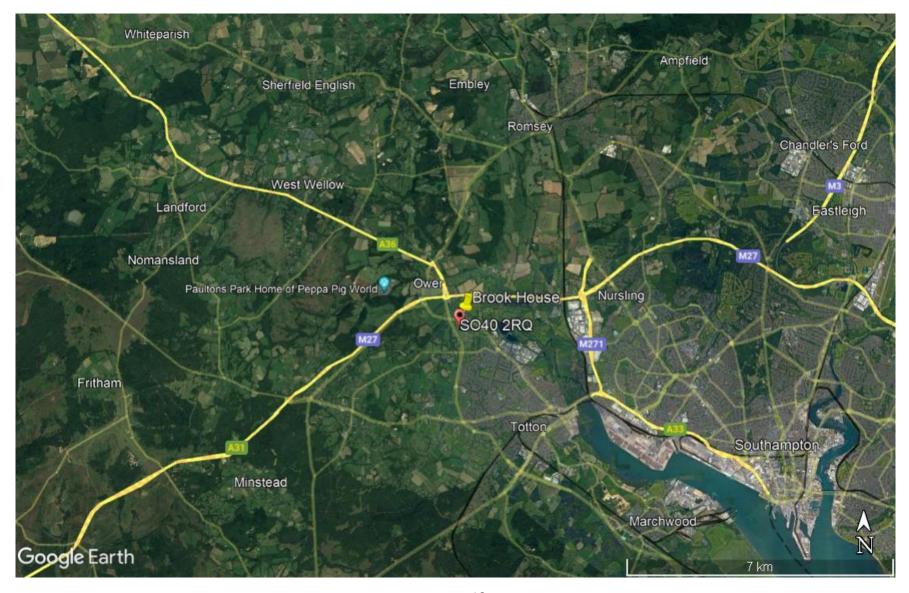
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Eaton *et al.*, (2015) Birds of Conservation Concern 4: The Population Status of Birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 108, pp708-74.

6. PLANS

Plan 1: Site Location



7. APPENDICES

APPENDIX 1: SUMMARY OF UK LEGISLATION & POLICY

Legislation

Amended Habitats Regulations: The Conservation of Habitats and Species (Amendment)(EU Exit) Regulations 2019.

Otherwise known as 'The Habitats Regulations', this legislation transposes the EU Habitats Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna into UK law. Under this legislation Special Areas of Conservation (or SACs) and Special Protection Areas (SPA) can be designated as sites of European importance. These sites and their qualifying interests are protected from damage.

Species listed under Schedule 2 of these regulations are protected from deliberate killing, injury or significant disturbance and their breeding sites or resting places are also protected from damage and destruction. European protected species include: all UK species of bat, dormice, otter and great crested newts.

In order for development that may affect one of the above species to proceed and to avoid committing an offence, licences are achievable from Natural England. In order for licences to be granted the following tests must be met:

- The proposal must be necessary 'to preserve public health or public safety or for other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- The proposals must *not be detrimental to the maintenance of the population of the* species concerned at a favourable conservation status in their natural range;
- There must be no 'satisfactory alternative'.

Wildlife & Countryside Act 1981 (as amended).

The Wildlife & Countryside Act 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in the UK. This Act relates to the designation and protection of Special Sites of Scientific Interest (SSSI) and Protected Species. The Act includes:

- The protection of SSSIs and prohibitive lists of potentially damaging operations;
- The protection of wild birds from intentional killing and injury, destruction of their nests whilst being built or in use and taking of eggs;
- The protection of animals listed on Schedule 5 from intentional killing, injury and taking, possession and sale. Places used for shelter and protection are also protected against intentional disturbance, obstruction, damage and destruction. Species on Schedule 5 include:

- Bats (all species);
- Dormice;
- Water Vole;
- Great Crested Newt;
- Otter;
- All UK reptile species;
- Common amphibians;
- Certain invertebrates including Stag Beetle.
- The protection of plants listed on Schedule 8;

Countryside & Rights of Way Act 2000

The CRoW Act strengthened parts of the Wildlife and Countryside Act to include the term 'reckless' when considering whether an offence is intentional. Thus if it can be demonstrated that sufficient knowledge of the likelihood of an offence is known then prosecution will follow.

Natural Environment & Rural Communities (NERC) Act 2006

The NERC Act firmly places a duty on Local Authorities to conserve biodiversity. The Act required the publication of a list of the living organisms and types of habitat which are of principal importance for the purpose of conserving biodiversity: the Section 41 List. The conservation of species on this list forms part of the duty of Local Authorities to conserve biodiversity. Species on the list include:

- All species of UK bat;
- All species of UK reptile;
- All species of UK amphibian;
- Otter, dormice, water vole and hedgehog;
- Birds including Skylark, Cirl Bunting and Yellowhammer;
- Invertebrates including the butterflies Wall, Dingy Skipper and Brown Hairstreak.

Protection of Badgers Act 1992

Due to their persecution, badgers are protected from killing, injuring and their setts from damage under the Protection of Badgers Act 1992. Development may need licences from Natural England to disturb or destroy badger setts where works are required in close proximity.

Hedgerow Regulations 1997

Important hedgerows are protected from removal by the Hedgerow Regulations 1997. Criteria are used to identify whether a hedgerow is one of importance for ecological, historical or landscape reasons.

Policy

National Planning Policy Framework (July, 2018)

The Government's stance on biodiversity is set out in The National Planning Policy Framework (July, 2021) and includes how biodiversity policy is expected to be applied in order to achieve sustainable development. The environment is considered a core component of sustainable development and the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- recognising the wider benefits of ecosystem services;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to, being put at
 unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air,
 water or noise pollution or land instability.

To protect and enhance biodiversity and geodiversity, plans should:

- distinguish between the hierarchy of international, national and locally designated sites, allocate land with the least environmental or amenity value, where consistent with other policies; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries;
- identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Biodiversity Action Plans (BAPs)

UK Biodiversity Action Plan

The UK Biodiversity Action Plan is the UK Government's response to signing up to the Convention on Biological Diversity in 1992 and is the national strategy to identify nature conservation priorities and key principals for future biodiversity conservation.

Draft Report-October, 2021

Biodiversity 2020: a strategy for England's Wildlife and Ecosystem Services sets out how the quality of the environment on land and at sea will be improved over the next ten years, following on from policies contained in the Natural Environment White Paper, published in June 2011.

APPENDIX 2: DESIGNATED SITES - CITATION SHEETS

Solent & Southampton Water SPA

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 (2011/484/EU).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the <u>SPA homepage</u> and <u>SAC homepage</u> on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA), Proposed Sites for Community Importance (pSCI), Sites of Community Importance (SCI) and for Special Areas of Conservation (SAC)

SITE **UK9011061**

Ecological Appraisal & Phase 1 Bat Survey

SITENAME Solent and Southampton Water

TABLE OF CONTENTS

- 1. <u>SITE IDENTIFICATION</u>
- 2. SITE LOCATION
- <u>5.</u> <u>ECOLOGICAL INFORMATION</u>
- 4. SITE DESCRIPTION
- 5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES
- 6. SITE MANAGEMENT

1. SITE IDENTIFICATION

1.1 Type	1.2 Site code	Back to top
A	UK9011061	

1.3 Site name

Solent and Southampton Water

1.4 First Compilation date	1.5 Update date
1998-10	2015-12

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Joint Nature Conservation Committee Monkstone House City Road

Peterborough Address:

PE1 1JY

Email:

1.7 Site indication and designation / classification dates

Date site classified as SPA:	1998-10
National legal reference of SPA designation	Regulations 12A and 13-15 of the Conservation Habitats and Species Regulations 2010, (http://www.legislation.gov.uk/uksi/2010/490/contents/made) as amended by The Conservation of Habitats and Species (Amendment) Regulations 2011 (http://www.legislation.gov.uk/uksi/2011/625/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude -1.525833333 50.74027778

2.2 Area [ha]: 2.3 Marine area [%]

5401.12 59.3

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code	Region Name
UKJ3	Hampshire and Isle of Wight

2.6 Biogeographical Region(s)

(100.0

Atlantic

%)

3. ECOLOGICAL INFORMATION

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Ecological Appraisal & Phase 1 Bat Survey

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species			Po	Population in the site				Site assessment							
G	Code	Scientific Name	S NP		s	Т	Size		Unit	Cat.	D.qual.	A B C D	A B C	:	
						Min	Max				Pop.	Con.	lso.	Glo	
В	A052	Anas crecca			w	4400	4400	i		G	В		С		
В	A675	Branta bernicla bernicla			w	7506	7506	i		G	В		С		
В	A137	Charadrius hiaticula			w	552	552	i		G	С		С		
В	A176	Larus melanocephalus			r	2	2	р		G	A		С		
В	A616	Limosa limosa islandica			w	1125	1125	i		G	A		С		
В	A195	Sterna albifrons			r	49	49	р		G	В		С		
В	A192	Sterna dougallii			r	2	2	р		G	В		Α		
В	A193	Sterna hirundo			r	267	267	р		G	В		С		
В	A191	Sterna sandvicensis			r	231	231	р		G	С		С		

- Group: A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- S: in case that the data on species are sensitive and therefore have to be blocked for any public access enter; yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see reference portal)
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

3.3 Other important species of flora and fauna (optional)

Species		Population in t	he site		Mot	ivatio	n		
Cat.	Scientific Species	Other Group	CODE	S	NP	Siz	е	Unit	t
Name	Annex				catego	ories			
	Min	Max C	R V P	IV	V	Α	В	С	D

Spe 3	it it							
Lan	I	l I						
Eco	<u>;</u>					:(
	Waterbird							
B WATR	assemblage	51361	51361	i			X	

- Group: A = Amphibians, B = Birds, F = Fish, Fu = Fungi, I = Invertebrates, L = Lichens, M = Mammals, P = Plants, R = Reptiles
- CODE: for Birds, Annex IV and V species the code as provided in the reference portal should be used in addition to the scientific name
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Unit:** i = individuals, p = pairs or other units according to the standard list of population units and codes in accordance with Article 12 and 17 reporting, (see reference portal)
- Cat.: Abundance categories: C = common, R = rare, V = very rare, P = present
- Motivation categories: IV, V: Annex Species (Habitats Directive), A: National Red List data; B: Endemics; C: International Conventions; D: other reasons

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N05	10.2
N16	0.6
N03	18.2
N07	3.4
N04	2.8
N10	17.1
N02	47.7
Total Habitat Cover	100.00000000000001

Other Site Characteristics

1 Terrestrial: Soil & Geology: mud,acidic,alluvium,sedimentary,neutral 2 Terrestrial: Geomorphology and landscape: floodplain,coastal,lowland 3 Marine: Geology: sand,gravel,sedimentary,shingle 4 Marine: Geomorphology: open coast (including bay),lagoon,estuary,intertidal rock,enclosed coast (including embayment),shingle bar,islands,intertidal sediments (including sandflat/mudflat) Ramsar Wetland Types: Marine and coastal wetlands

