

**Seaford Head Nature Reserve**  
**Management Plan**  
**2018 - 2028**

**Sarah Quantrill and Steve Tillman**

1: INTRODUCTION .....	4
1.1: Executive Summary & Vision Statement .....	4
2: POLICY STATEMENT .....	5
3: GENERAL DESCRIPTION .....	6
3.1: General Information .....	6
3.1.2: Tenure .....	7
3.1.3: Management/organisational infrastructure .....	7
3.1.4: Site infrastructure .....	8
3.1.5: Map coverage .....	9
3.1.6: Photographic coverage .....	9
3.2: Zones .....	10
3.3: Environmental information .....	10
3.3.1: Physical .....	10
3.3.1.1: vulnerability and climate change .....	10
3.3.1.1: Hydrology .....	11
3.3.1.2: Geology .....	11
3.3.1.3: Soils / Substrates .....	11
3.3.1.4: Geomorphology / Land Form .....	12
3.3.2: Biological .....	13
3.3.2.1: Habitats/communities .....	16
3.3.2.2: Flora .....	22
3.3.2.3: Fauna .....	25
3.4: Cultural .....	37
3.4.1: Archaeology .....	37
3.4.2: Past land use .....	39
3.4.2.1: Pre circa 1939 .....	39
3.4.4: Past management for nature conservation .....	40
3.4.5: Past status of the site .....	40
3.4.6: Present legal status of the site .....	41
3.5: People - Stakeholders, local communities .....	41
3.5.1: Local communities and Stakeholders .....	41
3.5.2: Access and Tourism .....	42
3.5.3: Interpretation provision .....	42
3.5.4: Educational use .....	43
3.6: Landscape .....	43
3.7: Bibliography .....	43
4: FEATURES, OBJECTIVES AND PRESCRIPTIONS .....	44
4.1: Feature 1 - Grassland communities .....	44
4.1.1: Description .....	44
4.1.2: Objective 1 .....	44

4.1.3: Factors.....	44
4.1.3 Attributes.....	46
4.1.4 Management Rationale.....	48
4.1.5: Management List .....	48
4.2: Feature 2 – Scrub.....	52
4.2.1: Description.....	52
4.2.2: Objective 2.....	52
4.2.3: Factors.....	52
4.2.4: Attributes.....	53
4.2.5: Management Rationale.....	54
4.2.6: Management List. ....	54
4.3: Feature 3 – Coastal/Saline Lagoon .....	55
4.3.1: Description.....	55
4.3.2: Objective 3.....	56
4.3.3: Factors.....	56
4.3.5: Management Rationale.....	57
4.3.6: Management List .....	57
4.4: Feature 4 – Public Access, Engagement and Education.....	58
4.4.1: Description.....	58
4.4.2: Objective 4.....	58
4.4.3: Factors.....	59
4.4.4: Attributes .....	59
4.4.5: Management Rationale.....	60
4.4.6: Management List .....	60
4.5: Feature 5 - Historical/Archaeological/Geological interest .....	61
4.5.1: Description.....	61
4.5.2: Objective 5.....	62
4.5.3 Factors.....	62
4.5.4: Management Rationale.....	62
4.6. Feature 6 – Legal and administrative obligations. ....	63
4.6.1: Objective 6.....	63
4.6.2 Management List .....	63
5. PROJECT REGISTER.....	64
7. ACKNOWLEDGEMENTS .....	66
8. APPENDICES.....	67

# 1: INTRODUCTION

## 1.1: Executive Summary & Vision Statement

Seaford Head Local Nature Reserve (LNR) covers an area of 150.24ha and is part of the Seaford to Beachy Head SSSI. The land within the LNR is owned by Seaford Town Council, The National Trust and East Sussex County Council with parts being let to tenant farmers. (Map 1 in Appendices) This Management Plan covers the area owned by Seaford Town Council (83ha) and managed by Sussex Wildlife Trust. (Map 1) This management area is referred to as the 'Reserve' in the rest of this document. (Map 2 in Appendices)

In 2013 The Sussex Wildlife Trust (SWT) took over management on an annual contract with Seaford Town Council, employing a Site Ranger for one and half days a week. A long term lease of 25 years was secured in 2017 enabling SWT to commit to longer term aims and access wider funding streams.

The beauty of the landscape along the coast between Eastbourne and Seaford is internationally famous. This natural heritage is a major attraction with the reserve boasting some of the best coastal views in southeast England and in particular of the Seven Sisters. It also offers opportunities to educate the local community in wildlife and conservation issues whilst actively enhancing the site for nature conservation and public enjoyment.