4.2 Quality and importance

ARTICLE 4.1 QUALIFICATION (79/409/EEC) During the breeding season the area regularly supports: Larus melanocephalus 15.4% of the GB breeding population 5 year peak mean, 1994-1998 Sterna albifrons (Eastern

Atlantic - breeding) 2% of the GB breeding population 5 year peak mean, 1993-1997 Sterna dougallii (Europe breeding) 3.1% of the GB breeding population 5 year peak mean, 1993-1997 Sterna hirundo (Northern/Eastern Europe - breeding) 2.2% of the GB breeding population 5 year peak mean, 1993-1997 Sterna sandvicensis

(Western Europe/Western Africa) 1.7% of the GB breeding population 5 year peak mean, 1993-1997 ARTICLE 4.2 QUALIFICATION (79/409/EEC) Over winter the area regularly supports: Anas crecca (North-western Europe) 1.1% of the population 5 year peak mean, 1992/3-1996/7 Branta bernicla bernicla (Western Siberia/Western Europe) 2.5% of the population 5 year peak mean, 1992/3-1996/7 Charadrius hiaticula (Europe/Northern Africa - wintering) 1.2% of the population 5 year peak mean, 1992/3-1996/7 Limosa limosa islandica (Iceland - breeding) 1.7% of the population 5 year peak mean, 1992/3-1996/7 ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS Over winter the area regularly supports: 51361 waterfowl (5 year peak mean 1991/92-1995/96) Including: Branta bernicla bernicla , Anas crecca , Charadrius hiaticula , Limosa limosa islandica

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

THE HIOST III	iportant imp	acis and aci	ivides with high
Negative In	npacts		
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
Н	G01		I
Н	M01		В
Н	M02		В
Н	F02		I
Н	H02		В

Positive I			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
Н	A04		I
Н	D05		I
Н	A03		I
Н	A02		I
Н	B02		I
Н	D05		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification, T = toxic inorganic chemicals, O = toxic organic chemicals, C = Mixed pollutions i = inside, C = toxic organic chemicals, C = toxic organic c

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): http://publications.naturalengland.org.uk/category/6490068894089216

http://publications.naturalengland.org.uk/category/3212324 http://jncc.defra.gov.uk/pdf/Natura2000 StandardDataForm UKApproach Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK01	21.8	UK04	100.0		
6. SITE MAN	AGEMENT				
s 1 Bodylies) responsible fo	r the site manage	ement:		Back to to
Organisation	-	tural England			
Address:					
Email:					
_	nent Plan(s):				
An actual mar	nagement plan do	es exist:			
Yes					
No, but	t in preparation				
X No					

6.3 Conservation measures (optional)

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the <u>official European Union guidelines for</u> <u>the Standard Data Form</u> (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
А	SPA (classified Special Protection Area)	53
В	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
С	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippopha • rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57

21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57

7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent representatively	57
В	Good representatively	57
С	Significant representatively	57
D	Non-significant presence representatively	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
А	> 15%-100%	58
		58
В	> 2%-15%	58
С	≤ 2%	

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent conservation	59

Ecological Appraisal & Phase 1 Bat Survey	

В	Good conservation	59
С	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent value	59
В	Good value	59
С	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
Α	> 15%-100%	62
		62
В	> 2%-15%	62
		62
С	≤ 2%	
D	Non-significant population	

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent conservation	63
В	Good conservation	63
С	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Population (almost) Isolated	63
В	Population not-isolated, but on margins of area of distribution	63

С	Population not-isolated within extended distribution range	63	
---	--	----	--

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent value	63
В	Good value	63
С	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65

В03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65
CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic ressources	
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
101	Invasive non-native species	65
102	Problematic native species	65
	·	

Changes in biotic conditions

Unknown threat or pressure

Threats and pressures from outside the Member State

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65

65

65

103 Introduced genetic material, GMO 65 J01 Fire and fire suppression 65 J02 Human induced changes in hydraulic conditions 65 J03 Other ecosystem modifications 65 K01 Abiotic (slow) natural processes 65 K02 Biocenotic evolution, succession 65 K03 Interspecific faunal relations 65 K04 Interspecific floral relations 65 K05 Reduced fecundity/ genetic depression 65 L05 Collapse of terrain, landslide 65 L07 Storm, cyclone 65 L08 Inundation (natural processes) 65 L10 Other natural catastrophes 65 M01 Changes in abiotic conditions 65

5.1 Designation type codes

M02

U

ХО

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

Solent Maritime SAC

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 (2011/484/EU).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the <u>SPA homepage</u> and <u>SAC homepage</u> on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA), Proposed Sites for Community Importance (pSCI), Sites of Community Importance (SCI) and for Special Areas of Conservation (SAC)

SITE **UK0030059**

SITENAME Solent Maritime

Ecological Appraisal & Phase 1 Bat Survey

TABLE OF CONTENTS

- <u>1. SITE IDENTIFICATION</u>
- 2. SITE LOCATION
- 3. ECOLOGICAL INFORMATION
- 4. SITE DESCRIPTION
- 5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES
- 6. SITE MANAGEMENT

1. SITE IDENTIFICATION

1.1 Type	1.2 Site code	Back to top
В	UK0030059	
	010000000	

1.3 Site name

Solent Maritime			
-----------------	--	--	--

1.4 First Compilation date	1.5 Update date
1998-10	2015-12

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Joint Nature Conservation Committee Monkstone House City Road Peterborough

Address:

PE1 1JY **Email**:

Date site proposed as SCI: 1998-10

Draft Report-October, 2021

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2005-04

National legal reference of SAC

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designation:

Regulations 11 and 13-15 of the Conservation of Habitats

and Species Regulations 2010

(http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude -0.927777778 **Latitude** 50.79638889

2.2 Area [ha]: 2.3 Marine area [%]

11243.12 91.9

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code Region Name

UKJ3	Hampshire and Isle of Wight
UKZZ	Extra-Regio
UKJ2	Surrey, East and West Sussex

2.6 Biogeographical Region(s)

(100.0

Atlantic

%)

3. ECOLOGICAL INFORMATION

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3.1 Habitat types present on the site and assessment for them

Annex I Habitat types			Site assessment	t					
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
11108			3597.8	0	М	С	С	С	С
1130 B			6633.44	0	G	A	В	В	В
11408			5059.4	0	G	A	С	В	С
11508	X		146.16	0	Р	С	В	В	С
1210 8			112.43	0	Р	С	A	В	С
12208			112.43	0	М	С	В	В	С
1310 B			123.67	0	Р	В	В	В	С
1320 B			94.44	0	Р	A	A	С	Α
1330 B			2023.76	0	М	В	В	В	В
2120			112.43	0	М	С	В	В	С
2130	Х		112.43	0	М	D			

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- Cover: decimal values can be entered
- Caves: for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

Ecological Appraisal & Phase 1 Bat Survey

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species			Population in the site				Site assessment							
G	Code	Scientific Name	s	NP	Т	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	lso.	Glo.
М	1355	<u>Lutra lutra</u>			р				Р	DD	D			
M	1365	Phoca vitulina			p				Р	DD	D			
I	1016	Vertigo moulinsiana			р				R	DD	В	В	В	С

- Group: A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see <u>reference portal</u>)
- Abundance categories (Cat.): C = common, R = rare, V = very rare, P = present to fill if data are deficient (DD) or in addition to population size information
- Data quality: G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N16	0.5
N03	23.0
N05	3.0
N04	0.5
N01	14.0
N02	59.0

otal Habitat Cover	100
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Other Site Characteristics

1 Terrestrial: Soil & Geology: shingle,sedimentary,sand,alluvium,mud,neutral,nutrient-rich,clay 2 Terrestrial: Geomorphology and landscape: island,lowland,coastal 3 Marine:

Geology: sand,clay,sedimentary,gravel,mud,limestone/chalk,shingle,sandstone/mudstone 4 Marine: Geomorphology: open coast (including bay),estuary,enclosed coast (including embayment),shingle bar,subtidal sediments (including sandbank/mudbank),intertidal sediments (including sandbank/mudbank).

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which the area is considered to support a significant presence. Annual vegetation of drift lines for which the area is considered to support a significant presence. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares. Perennial vegetation of stony banks for which the area is considered to support a significant presence. Salicornia and other annuals colonising mud and sand for which the area is considered to support a significant presence. Spartina swards (Spartinion maritimae) for which this is one of only two known outstanding localities in the United Kingdom. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares. Atlantic salt meadows (Glauco-Puccinellietalia maritimae) for which this is considered to be one of the best areas in the United Kingdom. Shifting dunes along the shoreline with Ammophila arenaria (?white dunes?) for which the area is considered to support a significant presence.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Ir	npacts		
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
Н	H02		В
Н	G01		I
Н	M02		В
Н	F02		I
Н	M01		В

Positive I	mpacts		
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
Н	A03		I
Н	A02		I
Н	A04		
Н	D05		
Н	D05		
Н	B02		

Rank: H = high, M = medium, L = low

 $Pollution: N = Nitrogen \ input, P = Phosphor/Phosphate \ input, A = Acid \ input/acidification,$

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions i =

inside, o = outside, b = both

Draft Report-October, 2021

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): http://publications.naturalengland.org.uk/category/6490068894089216

http://publications.naturalengland.org.uk/category/3212324

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK00	28.6	UK01	4.5	UK04	71.4
6. SITE MA	NAGEMENT				
6.1 Body(ie	es) responsibl	e for the site manag	gement:		Back to top
Organisatio		Natural England			
Address:					
Email:					
_	ement Plan(s)				
	anagement plar	1 does exist:			
Yes					
No, b	out in preparatio	n			
X No					
6.3 Conser	rvation measu	res (optional)			

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the <u>official European Union guidelines for</u> <u>the Standard Data Form</u> (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
А	SPA (classified Special Protection Area)	53
В	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
С	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippopha • rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57

21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57

7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent representatively	57
В	Good representatively	57
С	Significant representatively	57
D	Non-significant presence representatively	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
А	> 15%-100%	58
		58
В	> 2%-15%	58
С	≤ 2%	

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent conservation	59

Ecological Appraisal & Phase 1 Bat Survey

В	Good conservation	59
С	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent value	59
В	Good value	59
С	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
А	> 15%-100%	62
		62
В	> 2%-15%	62
		62
С	≤ 2%	
D	Non-significant population	

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent conservation	63
В	Good conservation	63
С	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Population (almost) Isolated	63
В	Population not-isolated, but on margins of area of distribution	63

С	Population not-isolated within extended distribution range	63	
---	--	----	--

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent value	63
В	Good value	63
С	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65

В03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65
CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic ressources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
101	Invasive non-native species	65
102	Problematic native species	65
	I .	1

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103 Introduced genetic material, GMO 65 J01 Fire and fire suppression 65 J02 Human induced changes in hydraulic conditions 65 J03 Other ecosystem modifications 65 K01 Abiotic (slow) natural processes 65 K02 Biocenotic evolution, succession 65 K03 Interspecific faunal relations 65 K04 Interspecific floral relations 65 K05 Reduced fecundity/ genetic depression 65 L05 Collapse of terrain, landslide 65 L07 Storm, cyclone 65 L08 Inundation (natural processes) 65 L10 Other natural catastrophes 65 M01 Changes in abiotic conditions 65 M02 Changes in biotic conditions 65 U Unknown threat or pressure 65 ХО Threats and pressures from outside the Member State 65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 (2011/484/EU).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the <u>SPA homepage</u> and <u>SAC homepage</u> on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA), Proposed Sites for Community Importance (pSCI), Sites of Community Importance (SCI) and for Special Areas of Conservation (SAC)

SITE **UK0030059**

SITENAME Solent Maritime

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TABLE OF CONTENTS

- 7. SITE IDENTIFICATION
- 8. SITE LOCATION
- 9. ECOLOGICAL INFORMATION
- 10. SITE DESCRIPTION
- 11. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES
- 12. SITE MANAGEMENT

1. SITE IDENTIFICATION

1.1 Type	1.2 Site code	Back to top
В	UK0030059	

1.3 Site name

	Solent Maritime			
--	-----------------	--	--	--

1.4 First Compilation date	1.5 Update date
1998-10	2015-12

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Joint Nature Conservation Committee Monkstone House City Road Peterborough

Address:

PE1 1JY Email:

Date site proposed as SCI: 1998-10

Draft Report-October, 2021

Date site confirmed as SCI: 2004-12

2005-04 Date site designated as SAC:

National legal reference of SAC

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designation:

Regulations 11 and 13-15 of the Conservation of Habitats

and Species Regulations 2010

(http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Latitude Longitude -0.927777778 50.79638889

2.2 Area [ha]: 2.3 Marine area [%]

11243.12 91.9

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code **Region Name**

UKJ3	Hampshire and Isle of Wight
UKZZ	Extra-Regio
UKJ2	Surrey, East and West Sussex

2.6 Biogeographical Region(s)

(100.0

Atlantic

%)

3. ECOLOGICAL INFORMATION

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3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment				
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C			
						Representativity	Relative Surface	Conservation	Global	
11108			3597.8	0	М	С	С	С	С	
1130 B			6633.44	0	G	A	В	В	В	
11408			5059.4	0	G	A	С	В	С	
11508	X		146.16	0	Р	С	В	В	С	
1210 8			112.43	0	Р	С	A	В	С	
12208			112.43	0	М	С	В	В	С	
1310 B			123.67	0	Р	В	В	В	С	
1320 B			94.44	0	Р	A	A	С	Α	
1330 B			2023.76	0	М	В	В	В	В	
2120			112.43	0	М	С	В	В	С	
2130	Х		112.43	0	М	D				

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- Cover: decimal values can be entered
- Caves: for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

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3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	s	NP	Т	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Рор.	Con.	lso.	Glo.
М	1355	Lutra lutra			р				Р	DD	D			
М	1365	Phoca vitulina			р				Р	DD	D			
I	1016	<u>Vertigo</u> <u>moulinsiana</u>			p				R	DD	В	В	В	С

- Group: A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see <u>reference portal</u>)
- Abundance categories (Cat.): C = common, R = rare, V = very rare, P = present to fill if data are deficient (DD) or in addition to population size information
- Data quality: G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N16	0.5
N03	23.0
N05	3.0
N04	0.5
N01	14.0
N02	59.0

Total Habitat Cover	100
---------------------	-----

Other Site Characteristics

1 Terrestrial: Soil & Geology: shingle,sedimentary,sand,alluvium,mud,neutral,nutrient-rich,clay 2 Terrestrial: Geomorphology and landscape: island,lowland,coastal 3 Marine:

Geology: sand,clay,sedimentary,gravel,mud,limestone/chalk,shingle,sandstone/mudstone 4 Marine: Geomorphology: open coast (including bay),estuary,enclosed coast (including embayment),shingle bar,subtidal sediments (including sandbank/mudbank),intertidal sediments (including sandbank/mudbank).

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which the area is considered to support a significant presence. Annual vegetation of drift lines for which the area is considered to support a significant presence. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares. Perennial vegetation of stony banks for which the area is considered to support a significant presence. Salicornia and other annuals colonising mud and sand for which the area is considered to support a significant presence. Spartina swards (Spartinion maritimae) for which this is one of only two known outstanding localities in the United Kingdom. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 100 hectares. Atlantic salt meadows (Glauco-Puccinellietalia maritimae) for which this is considered to be one of the best areas in the United Kingdom. Shifting dunes along the shoreline with Ammophila arenaria (?white dunes?) for which the area is considered to support a significant presence.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative In	npacts		
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
Н	H02		В
Н	G01		I
Н	M02		В
Н	F02		I
Н	M01		В

Positive I	Positive Impacts		
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
Н	A03		I
Н	A02		I
Н	A04		I
Н	D05		
Н	D05		
Н	B02		

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions i =

inside, o = outside, b = both

Draft Report-October, 2021

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): http://publications.naturalengland.org.uk/category/6490068894089216

http://publications.naturalengland.org.uk/category/3212324

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]	
UK00	28.6	UK01	4.5	UK04	71.4	
6. SITE MA	NAGEMENT			J		
6.1 Rody/io	os) rosponsible for	the site manag	iomont:		Back to	top

6.1 Body(les) responsible for the site management:

Organisation:
Address:
Email:

6.2 Management Plan(s):
An actual management plan does exist:

Yes

6.3 Conservation measures (optional)

No, but in preparation

No

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the <u>official European Union guidelines</u> <u>for the Standard Data Form</u> (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
А	SPA (classified Special Protection Area)	53
В	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
С	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippopha• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57

3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

3160	Natural dystrophic lakes and ponds	57
		3,
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57

8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
Α	Excellent representatively	57
В	Good representatively	57
С	Significant representatively	57
D	Non-significant presence representatively	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
А	> 15%-100%	58
		58
В	> 2%-15%	58
С	≤ 2%	

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent conservation	59
В	Good conservation	59
С	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent value	59
В	Good value	59
С	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
А	> 15%-100%	62
		62
В	> 2%-15%	62
		62
С	≤ 2%	
D	Non-significant population	

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent conservation	63
В	Good conservation	63
С	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Population (almost) Isolated	63
В	Population not-isolated, but on margins of area of distribution	63
С	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
А	Excellent value	63

В	Good value	63
С	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code	l
DDA	breeding bird assemblage (applies only to sites classified pre 2000)	ok specific code	

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65

В06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65
CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic ressources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
101	Invasive non-native species	65
102	Problematic native species	65
103	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
		-

	-	
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
ХО	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

New Forest SAC

The New Forest

Site details



Location of The New Forest SAC/SCI/cSAC

Country	England
Unitary Author	Hampshire; Wiltshire
Centroid*	SU225075
Latitude	50.8664
Longitude	-1.6806

SAC EU code	UK0012557
Status	Designated Special Area of Conservation (SAC)
Area (ha)	29213.57

^{*} 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.

General site character

Bogs, Marshes, Water fringed vegetation, Fens (7%)
Heath, Scrub, Maquis and Garrigue, Phygrana (34%)
Dry grassland, Steppes (10%)
Humid grassland, Mesophile grassland (3%)
Broad-leaved deciduous woodland (29%) Coniferous woodland (17%)

Boundary map and associated biodiversity information on the NBN Gateway.

Natura 2000 standard data form for this site as submitted to Europe (PDF, < 100kb).

Interactive map from MAGIC (Multi-Agency Geographic Information for the Countryside).

Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

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

3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)

Hatchet Pond in the New Forest in the south of England is in fact three ponds, one of which is an example of an oligotrophic waterbody amidst wet and dry lowland heath developed over fluvial deposits. It contains shoreweed *Littorella uniflora* and isolated populations of northern species such as bog orchid *Hammarbya paludosa* and floating bur-reed *Sparganium angustifolium*, alongside rare southern species such as Hampshire-purslane *Ludwigia palustris*. Hatchet Pond is therefore important as a southern example of this lake type where northern species, more common in the uplands of the UK, co-exist with southern species.

3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea

In the New Forest **vegetation of the** *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* occurs on the edge of large temporary ponds, shallow ephemeral pools and poached damp hollows in grassland, which support a number of specialist species in a zone with toad rush *Juncus bufonius*. These include the two nationally scarce species coralnecklace *Illecebrum verticillatum* and yellow centaury *Cicendia filiformis*, often in association with allseed *Radiola linoides* and chaffweed *Anagallis minima*. Heavy grazing pressure is of prime importance in the maintenance of the outstanding flora of these temporary pond communities. Livestock maintain an open habitat, controlling scrub ingress, and trampling the surface. Commoners' animals also transport seed in their hooves widely from pond to pond where suitable habitat exists. Temporary ponds occur throughout the Forest in depressions capable of holding water for part of the year. Most ponds are small (between 510 m across) and, although great in number, amount to less than 10 ha in total area.

4010 Northern Atlantic wet heaths with Erica tetralix

The New Forest contains the most extensive stands of lowland **northern Atlantic wet heaths** in southern England, mainly of the M16 *Erica tetralix* – *Sphagnum compactum* type. M14 *Schoenus nigricans* – *Narthecium ossifragum* mire is also found on this site. The wet heaths are important for rare plants, such as marsh gentian *Gentiana pneumonanthe* and marsh clubmoss *Lycopodiella inundata*, and a number of dragonfly species, including the scarce blue-tailed damselfly *Ischnura pumilio* and small red damselfly *Ceriagrion tenellum*. There is a wide range of transitions between wet heath and other habitats, including dry heath, various woodland types, *Molinia* grasslands, fen, and acid grassland. Wet heaths enriched by bog myrtle *Myrica gale* are a prominent feature of many areas of the Forest. Unlike much lowland heath, the New Forest heaths continue to be extensively grazed by cattle and horses, favouring species with low competitive ability.

4030 European dry heaths

The New Forest represents **European dry heaths** in southern England and is the largest area of lowland heathland in the UK. It is particularly important for the diversity of its habitats and the range of rare and scarce species which it supports. The New Forest is unusual because of its long history of grazing in a traditional fashion by ponies and cattle. The dry heaths of the New Forest are of the H2 *Calluna vulgaris – Ulex minor* heath type, and H3 *Ulex minor – Agrostis curtisii* heath is found on damper areas. There are a wide range of transitions between dry heath and wet heath, *Molinia* grassland, fen, acid grassland and various types of scrub and woodland. Both the New Forest and the two Dorset Heath SACs are in southern England. All three areas are selected because together they contain a high proportion of all the lowland **European dry heaths** in the UK. There are, however, significant differences in the ecology of the two areas, associated with more oceanic conditions in Dorset and the continuous history of grazing in the New Forest.

6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)

The New Forest represents *Molinia* meadows in southern England. The site supports a large area of the heathy form of M24 *Molinia* caerulea – Cirsium dissectum fen-meadow.