The site consists of maritime chalk cliff, semi-natural grassland, vegetated shingle, saltmarsh, coastal scrub, semi-natural woodland and farmland and is of national, county and local importance for its ecology, geology, geomorphology, archaeology, landscape, amenity and educational value. It is an important part of a complex of sites within the coastal area of the South Downs National Park, which includes Seven Sisters Country Park, Beachy Head and the Cuckmere Valley and forms part of the Sussex Heritage Coast.

A number of species of conservation concern have been recorded from the site, most notably **Moon Carrot** *Seseli libanotis*, and the **Potter Flower-bee** *Anthophora retusa* for which the Reserve is especially important. Both species rely on areas of open grassland and are threatened by the spread of scrub. The



site has seen a loss in its calcareous grassland over time with an increase in rank and invasive species such as Tor grass, scrub encroachment, and over-grazing by rabbits. The larger areas of scrub are an important habitat for migratory birds. The long term vision of this plan is to move the site towards a more floristically rich chalk grassland habitat interspersed with scattered blocks of denser scrub. The open grassland will be maintained using appropriate grazing animals with the minimum of mechanical management. The site forms part of the larger landscape with Sussex Wildlife Trust working in partnership with other landowners such as the National Trust and South Downs National Park Authority to create open rolling Downland.

## **2: POLICY STATEMENT**

The aim of the Sussex Wildlife Trust is to use its knowledge and expertise to help people and organisations in Sussex to enjoy, understand and take action to conserve the Sussex environment and its wildlife.

Lowland Calcareous grassland is one of the priority habitats of the South Downs, covering 5,608ha of the National Park (4%). It is often referred to as the European equivalent of tropical rainforest due to the rich diversity of species it supports. However, chalk grassland has suffered badly from loss and fragmentation both nationally and within the National Park. (State of the National Park 2012 paper)

The aims for the site are to meet the requirements of the still relevant Habitat Action Plan for Sussex - Chalk Grassland, in so far as is possible within a single site:

- To re-create the broad landscape qualities of chalk grassland.
- The National Habitat Action Plan sets the following objectives for lowland calcareous grassland, which provide the context for the Sussex HAP:
  - Arrest the depletion of lowland calcareous grassland throughout the UK.

- Within SSSIs, initiate rehabilitation management for all significant unimproved lowland calcareous grassland in unfavourable conservation condition, with the aim of achieving favourable status wherever feasible.

#### Sussex Objectives:

- Maintain the integrity of all existing chalk grassland by preventing further loss and damage.
- Ensure that all existing chalk grassland is maintained and enhanced by appropriate management.
- Maintain and expand the area of chalk grassland by carefully targeted scrub management, where possible linking existing sites together.
- Identify and restore all areas suitable for reversion to chalk grassland. Ideally these should buffer and/or link together existing sites.
- Raise awareness of the importance of chalk grassland to the public, professionals and practitioners.
- Ensure better co-ordination and co-operation of bodies that have an influence over chalk grassland, at the local, national and international level.

### 3: GENERAL DESCRIPTION

#### **3.1: General Information**

##### 3.1.1: Location & site boundaries

**County:** East Sussex

**District:** Lewes

**Planning Authority:** East Sussex County Council

**Grid reference:** (Main site entrance) TV 5051 9801

**Area:** LNR: 150.24ha      SWT leased area: 45.7ha

Seaford Head Nature Reserve lies to the south easterly outskirts of Seaford town (Map 2 in appendices) and as such provides close access to an important green space area for the population of the town and a gateway into the South Downs National Park. The reserve is a short distance from a number of other Sussex towns and cities most notably Brighton, Eastbourne, Newhaven and Hastings.

(Map 3 in Appendices). Seven Sisters Country Park, owned by ESCC, lies over the other side of the River Cuckmere.

The famous views from the reserve across Cuckmere Valley and to the Seven Sisters cliffs are a major attraction for visitors locally, nationally and internationally. The site is also well known for bird watching being particularly important for migrating birds in the Spring and Autumn.

The Reserve is an important educational resource for schools and colleges in Seaford, Brighton, Eastbourne, Hastings and the surrounding towns and villages of East Sussex.