This vegetation occurs in situations of heavy grazing by ponies and cattle in areas known locally as 'lawns', often in a fine-scale mosaic with 4010 Northern Atlantic wet heaths and other mire and grassland communities. These lawns occur on flushed soils on slopes and on level terrain on the floodplains of rivers and streams. The New Forest *Molinia* meadows are unusual in the UK in terms of their species composition, management and landscape position. The grasslands are species-rich, and a particular feature is the abundance of small sedges such as carnation sedge *Carex* panicea, common sedge *C. nigra* and yellow-sedge *C. viridula* ssp. *oedocarpa*, and the more frequent occurrence of mat-grass *Nardus* stricta and petty whin *Genista* anglica compared to stands elsewhere in the UK.

7150 Depressions on peat substrates of the Rhynchosporion

The New Forest, one of three sites selected in southern England, is considered to hold the largest area in England of **Depressions on peat substrates of the** *Rhynchosporion*, in

complex habitat mosaics associated primarily with the extensive valley bogs of this site. The habitat type is developed in three situations: in natural bog pools of patterned bog surfaces, in flushes on the margins of valley mires and in areas disturbed by peat-digging, footpaths, tracks, ditches etc. In places the habitat type is rich in brown mosses *Cratoneuron* spp. and *Scorpidium scorpioides*, suggesting flushing by mineral-rich waters. The mosaics in which this habitat type occurs are an important location for bog orchid *Hammarbya paludosa*.

9120 <u>Atlantic acidophilous beech forests with llex and sometimes also Taxus in the</u> shrublayer (Quercion robori-petraeae or Ilici-Fagenion)

The New Forest is the largest area of mature, semi-natural beech *Fagus sylvatica* woodland in Britain and represents **Atlantic acidophilous beech forests** in the most southerly part of the habitat's UK range. The mosaic with other types of woodland and heath has allowed unique and varied assemblages of epiphytic lichens and saproxylic invertebrates to be sustained, particularly in situations where the woodland is open and the tree trunks receive plenty of light. The traditional common grazing in the Forest by cattle and ponies provides opportunities to explore the impact of large herbivores on the woodland system.

9130 Asperulo-Fagetum beech forests

The New Forest is the largest area of mature, semi-natural beech Fagus sylvatica woodland in Britain; much of it is a form of W14 Fagus sylvatica – Rubus fruticosus woodland that conforms to the Annex I type Asperulo-Fagetum beech forests. The mosaic with other types of woodland and heath has allowed unique and varied assemblages of epiphytic lichens and saproxylic invertebrates to be sustained, particularly in situations where the woodlands are open and the tree trunks receive plenty of light. The traditional common grazing in the Forest by cattle and ponies provides opportunities to explore the impact of large herbivores on the woodland system.

9190 Old acidophilous oak woods with Quercus robur on sandy plains

The New Forest is representative of **old acidophilous oak woods** in the southern part of its UK range. It is the most extensive area of active wood-pasture with old oak *Quercus* spp. and beech *Fagus sylvatica* in north-west Europe and has outstanding invertebrate and lichen populations. This site was preferred over other sites that lack a succession of age-classes because, although scattered over a wide area, the oak stands are found within a predominantly semi-natural landscape with a more balanced age-structure of trees. The traditional common grazing in the Forest by cattle and ponies provides opportunities to explore the impact of large herbivores on the woodland system. The New Forest has been identified as of potential international importance for its saproxylic invertebrate fauna by the Council of Europe (Speight 1989).

91D0 Bog woodland * Priority feature

Within the New Forest, in southern England, birch – willow Betula – Salix stands occur over valley bog vegetation, with fringing alder Alnus – Sphagnum stands where there is some water movement. These stands appear to have persisted for long periods in stable association with the underlying Sphagnum bog-moss communities. The rich epiphytic lichen communities and pollen record provide evidence for the persistence of this association. The Bog

woodland occurs in association with a range of other habitats for which the site has also been selected.

91E0 <u>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)</u> * Priority feature

The New Forest contains many streams and some small rivers that are less affected by drainage and canalisation than those in any other comparable area in the lowlands of England. Associated with many of the streams, particularly those with alkaline and neutral groundwater, are strips of alder *Alnus glutinosa* woodland which, collectively, form an extensive resource with a rich flora. In places there are examples of transitions from open water through reedswamp and fen to alder woodland. The small rivers show natural meanders and debris dams, features that are otherwise rare in the lowlands, with fragmentary ash *Fraxinus excelsior* stands as well as the alder strips. In other places there are transitions to 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains and 9120 Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*), for which this site has also been selected.

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

7140 Transition mires and quaking bogs

7230 Alkaline fens

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

1044 Southern damselfly Coenagrion mercuriale

The New Forest in central southern England is an outstanding locality for **southern damselfly** *Coenagrion mercuriale*, with several population centres and strong populations estimated to be in the hundreds or thousands of individuals and with a long history of records. With Preseli, Dorset Heaths and the River Itchen, it represents one of the four major population centres in the UK.

1083 Stag beetle Lucanus cervus

The New Forest represents **stag beetle** *Lucanus cervus* in its Hampshire/Sussex population centre, and is a major stronghold for the species in the UK. The forest is one of the most important sites in the UK for fauna associated with rotting wood, and was identified as of potential international importance for its saproxylic invertebrate fauna by the <u>Council of Europe</u> (Speight 1989).

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

1166 Great crested newt Triturus cristatus

Solent & Southampton Water RAMSAR

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:	FOR OFFICE HOF ONLY		
1. Ivame and address of the compiler of this form.			
Joint Nature Conservation Committee Monkstone House City Road Peterborough Cambridgeshire PE1 1JY	Designation date Site Reference Number		
UK Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948 Email: RIS@JNCC.gov.uk			
2. Date this sheet was completed/updated: Designa	ted: 01 October 1998		
3. Country:			
·			
UK (England)			
4 November 641 - Dominion 24			
4. Name of the Ramsar site:			
Solent and Southampton Water			
5. Designation of new Ramsar site or update of existing s	site:		
This RIS is for: Updated information on an existing Ramsar	site		
6. For RIS updates only, changes to the site since its desi Site boundary and area:	gnation or earlier update: a)		
** Important note: If the boundary and/or area of the designated site is being have followed the procedures established by the Conference of the Parties in provided a report in line with paragraph 28 of that Annex, prior to the submit	the Annex to COP9 Resolution IX.6 and		
b) Describe briefly any major changes to the ecological cha the application of the Criteria, since the previous RIS for the	, ,		

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

- a) A map of the site, with clearly delineated boundaries, is included as:
 - i) hard copy (required for inclusion of site in the Ramsar List): yes 🐿 -or- no;
 - ii) an electronic format (e.g. a JPEG or ArcView image) Yes
 - iii) a GIS file providing geo-referenced site boundary vectors and attribute tables yes or- no;
- b) Describe briefly the type of boundary delineation applied:

Ramsar Information Sheet: UK11063	Pag 64 1 of 13	Solent and Southampton Water
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Ecological Appraisal & Phase 1 Bat Survey

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

50 44 25 N

01 31 32 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Southampton

Solent and Southampton Water lies on the central south coast of England.

Administrative region: City of Portsmouth; City of Southampton; Hampshire; Isle of Wight

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 5346.44

Min. -1 Max. 9 Mean 1

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The area covered extends from Hurst Spit to Gilkicker Point along the south coast of Hampshire and along the north coast of the Isle of Wight. The site comprises of estuaries and adjacent coastal habitats including intertidal flats, saline lagoons, shingle beaches, saltmarsh, reedbeds, damp woodland, and grazing marsh. The diversity of habitats support internationally important numbers of wintering waterfowl, important breeding gull and tern populations and an important assemblage of rare invertebrates and plants.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.

Ramsar criterion 2

The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

51343 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation): Species with peak counts in spring/autumn:

Ringed plover, *Charadrius hiaticula*, 397 individuals, representing an average of 1.2% Europe/Northwest Africa of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Dark-bellied brent goose, Branta bernicla bernicla, 6456 individuals, representing an average of 3%

of the population (5 year peak mean 1998/9-

2002/3)

Eurasian teal, Anas crecca, NW Europe 5514 individuals, representing an average of

1.3% of the population (5 year peak mean

1998/9-2002/3)

Black-tailed godwit, Limosa limosa islandica,

Iceland/W Europe

1240 individuals, representing an average of 3.5% of the population (5 year peak mean

1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

Details of bird species occuring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region: Atlantic

b) biogeographic regionalisation scheme (include reference citation): Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	acidic, neutral, shingle, sand, mud, alluvium, sedimentary	
Geomorphology and landscape	lowland, island, coastal, floodplain, shingle bar, subtidal	
	sediments (including sandbank/mudbank), intertidal	
	sediments (including sandflat/mudflat), open coast	
	(including bay), enclosed coast (including embayment),	
	estuary, lagoon, intertidal rock	

Nutrient status	eutrophic
рН	no information
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Everton, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites /everton.html) Max. daily temperature: 14.0° C Min. daily temperature: 7.0° C Days of air frost: 32.5 Rainfall: 763.7 mm Hrs. of sunshine: 1750.7

General description of the Physical Features:

The Solent and Southampton Water comprises a series of estuaries and harbours with extensive mudflats and saltmarshes together with adjacent coastal habitats including saline lagoons, shingle beaches, reedbeds, damp woodland and grazing marsh.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Solent encompasses a major estuarine system on the south coast of England with four coastal plain estuaries (Yar, Medina, King's Quay Shore, Hamble) and four bar-built estuaries (Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour). The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area. Sediment habitats within the estuaries include extensive estuarine flats, often with intertidal areas supporting eelgrass *Zostera* spp. and green algae, sand and shingle spits, and natural shoreline transitions. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered almost fully marine muds in Chichester and Langstone Harbours.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	47.9
Н	Salt marshes	18.5
Sp	Saline / brackish marshes: permanent	14.9
Е	Sand / shingle shores (including dune systems)	12.1
Тр	Freshwater marshes / pools: permanent	3.7
D	Rocky shores	1.5
J	Coastal brackish / saline lagoons	0.7
Xf	Freshwater, tree-dominated wetlands	0.7

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The estuaries and harbours of the Solent are particularly sheltered and form the largest number and tightest cluster of small estuaries anywhere in Great Britain. The Solent and Isle of Wight system is notable for its large range and extent of different habitats.

The intertidal area is predominantly sedimentary in nature with extensive intertidal mud and sandflats within the sheltered harbours and areas of gravel and pebble sediments on more exposed beaches. These conditions combine to favour an abundant benthic fauna and green algae which support high densities of migrant and over-wintering wildfowl and waders. Eelgrass *Zostera* beds occur discontinuously along the north shore of the Isle of Wight and in a few places along the northern shore of The Solent.

The Solent system supports a wide range of saltmarsh communities. Upper saltmarshes are dominated by sea purslane *Atriplex portulacoides*, sea plantain *Plantago maritima*, sea meadow grass *Puccinellia maritima* and sea lavender *Limonium vulgare*; locally thrift *Armeria maritima* and the nationally scarce golden samphire *Inula crithmoides* are abundant. Lower saltmarsh vegetation tends to be dominated by sea purslane, cord grass *Spartina* spp., glasswort *Salicornia* spp. and sea-blite *Suaeda maritima*. Cord-grasses dominate much of the saltmarsh in Southampton Water and in parts of the Solent and it was the original location of the introduction of *Spartina alterniflora* and subsequent hybridisation with the native species.

There are several shingle spits including Hurst spit, Needs Ore Point, Calshot spit and Newtown Harbour spits which support a characteristic shingle flora.

A range of grassland types lie inshore of the intertidal zone including unimproved species-rich neutral and calcareous grasslands, brackish grazing marsh systems and reed dominated freshwater marshes.

The brackish water lagoons associated with grazing marsh systems behind the seawalls, e.g. Keyhaven-Lymington, Gilkicker lagoon, and at Brading Marshes contain internationally important communities of rare and endangered invertebrates and plants.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher Plants.

Eleocharis parvula, Geranium purpureum forsteri, Lotus angustissimus, Ludwigia palustris, Orobanche purpurea, Lamprothamnium papulosum, Spartina maritima Zostera marina

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present - these may be supplied as supplementary information to the RIS.

Birds

Species currently occurring at levels of national importance: Species regularly supported during the breeding season:

Mediterranean gull, Larus melanocephalus, 11 apparently occupied nests, representing an

average of 10.1% of the GB population (Seabird Europe 2000 Census)

Black-headed gull, Larus ridibundus, N & C 6911 apparently occupied nests, representing an Europe

average of 5.4% of the GB population (Seabird

2000 Census)

Sandwich tern, Sterna 268 apparently occupied nests, representing an

average of 2.5% of the GB population (Seabird (Thalasseus) sandvicensis sandvicensis, W Europe

2000 Census)

Roseate tern, Sterna dougallii dougallii, W Europe 1 apparently occupied nests, representing an

average of 1.9% of the GB population (Seabird

2000 Census)

Common tern, Sterna hirundo hirundo, N & E

Europe

192 apparently occupied nests, representing an average of 1.8% of the GB population (Seabird

2000 Census)

Little tern, Sterna albifrons albifrons, W Europe 22 apparently occupied nests, representing an

average of 1.1% of the GB population (Seabird

2000 Census)

Species with peak counts in spring/autumn:

Little egret, Egretta garzetta, West Mediterranean 115 individuals, representing an average of 6.9%

of the GB population (5 year peak mean 1998/9-

2002/3)

Spotted redshank, Tringa erythropus, Europe/W

Africa

13 individuals, representing an average of 9.5% of the GB population (5 year peak mean 1998/9-

2002/3)

Common greenshank, Tringa nebularia, Europe/W58 individuals, representing an average of 9.7%

Africa

of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Little grebe, Tachybaptus ruficollis ruficollis,

Europe to E Urals, NW Africa

105 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)

Slavonian grebe, Podiceps auritus, Northwest

Europe

12 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)

Black-necked grebe, Podiceps nigricollis

nigricollis, Europe, N Africa

3 individuals, representing an average of 2.5% of the GB population (5 year peak mean 1998/9-

Great cormorant, Phalacrocorax carbo carbo, **NW** Europe

2002/3)

247 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Common shelduck, *Tadorna tadorna*, NW Europe 964 individuals, representing an average of 1.2%

of the GB population (5 year peak mean 1998/9-

2002/3)

Eurasian wigeon, Anas penelope, NW Europe 7907 individuals, representing an average of 1.9%

of the GB population (5 year peak mean 1998/9-

2002/3)

Northern pintail, *Anas acuta*, NW Europe 359 individuals, representing an average of 1.2%

of the GB population (5 year peak mean 1998/9-

2002/3)

Northern shoveler, Anas clypeata, NW & C

Europe

267 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-

2002/3)

Red-breasted merganser, Mergus serrator, NW & 142 individuals, representing an average of 1.4%

C Europe

142 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-

2002/3)

Water rail, *Rallus aquaticus*, Europe 17 individuals, representing an average of 3.7% of

the GB population (5 year peak mean 1998/9-

2002/3)

Grey plover, Pluvialis squatarola, E Atlantic/W

Africa -wintering

1171 individuals, representing an average of 2.2% of the GB population (5 year peak mean 1998/9-

2002/3

Dunlin, Calidris alpina alpina, W Siberia/W

Europe

10417 individuals, representing an average of 1.8% of the GB population (5 year peak mean

1998/9-2002/3)

Eurasian curlew, Numenius arquata arquata, N. a. 1766 individuals, representing an average of 1.2%

arquata Europe

(breeding)

of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Invertebrates.

Allomelita pellucida, Gammarus insensibilis, Nematostella vectensis, Arctosa fulvolineata, Aulonia albimana, Anisodactylus poeciloides, Anthonomus rufus, Baris analis, Berosus spinosus, Cantharis fusca, Drypta dentata, Leptura fulva, Meligethes bidentatus, Paracymus aeneus, Staphylinus caesareus, Aphrosylus mitis, Atylotus latistriatus, Dorycera graminum, Haematopoda grandis, Hippobosca equina, Linnaemya comta, Stratiomys longicornis, Syntormon mikii, Tetanocera freyi, Villa circumdata, Trachysphaera lobata, Paludinella littorina, Truncatellina cylindrica, Andrena alfkenella, Acleris lorquiniana, Elachista littoricola, Melissoblaptes zelleri, Platytes alpinella, Psamathrocrita argentella, Armandia cirrhosa

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)

Archaeological/historical site

Environmental education/interpretation

Fisheries production

Livestock grazing

Non-consumptive recreation

Scientific research

Sport fishing

Sport hunting

Tourism

Traditional cultural

Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation	+	+
(NGO)		
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+
Public/communal	+	+
Other	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Tourism	+	
Recreation	+	
Current scientific research	+	
Collection of non-timber natural products: (unspecified)	+	
Commercial forestry		+

	1	,
Cutting/coppicing for	+	
firewood/fuel		
Fishing: (unspecified)	+	
Fishing: commercial	+	
Fishing: recreational/sport	+	
Marine/saltwater aquaculture	+	
Gathering of shellfish	+	
Bait collection	+	
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Permanent pastoral agriculture	+	
Hay meadows	+	
Hunting: recreational/sport	+	
Industry		+
Sewage treatment/disposal	+	
Harbour/port	+	
Flood control	+	
Irrigation (incl. agricultural water		+
supply)		
Mineral exploration (excl.		+
hydrocarbons)		
Oil/gas exploration		+
Oil/gas production		+
Transport route		+
Domestic water supply		+
Urban development		+
Non-urbanised settlements		+
Military activities	+	+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

- 1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
- $2. \quad \textit{Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.}$

NA = *Not Applicable because no factors have been reported.*

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2		+		+

		i
		i

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors? Erosion - Coastal Defence Strategies, regulation of private coastal defences, shoreline management plans, ChAMPs are in place or are being developed.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest	+	
(SSSI/ASSI)		
National Nature Reserve (NNR)	+	+
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation	+	+
for nature conservation		
Management agreement	+	+
Special Area of Conservation (SAC)	+	
Management plan in preparation	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc. No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Contemporary.

Numbers of migratory and wintering waterfowl are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee. Bird Ringing by Solent Shorebirds Study Group.

Environment.

Coastal Sediment (SCOPAC)
Water Quality (EA/Southern Water)

Various research and educational establishments carry out ongoing research into a number of different aspects of the environment.

Flora.

Saltmarsh Monitoring (EN project). *Spartina* survey (EN project).

Completed.

Flora.

Sand dune and saltmarsh NVC survey.

Habitats.

Habitat surveys (various local individual surveys). Species surveys (various local individual surveys).

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Various educational programmes exist within the voluntary conservation organisations, research institutes, education centres and also Local Authorities e.g. Newtown National Nature Reserve managed by National Trust, Medina Valley Centre, and Southampton Oceanography Centre.

There are a number of interpretation facilities present and proposed in the area e.g. National Nature Reserve & Local Nature Reserve and proposed centre of coastal management on Isle of Wight.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Almost all the estuaries in the Ramsar site are used extensively for a wide range of leisure and recreational activities, particularly water-based recreation.

Land based recreation:

Walking including dog-walking is popular along large stretches of the coast and estuaries. The presence of country parks, NNR and LNRs on the coast also attract large numbers of people to certain locations.

Bait-digging and collection of shellfish occurs in a number of locations. Birdwatching is also a popular activity with a number of favoured locations with easy access. Some golf courses are also present.

Water-based recreation:

The Solent is an internationally important centre for yachting, dinghy sailing and power-boating and national important for canoeing, and water-skiing. A small amount of hovercraft racing sometimes occurs.

Wildfowling and egg collection:

Private, syndicate and club wildfowling operate on the marshes. Small-scale egg-collecting also occurs. Bait-digging and angling also occur.

Air Recreation:

There is a proposed microlighting centre within the area.

The high degree of recreation in the Solent is accompanied by a high degree of supporting developments e.g. marinas, boatyards, clubs, holiday centres occur throughout the area.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs, European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

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NEW FOREST SSSI

County: Hampshire/Wiltshire Site Name: New Forest SSSI

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: Hampshire County Council, New Forest District Council, Wiltshire County Council, Salisbury District Council, Test Valley Borough Council

National Grid Reference: SU 298081

Ordnance Survey Sheet 1:50,000: 195, 196 1:25,000: SU 10, 11, 20, 21, 30, 31, 40,

SZ 29, 39

Area: 28,947.37 (ha) 71,528.95 (ac)

Date Notified (Under 1949 Act): 1959, 1971, 1974 Date of Last Revision: 1979

Date Notified (Under 1981 Act): 7 May 1987 Date of Previous Revision: 1987 Date of Last Revision: 28

February 1996 Date Confirmed: 14 November 1996

Other Information:

The New Forest is classified as a Grade 1 site in A Nature Conservation Review edited by D. A. Ratcliffe (Cambridge University Press, 1977) and includes seven Geological

Conservation Review sites. The major part of the site has been designated as a Special Protection Area under the EC Directive 79/409 on the Conservation of Wild Birds and as a Ramsar Site under the Ramsar Convention on Wetlands of International Importance. The site is mainly Crown Land together with the manorial wastes of Plaitford, Furzley, Half Moon, Cadnam, Hale Purlieu and Hightown Commons belongjing to the National Trust; Hyde and Gorley Commons and parts of Rockford and Ibsley owned by Hampshire County Council; the rest of Rockford and Ibsley Commons, Minstead Manor, Kingston Great Common, Bisterne Common, West Wellow and Copythorne Common and most of the unimproved meadows are privately owned. Part of Kingston Great Common is a National Nature Reserve and there are three reserves managed by the Hampshire Wildlife Trust at Bagnum, Long Aldermoor and Holmsley. The Crown Land is managed by the Forestry Commission on behalf of the Minister of Agriculture. The Court of Verderers have statutory powers within the Forest although they own very little land and no domestic stock. The Forestry Commission, along with the Verderers, and English Nature have signed a Minute of Intent which provides for the participation of English Nature in the preparation of management plans and consultation over annual management programmes. Selected areas were notified in 1959 and a much larger area in 1971. Further additions were made in 1974, 1979 and 1987.