The Reserve falls into two blocks divided by farmland and connected by a narrow coastal strip. The eastern block overlooks the Cuckmere Valley and is a popular tourist destination for viewing the Seven Sisters cliffs. The western block is adjacent to and in places overlaps with Seaford Head Golf Club. The Golf Club and SWT work together in those areas shown on (Map 2 in Appendices)

### **3.1.2: Tenure**

The land tenure details of the site are as follows: -

**Ownership:** (Map 1) Seaford Town Council own the freehold for the area of Seaford Head Local Nature Reserve which is part of the Seaford Estate. The lease with SWT covers the areas as detailed in Map 2. It is for 25 years from September 2017 to September 2042.

Right of access via the main track from South Hill Barn car park exists for the owners of the Coastguard Cottages and for the Environment Agency.

### **3.1.3: Management/organisational infrastructure**

Seaford Head Local Nature Reserve Management Committee coordinates the overall maintenance and management of the whole LNR. The Committee consists of Seaford Town and Lewes District Councillors and representatives from interested organisations; Sussex Wildlife Trust, Sussex Ornithological Society, Seaford Natural History Society, the National Trust, South Downs

National Park Authority, South Downs Society, Natural England, the Seaford Head Golf Club Greenkeeper, the tenant farmer and a representative from the Coastguard Cottages. The Management Committee currently meets three times a year.

The area covered by this Plan is managed by the Sussex Wildlife Trust. The Trust's Reserves Manager (Central) has executive authority over most management decisions. A Site Ranger, currently employed for 10.5 hours per week, implements the management objectives under the supervision of the Reserves Manager.

Within the reserve there are two areas managed by SWT, an area where we provide management support to the Golf Course, and an area where we provide management support to the tenant farmer. (Map 2)

The SWT Conservation Committee acts as an advisory group for conservation policy, reserves management and advises the Wildlife Trust Council on scientific matters. Through the management plan all work is approved by the SWT Conservation Committee.

### **3.1.4: Site infrastructure**

The site can be easily reached via car with a free car park at South Hill Barn, TV5046 9805. The Vanguard Way long distance path, a part of which passes through the Reserve from the Cuckmere Valley to Newhaven, can be reached via the A259 with parking at the Seven Sisters Country Park car park at TV 5184 9942. A bus route runs from Eastbourne to Brighton and stops at Seven Sisters Country Park. The Vanguard Way can be taken from the A259 at the Cuckmere Inn pub along the Cuckmere River to the eastern entrance to Seaford Head LNR. The closest train station is at Seaford with a short walk through the town taking visitors to Splash Point and entry into the Reserve from the west along the coastal path via Seaford Head.

Access to the beach is via the steps at Hope Gap and from Cuckmere Haven but only at suitable states of the tide. There is no access at any state of the tide west of Hope Gap. As well as Public Rights of Way there are many well established desire lines crossing the reserve. (Map 4 in Appendices)

Authorised vehicular access to the Eastern side of the site is via South Hill Barn car park along the track to the Coastguard Cottages and along the cement road towards the radar beacon. On the Western side access is from Chyngton Road TV497986 but this can be impassable in wet conditions. Access across the golf course can be arranged with the Greenkeeper when necessary.

### **3.1.5: Map coverage**

OS Landranger 1:50000 sheet 198 Brighton and Lewes/199 Eastbourne and Hastings

OL25 - Explorer 1:25 000 scale Eastbourne and Beachy head

### **3.1.6: Photographic coverage**

#### *a) - Aerial Photographs*

A range of aerial photos exist on Google Earth most recent photos are from 2015. Luke Barber, Senior Research Officer, Sussex Archaeology Society holds many aerial photographs of WW1 and WW2 archaeology.

#### *b) - Ground Photographs*

There are also several ground photographs taken of the army camp during the WW1.

#### *c) - Fixed Point Photographs*

A series of 12 fixed point photographs were set up by SWT in 2013 and repeated on an annual basis. Photos are held on the SWT land management IT system.

#### *d) – Drone Footage*

There is no official film of the site taken by a drone but numerous films can be found online.

### **3.2: Zones**

The site is divided into 13 compartments to aid management with numbered Rides and Glades. (Maps 5 and 6 in Appendices)

<b>Compartment No:</b>	<b>Compartment Name:</b>
1	Golf Course
2	The Trenches
3	The Rides
4	The Beacon
5	Buckle Church
6	Coastal Strip
7	Hope Gap
8	Hope Bottom
9	Turning Circle & Track
10	Cuckmere View
11	Cable Hut
12	Saline Lagoon
13	Farmers Field

### **3.3: Environmental information**

#### **3.3.1: Physical**

##### **3.3.1.1: vulnerability and climate change**

The projection is for hotter drier summers. Impacts to chalk grassland will be due to greater incidents of drought leading to:

- Changes in species composition and declines in overall species diversity on species rich chalk grassland.
- Loss of condition on designated sites or priority habitats may occur.
- Species migration and loss of small or isolated patches of habitat will affect their resilience.
- Fragmentation of some habitat types will limit their adaptive capacity.