Reasons for Notification:

The New Forest embraces the largest area of unsown vegetation in lowland England and includes the representation on a large scale of habitat formations formerly common but now fragmented and rare in lowland western Europe. They include lowland heath, valley and seepage step mire, or fen, and ancient pasture woodland, including riparian and bog woodland. Nowhere else do these habitats occur in combination and on so large a scale. There are about 4,600 hectares of pasture woodland and scrub dominated by oak, beech and holly; 11,800 hectares of heathland and associated grassland; 3,300 hectares of wet heath and valley mire-fen and also 8,400 hectares of plantations dating from various periods since the early 18th century. Within this matrix of habitats are a range of acid to neutral grasslands where the vegetation owes much to the local geology and continuous grazing, a situation which is uncommon in lowland England. Scattered around the New Forest and throughout the small pockets of enclosed farmland are a series of unimproved meadows which have similarities with these Open Forest grasslands.

A network of small streams draining the system form an unusual community which results from the combination of nutrient-poor, acid waters and outcrops of neutral enriched soils. There are many ponds of varying sizes and water chemistry including several ephemeral ponds. This wide range of habitats support an assemblage of nationally rare and scarce plants and a nationally important assemblage of rare and scarce invertebrates. The area supports internationally important breeding populations of certain bird species and the wintering population of another as well as an assemblage of birds associated with specific habitats such as old woodland or wetlands. Within the New Forest there are seven sites which are of special geological or physiographic interest including valley mires, the headwaters of the Highland Water, stream sections with exposures of fossil-bearing strata and a gravel pit rich in palaeolithic artefacts.

The New Forest is probably sufficiently large to ensure the long term survival of the characteristic flora and fauna within the wide range of habitats. Smaller isolated examples of the component habitats are vulnerable to biological impoverishment but here in the New Forest has survived largely because of the persistence of a pastoral economy based on the exercise of common rights of grazing and mast together with protection afforded by Crown ownership. This, and the management of vegetation in the Open Forest through burning and cutting programmes, administered by the Forestry Commission on the Crown Lands, maintains the quality of the grazings, ensures the prevention of natural succession and encourages local diversity in plant communities. The pastoral economy in turn depends on the continued existence of a small community of commoners who make up a discrete social unit and this combination of natural and cultural elements contributes to the maintenance of the New Forest habitats.

Geomorphologically the Forest comprises a series of eroded terraces capped with flint gravel, brickearth and other superficial deposits. The terraces are highest and most fragmented by erosion in the north and lowest and most complete in the south. Erosion has exposed the underlying Tertiary strata, in wide valleys and hollows separating the terraces. Soils are mainly acid, poor in nutrients, susceptible to leaching and only slowly permeable. Locally, however, there are enriched areas such as the exposed Headon Beds in the south which support relatively species-rich grassland or mire floras. The Forest streams, mires and abundant wet flushes along slope springlines help to create a humid microclimate which, in the woodlands in particular, provides the right conditions for epiphytic lichens, bryophytes and ferns, a situation which has become rare elsewhere.

The unenclosed woodlands are dominated by oak and beech in varying proportions. Oak is generally dominant on the heavier soils, and some areas comprise nearly monospecific oakwoods, whereas the beech tends to dominate on sandy knolls and well drained terrace edges. Holly is the dominant shrub layer species. The number of tree species is higher in linear riverine woodland where ash is abundant and carr of alder, sallow and holly are common. Age structure of the woodland is closely related to past fluctuations in herbivore densities. The oldest generation of trees still standing are oaks and beeches of early 17th century origin. A high proportion of these and later 17th century trees are pollarded. The main younger generations have arisen since about the mid 19th century. Older trees support the richest known woodland lichen flora in lowland Europe, and an exceptionally species-rich deadwood fauna, mainly beetles Coleoptera, including the stag beetle Lucanus cervus and now rare in Europe, and flies Diptera. The lichen flora includes two rare species, Catillaria laureri and Parmelia minarum (Sch.8)**. The woods are also rich in fungi that are specific to pasture woodland such as *Hericium erinaceous*, *Mycena picta*, Creolophus circhatus and Flammulaster limulata. The woodland ground flora varies according to soil type but grazing often gives the impression of it being impoverished. On base-rich soils, however, species diversity increases with grazing whereas on more acid soils the vascular plants may be reduced but bryophytes become more extensive and diverse. Woodland species such as *Dicranum majus*, Rhitidiadelphus loreus and Leucobryum juniperoideum can be common whilst rarer species include Bassania trilobuta and Saccogyna viticulosa. The vascular plants include about 60 species associated with old woodland. These older trees also support a high density of holenesting, insectivorous birds, such as redstart Phoenicurus phoenicurus, and provide roost sites for several species of bat including the very rare Bechstein s bat Myotis bechsteini**

The sylvicultural enclosures include 40% broad-leaved trees, mainly oak and beech, which, with the unenclosed woods, comprises the largest tract of native broad-leaved woodland in southern England. The inclosures include many fragments of former pasture woods totalling about 285 hectares and these are

relatively unmodified by enclosure. Much of the remaining broad-leaved component comprises mature oak plantation which when in proximity to unenclosed woodland can take on the characteristics of pasture woodland. In South Bentley Inclosure the epiphytic flora has developed with similar species to the adjacent unenclosed Anses Wood. Some of the inclosures have only low grazing pressure and the ground flora then provides food plants for certain invertebrates, such as silver-washed fritillary $Argynnis\ paphia$ and white admiral $Limenitis\ camilla$.

The heathlands, including grass heaths and acid grasslands comprise a series of plant communities, the composition of which is related to soil structure and permeability and the effects of grazing. Dry heath dominated by heather *Calluna vulgaris* and bell heather *Erica cinerea* and bristle bent *Agrostis curtisii* grades into humid heath in which cross-leaved heath *Erica tetralix* and purple moor-grass *Molinia caerulea* are constant species. The humid heath on slowly permeable and often seasonally waterlogged soils is spatially dominant here although only recognised as a transitional community elsewhere. On the wetter humic soils heather becomes less frequent and typically deer grass *Trichophorum cespitosum*, heath rush *Juncus squarrosus* and the smaller *Sphagnum* species *Sphagnum compactum* and *S. tenellum* become frequent. The heathlands have well-developed lichen-rich communities in which a number of *Cladonia* species are present. These include the nationally scarce *C. incrassata* and an abundance of species such as *C. strepsilis* and *Pycnothelia papillaria*. Other lowland plants occur such as the rare dung fungus *Poronia punctata* which grows on pony dung. Within the heathland mosaic, on pockets of richer soils, acid grassland occurs. These areas can change from grass to heath depending on the grazing intensity. They are dominated by bristle bent and purple moor-grass with varying amounts of heather, gorse *Ulex europaeus* and bracken *Pteridium aquilinum*.

The acid to neutral grasslands are strongly influenced by the underlying geology and by grazing. The naturally infertile soils support herb-rich vegetation communities on the drier brown earths and stagnogleys and a complex range of wet acid grasslands on gleys and peats. The acid grasslands are often quite extensive, relatively species-rich and comprise two main elements: (a) species which benefit from heavy grazing and are mostly prostrate or are able to survive in dwarf form and (b) species which are less palatable. The former includes rosette forming species such as hawkbits *Leontodon*, cat s-ear *Hypochoeris radicata*, mouse-ear hawkweed *Hieracium pilosella* and yarrow *Achillea millefolium* and a profusion of small herbs with low growth forms such as tormentil *Potentilla erecta*, heath bedstraw *Galium saxatile*, lousewort *Pedicularis sylvatica*, self heal *Prunella vulgaris*, eyebrights *Euphrasia*, squirrel-tail fescue *Vulpia bromoides*, all-seed *Radiola linoides* and numerous sedges. The less palatable species with a more upright growth form include yellow centaury *Cicendia filiformis* which is nationally scarce, common centaury *Centaurium erythraea*, field gentian *Gentianella campestre* and moonwort *Botrychium lunaria*.

The more neutral grasslands known locally as lawns occur as linear features following many of the small streams, roadside verges around settlements — village greens, and as glades in association with pasture woodland. They are influenced by such factors as soils, topography, the nutrient quality of floodwater and frequency of numbers of grazing animals. Typical species on the wetter lawns are velvet bent Agrostis canina and an abundance of wetland sedges, rushes and herbs. The drier communities around settlements are dominated by common bent-grass Agrostis capillaris with some perennial rye-grass Lolium perenne, crested dog s-tail Cynosurus cristatus, daisy Bellis perennis, and most distinctively mats of abundant chamomile Chamaemelum nobilis, which is nationally rare and declining. Associated with these settlement edge lawns that are seasonally poached and heavily grazed are an assemblage of nationally rare and scarce plants. They include small fleabane Pulicaria vulgaris and pennyroyal Mentha pulegium

both (RDB)* (Sch 8)**. Slender marsh bedstraw *Galium debile* (RDB)* and coral necklace *Illecebrum verticillatum*, which is nationally scarce, also occur. Hampshire purslane *Ludwigia palustris* (RDB)* occurs in the poached muddy pools and is confined in England to the New Forest area.

The unimproved meadows in and around the Forest have similarities with the acid to neutral grasslands within the Open Forest. The frequent spring-lines and infertility of the soils have hindered agricultural improvement and these meadow communities are now rare or scarce in England. The main vegetation types are herb-rich, permanent pastures on the drier brown earths and stagno-gleys and a complex range of wet acid grasslands on gleys and peats. The former could be described as the typical grassland of grazed hay-meadows usually dominated by common bent Agrostis capillaris and red fescue Festuca rubra but containing a high proportion of herbs. The character of the wet grassland is more complex. Moderately-grazed, rush-dominated stands are mostly dominated by sharp-flowered rush Juncus acutiflorus and accompanied by soft rush Juncus effusus but the other associates can be quite diverse. Lightlygrazed grassland dominated by Molinia caerulea is especially variable with both heathy, fen meadow and mire communities present. Pony-grazed grasslands lack any tall dominants and consist of a species-rich mixture of velvet bent Agrostis canina and sedges, much like the wetter Open Forest lawns. Within these vegetation types there are pockets containing diverse herb-rich communities. Very dry soils, for instance, support parched acid-grassland which is typically hard-grazed and disturbed and provides suitable habitat for spring annuals such as subterranean clover Trifolium subterraneum. In contrast the wettest parts of spring-lines often support mire communities typical of the Open Forest with Sphagnum species dominant and scarce plants present such as brown beak-sedge Rhynchospora fusco. Much rarer are the baserich mire communities which occur in close juxtaposition with acid communities such as the small, marshy flushes at Upper Pennington Common.

The Forest contains about 90 clearly separable valley mires, or fen, within about 20 different valley systems. This is thought to be more than survive in the remainder of Britain and Western Europe. This suite of mires sits within a relatively unpolluted catchment and for this reason the greater part of the New Forest has been designated as an internationally important wetland, a Ramsar site. The mires receive the products of leaching from the higher ground and are thus comparatively base-enriched. Structurally they comprise a distinctive sequence of plant communities arranged laterally to the axis and exhibiting increased enrichment from the outer margin to the centre. Similarly, the mires tend to become progressively base-enriched with progress downstream from the valley head, and this also influences the complex arrangement of plant communities. The zonation from enriched fen along the axes of many mires, to acid mire at the outer margins, gives rise to a great diversity of plant species. The richest mires have in excess of 150 species including many locally distributed and rare plants. Slender cottongrass *Eriophorum gracile* (RDB)* (Sch.8*)** is confined in England to sites in the New Forest and one in Surrey. The list of nationally scarce plants found on mires and their heathy margins include pillwort *Pilularia* globulifera, bog orchid Hammarbya paludosa, bog hair-grass Deschampsia setacea, marsh gentian Gentiana pneumonanthe, marsh clubmoss Lycopodiella inundata, brown beak-sedge and marsh fern Thelypteris palustris*.

Of the many ponds within the Forest the less acidic ponds support important populations of amphibians, including the rare great crested newt *Triturus cristatus* (Sch.5)**. The wetland habitats collectively form probably the most important single suite of habitats for dragonflies *Odonata* in Britain. Twenty-seven species breed in the New Forest including the rare southern damselfly *Coenagrion mercuriale* (RDB)*. The temporary ponds that dry out in the summer provide ideal conditions for some specially adapted

invertebrates including fairy shrimps *Chirocephalus diaphanus* and one such pond is the only known British locality for the tadpole shrimp *Triops cancriformis* both (RDB)* (Sch.5)**.

The plant community associated with the streams is restricted almost exclusively to the New Forest. (The only other stream of this type is the River Fowey on Bodmin Moor.) This is because of the combination of nutrient-poor acid waters and outcrops of neutral-enriched soils. The Lymington River is the largest stream system within the Forest showing all the typical characteristics. The tributary known as the Ober Water is recognised in the Nature Conservation Review as a lowland base-poor stream with a very diverse flora. Surveys of the Forest streams have recorded twenty of the fifty-four British species of fish and a wide variety of invertebrates. Some streams are used by otters, a species which has declined and which is fully protected through Schedule 5**.

The Forest supports populations of nine rare and twenty-five nationally scarce vascular plants*. Of the rare plants five have been mentioned above. Dorset heath *Erica ciliaris* occurs at two locations and the wild gladiolus *Gladiolus illyricus* (Sch.8)**, which is confined to the New Forest in Britain, is present in many of the bracken stands where it is normally associated with bluebells and wood anemones. Heath lobelia *Lobelia urens* is only found at one locality, as is the early gentian *Gentianella anglica* which occurs in association with imported chalk!

The New Forest supports nationally important breeding populations of birds as listed in Annex 1 of the EU Directive on the Conservation of Wild Birds including, nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea*, Dartford warbler *Sylvia undata*, and kingfisher *Alcedo atthis*. The Forest also supports a wintering population of hen harrier *Circus cyaneus* which is also listed on Annex 1. Other breeding birds include an assemblage of waders comprising lapwing *Vanellus vanellus*, redshank *Tringa totanus*, curlew *Numenius arquata*, snipe *Gallinago gallinago* and ringed plover *Charadrius hiaticulata* which all depend to a great extent on the Forest s wetland habitats.

Populations of all Britain s native reptiles are present in the New Forest including sand lizard *Lacerta* angilis (Sch.5)* and smooth snake *Coronella austriaca* (Sch.5), which both occur in suitable localities throughout the heathland.

The wide range of habitats within the New Forest, and its large size, make it an important site for populations of several groups of invertebrates. Of the 2,500 species of British butterflies and moths *Lepidoptera*, nearly half have been recorded from the Forest and over a third of the British species of beetle have been recorded as well as many species from other invertebrate groups. Many of these species are recorded in the Red Data Book and even more are considered notable. For some of these species, such as the New Forest Cicada *Cicadetta montana*, the New Forest is the only or main centre of distribution in Britain.

The seven sites of special geological or physiographic interest are as follows:

Studley Wood stream section is a prolific Tertiary locality exposing the only complete exposure of the silty Huntingbridge Formation of the Bracklesham Group. This is also the stratotype for the Studley Wood Member of the Formation. This series of units forming the top of the Bracklesham beds is remarkable for its molluscan faunas and the number of species limited to the Formation. Numerous corals, scaphopoda, bivalves and gastropods occur here. This is an outstanding Eocene locality of great interest in studies of Tertiary stratigraphy and palaeontology within the Hampshire Basin and across north western Europe.

Shepherd s Gutter stream section has been known to geologists since at least the middle of the 19th century and this locality is renowned for its rich Tertiary marine faunas. It shows a section through the Selsey Formation of the Bracklesham Group, of Middle Eocene age, and includes several mollusc-rich horizons and one kind of *Nummulites* correlatable with the Isle of Wight and Bracklesham sections. This is a key locality for its correlations between the classic Eocene localities of the Hampshire Basin, and for its prolific molluscan faunas.

Parkhill Enclosure ditch section is the only exposure in England outside the Isle of Wight to show upper middle Headon Bends. The occurrence of a fauna of *Cerithidea ventricosa* and other mollusca in the Headon clays here allows correlation with the type sections of the Isle of Wight. The fauna of well preserved shells and fish remains makes this one of the richest Tertiary faunal localities on the mainland. It is an important site for its palaeontology and for correlations within the Hampshire Tertiary Basin.

Woodgreen gravel pit exposes Pleistocene gravel, deposited by the River Avon, rich in Palaeolithic artefacts. Palaeolithic assemblages provide major evidence for the subdivision of the terrace sequence in The Solent Basin, where they are particularly important owing to a dearth of palaeontological sites. The Woodgreen pit has yielded over 400 artefacts, making it one of the most prolific in The Solent catchment. This is an important site which has significant potential to further elucidate the complex history of the River Avon gravels and the evolution of The Solent river.

Mark Ash Wood is a valley mire complex of considerable importance for palynological and palaeoecological studies. Peat growth at the site dates from the early part of the Devensian late-glacial to the sub-Atlantic period. Mark Ash Wood contains the oldest post-glacial peats in the New Forest area and is exceptional for high accumulation rates during late-glacial times. Macrofossil and pollen analyses have yielded some of the earliest British post-glacial records of bryophytes. Mark Ash Wood is also of importance in tracing the early post-glacial immigration and expansion of plant species, and has been used as a reference site for correlation in southern England.

Cranes Moor is a large mire complex, set in a shallow basin containing significant peat accumulations dating back to Devensian late-glacial times. It is a key reference site for palynological studies in southern England. It is also unusual for the apparently rapid accumulation of peat in the Boreal period, and is therefore particularly important in the study of the early immigration and expansion of flora in post-glacial times. Several studies of vegetational history have been carried out in the post-war period at a number of sub-sites within the basin including, most recently, an integrated investigation of macrofossils, pollen, and other microfossils, together with radiocarbon correlation of cores.

Highland Water is a unique area demonstrating a combination of low management and low human impact on fluvial processes. It is particularly important on two accounts. First, it provides a valuable opportunity to study the role and influence of vegetation in hydrological and fluvial processes. Second, it is of exceptional value for the study of debris dams which have a significant effect on channel processes, travel times of flood hydrographs, channel roughness and flow resistance. The hydrological and fluvial characteristics of the Highland Water are typical of those that formerly occurred in much of southern England.

^{*} Nationally rare species are equivalent to those listed in the British Red Data Book which include those considered endangered, vulnerable or rare.

Nationally notable/scarce species are estimated to occur in 16—100 10km grid squares in Britain.

** Species as listed under Schedule 5 or Schedule 8 of the Wildlife and Countryside Act, 1981, as amended.

Lower Test Valley SSSI

File ref:

County: Hampshire Site Name: Lower Test Valley SSSI

Local Planning Authority: Hampshire County Council, New Forest District Council, Southampton City Council, Test Valley Borough Council

National Grid Reference: SU 360153

Ordnance Survey Sheet 1:50,000: 185/196 1:25,000: SU 31

Area: 138.7 (ha) 342.7 (ac)

Date Notified (Under 1949 Act): 1971 Date of Last Revision: -

Date Notified (Under 1981 Act): 2.12.1986 Date of Last Revision: -

Other Information:

110 ha is leased as a nature reserve by the Hampshire and Isle of Wight Naturalists' Trust.

Reasons for Notification:

The site comprises the upper estuary of the River Test and exhibits a gradation from salt through brackish to freshwater conditions. It consists of one of the most extensive reed Phragmites beds on the south coast with flanking unimproved meadowland intersected by numerous tidal creeks: and flooded on high water spring tides.

The brackish grassland in the south of the site supports a varied flora with several species characteristic of salt marsh habitat, for example, sea arrow-grass Triglochin maritima, sea aster Aster tripolium and sea milkwort Glaux maritima. The rare bulbous foxtail Alopecurus bulbosus, a species whose distribution is rapidly contracting, occurs here, together with other uncommon species such as brookweed Samolus valerandi, spike-rush Eleocharis uniglumis, and the hybrid saltmarsh grass Puccinellia 3 Krusemaniana.

Above the termination of tidal influence are extensive unimproved neutral meadows containing a colourful and species-rich flora dominated by grasses such as Yorkshire fog Holcus lanatus, sweet vernal-grass Anthoxanthum odoratum, ryegrass Lolium perenne and meadow fescue Festuca pratensis, with abundant sedges Carex species and rushes Juncus species. Several plants now rather uncommonly found owing to modern intensive agricultural methods are common here, including ragged robin Lychnis flos-cuculi, water avens Geum rivale, lesser valerian Valeriana dioica, green-winged orchid Orchis morio, flowering rush Butomus umbellatus, water whorl-grass Catabrose aquatica and large bitter-cress Cardamine amara. Groups of willows Salix species are widespread along drains and creeks and support notable populations of the nationally rare green-flowered helleborine Epipactis Phyllanthes var Vectensis

in an atypical habitat, together with numbers of common helleborine Epipactis helleborine. Over 450 species of flowering plants have been recorded for the site as a whole.

The site is also important for wetland breeding birds and as a wader and duck feeding and roosting ground. The reed beds support large breeding populations of reed warblers Acrocephalus scripaceus and sedge warblers A. schoenobaenus. They also function as an autumn roost site for swallows and martins, and a premigratory feeding site for various passerine birds, notably reed and sedge warblers.

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981

ELING AND BURY MARSHES SSSI

COUNTY: HAMPSHIRE SITE NAME: ELING AND BURY MARSHES SSSI

Local Planning Authorities: Hampshire County Council, New Forest District Council

National Grid Reference: SU 355120

Ordnance Survey Sheets 1:50,000: 196 1:25,000: SU 31

Hectares/Acres: 110.3/272.58

Date Notified (1949 Act): 1979 Date of Last Revision: –

Date Notified (1981 Act): 26 June 1986 Date of Last Revision: -

Other Information:

Reasons for Notification: The Site of Special Scientific Interest embraces two dissimilar saltmarshes and their intervening intertidal mudflats at the head of Southampton Water. Eling Great Marsh is a 13 (ha.)/32 (ac.) grazed saltmarsh with a close sward of Saltmarsh-grass Puccinellia maritima with creeping bent Agrostis stolonifera and red fescue Festuca rubra sub-dominant. The marsh margins have in places been colonised by cord-grass Spartina anglica. That the present sward is derived by grazing from a more varied, mixed saltmarsh plant community is suggested by the occurrence, apparently in relict populations, of such characteristic saltmarsh plants as thrift Armeria maritima, sea purslane Halimione portulacoides and sea aster Aster tripolium. Eling Great Marsh is the only Puccinellia saltmarsh on the central south coast.

Bury Marsh is an ungrazed Puccinellia marsh which in consequence supports a more mixed saltmarsh community, with Halimione dominating drainage channel edges and extensive Spartina invasion. It is probably the only remaining locality for the American smooth cordgrass Spartina alterniflora in Britain apart from deliberate plantings. This population covers an extensive area and is genetically important as one of the parent species of the successful Spartina hybrids (and subsequently the fertile Spartina anglica) which colonised large areas of intertidal land in the late 19th and 20th centuries. At high water mark of spring tides there is an abrupt transition to oak/hazel woodland of apparently ancient origin.

The Southampton Water estuary is nationally important for its wader populations. The saltmarshes and associated mudflats of the SSSI are considered to be vital feeding and roosting areas for the autumn and winter populations of waders, ducks and grey herons Ardea cinerea.

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

8.0 PHOTOGRAPHS

Photo 1: Aerial View of Brook House, Salisbury Road, Totton, Hampshire (Google Earth, 2021).

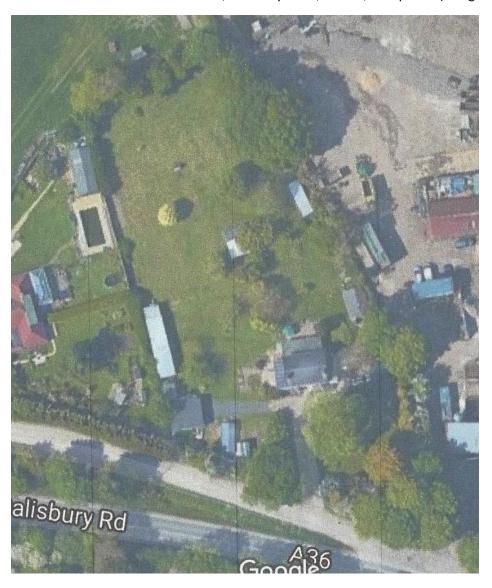






Photo 3: View from off-site of mature vegetation along the boundary with Salisbury Road and along the entrance driveway to Brook House to the South-East corner of the Site.



Photo 4: View North from the Timber Garage showing the short-mown, improved grassland. The mature trees and shrubs to the right are off-site.



Photo 5: A medium-aged ornamental tree stands within the lawn in front of the Bow-Shed/Mower Shed with mown, improved grassland behind.



Photo 6: View of short-mown, improved grassland across the Site.

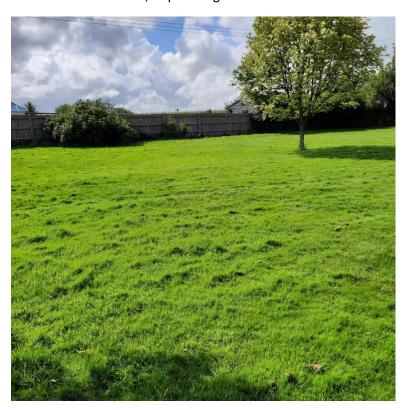


Photo 7: View from off-site towards the Bow Shed/Mower Shed on the Western boundary of the Site



Photo 8: An overgrown area of vegetation, including scrub, lies between the Timber Garage and the hedge bordering Salisbury Road.



Photo 9: View of the hedge bordering the Site with Salisbury Road to the South.

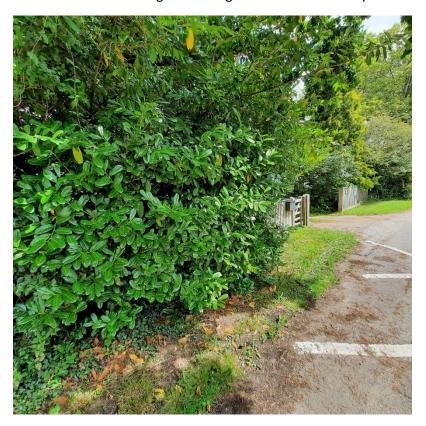


Photo 10: View of hedgerow with Salisbury Road to the South with mature Oak tree.



Photo 11: Closer view of Oak tree on boundary of Site.







Photo 13: Close view of the front of the Timber Garage on Site.

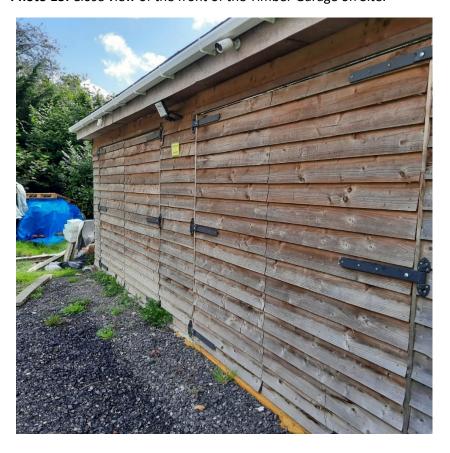
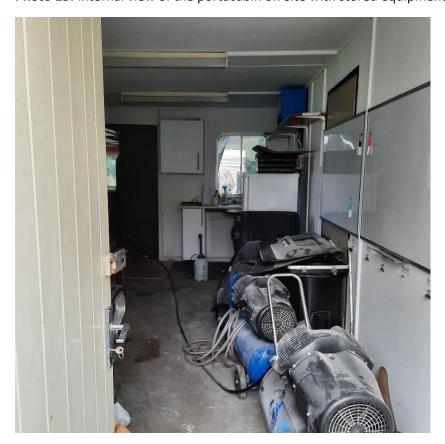
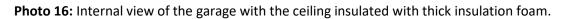






Photo 15: Internal view of the portacabin on Site with stored equipment and materials.





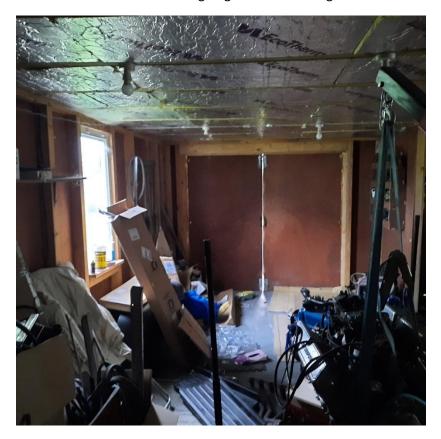


Photo 17: External view of the timber Bow Shed/Mower Shed which runs North to South along the Western boundary of the Site.



Photo 18: Closer view of a section of the external front aspect of the Bow Shed/Mower Shed showing a gap above the door and a gap where two parts of the building join together in the centre of the photo.



Photo 19: A closer view of the gap between the timber sections of two different parts of the building.



Photo 20: Gaps are occasionally present between the weather-boarding which may allow bats access to the internal structure of the building.



Photo 21: A view of gaps between boards on a different section of the building where blocking insulation seems to have fallen out. These gaps may give bats access.



Photo 22: A gap is present into the soffits at the centre of the front of the building just below the roof, which may give bats access.



Photo 23: Gaps are also present around some of the window frames which may give bats access into the structure of the building.



Photo 24: The Northern end of the building is clad with corrugated iron which will heat up in the sun during the day but will not hold this heat when temperatures drop during the night and thus may not be suitable for roosting bats.



Photo 25: A gap is present at the eaves where the roof meets the corrugated iron sheet walls which would allow bats to the internal structure of the building.



Photo 26: Internal view of the Bow Shed end of the building to the South which is internally cladded with timber and has linoleum and rugs on the floor.

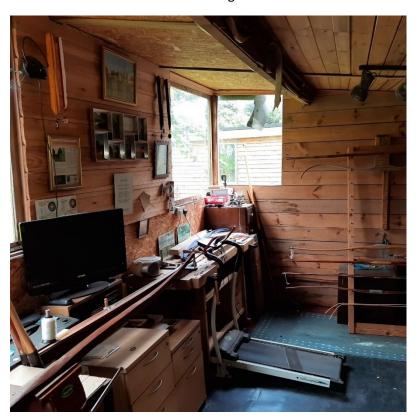


Photo 27: A further view inside the Southern end of the Bow Shed.



Photo 28: The roof of the Mower Shed part of the building is lined with timber boards below the corrugated iron roof, so a cavity is present between the two materials where bats could roost.

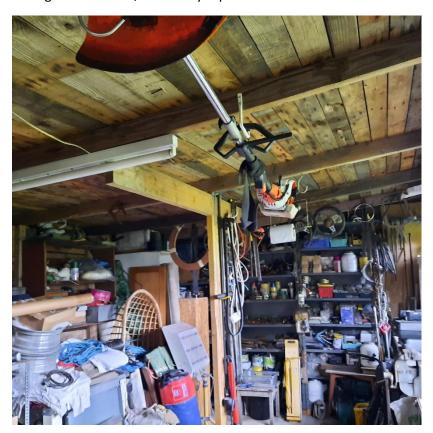


Photo 29: The storage room at the Northern end of the building has no internal cladding and so the temperature of this part of the building will fluctuate with the external environment and thus unlikely to be used by bats for roosting.



Photo 30: A low number of Pipistrelle-type bat droppings were recorded below one of the gaps in the weather-boarding cladding. This suggests bats may be roosting within this cavity in the building.

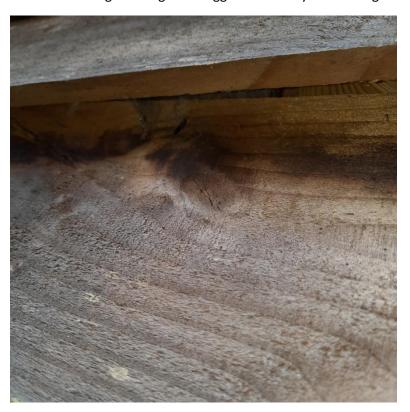


Photo 31: A gap between the boarding near the soffit on the front of the building may give bats access.



Photo 32: A gap between the boarding and roofing felt on the South-eastern corner of the soffit boards may give bats access.



Photo 33: A gap behind the building is being used as a mammal run in conjunction with the hedgerow behind.