To try to mitigate for climate change objectives could include increasing habitat connectivity and permeability of the landscape to wildlife, undertaking adaptive

management and ensuring that areas of valuable habitat are bigger and better managed. Also to work with partners to enable better connectivity and more joined up thinking.

(Reference from SOUTH DOWNS NATIONAL PARK Climate Change Adaptation Plan)

### **3.3.1.1: Hydrology**

Due to its porous soils and bedrock the site drains freely. There are no rivers, streams or surface water bodies such as dewponds within the reserve boundary. There is a derelict pond at South Hill Barn outside the reserve boundary which is overgrown with invasive species.

### **3.3.1.2: Geology**

The reserve is a very unusual maritime cliff site which is essentially a hard rock cliff made up of Cretaceous Upper Chalk with flints but with a layer of loess deposits on top of the chalk which are exposed along the cliff top.

On Seaford Head there is a thin layer of Palaeogene sand. Resting on top is a similarly thin layer of Pleistocene loess, reworked silt and sand transported by wind and probably sheetwash. They are difficult to distinguish from each other as they are both fine-grained and orange-brown. Below these surface layers, which acidify percolating water, are funnel-shaped solution pits in the chalk, similar to those at Newhaven, and some larger solution pipes. Short Cliff carries a thicker layer of loess, which rests on what appears to be an ancient river terrace of the Cuckmere. Beneath the Short Cliff Beds are well-developed solution pipes passing down to high water and below. (1996, Castleden, R.) Some of these solution pipes can also be seen in the wave cut platform below Short Cliff.

### **3.3.1.3: Soils / Substrates**

There has been no soil survey for the Reserve and the following description has been compiled from information held in the site records.

The unusual geology of chalk, Palaeogene sand and Pleistocene loess has produced a mix of soil types giving rise to a complex series of habitats and NVC

(National Vegetation Classification) communities combining base-rich, neutral and some acidic grassland and scrub. Soils on the chalk are generally well drained and tend to be thin but they do vary across the site.

#### **3.3.1.4: Geomorphology / Land Form**

The area which is now south-east England was, 20 million years ago, a low plain formed by the deposition and burial of layers of chalk, clay, silt and sand throughout the Cretaceous period and the succeeding Palaeogene period. The building up of subterranean forces subsequently resulted in large-scale movements of the earth's crust resulting in uplift and erosion. Over millions of years the centre of what would otherwise have been a dome of rock eroded away leaving an outer rim of harder chalk which now forms the North and South Downs, surrounding a lowland plain of softer clay, with the more resistant Greensands and sandstones of the High Weald forming intermediate, central hills.

The southeasterly slopes and dry valleys along this stretch of chalk cliffs are truncated at the coast. To the east of Seaford Head they form Hope gap and beyond the Cuckmere Estuary the Seven Sisters. Cliff erosion has been estimated at an average of 0.3 – 0.5m per year but around Hope Gap 1.26m per year. Generally cliff falls are relatively small and happen in winter and spring. However in June 2017 there were a series of falls the biggest producing a reported 50,000 tonnes of debris below the cliff just the west of the Nature Reserve boundary. Erosion on the east side of the steps at Hope Gap is likely to completely isolate the steps from the cliff in time.

Inland on the western side of the Reserve the slopes face north and are dotted with small quarries, possibly where chalk and flints were removed. Some of these quarries were used as waste tips by the soldiers who were based there during WW1.



### 3.3.2: Biological

#### Introduction

A total of 1507 species have been recorded across all taxa as of April 2018. This makes the site the 11<sup>th</sup> (out of 32) most well recorded Sussex Wildlife Trust reserve and the Central Area Manager's third most well recorded reserve (after Woods Mill & Malling Down) despite being the Trust's newest reserve. **Of these 1507 species, 152 (or 12.3%) have some form of conservation status.**

The 'mean year of the last record' across all species is 2011, considerably higher than the average across all reserves of 2006. This is a good indicator of how contemporary the recording is at Seaford Head compared to other sites and is beaten only by Graffham Common and Southerham Farm. Having Seaford Head Natural History Society so active on the reserve is a unique situation on SWT reserves and plays a big factor in this.

Each taxonomic group has been assessed at different times by varying methods. Some taxa are long overdue revision while others have been updated very recently (such as the spiders in 2017). A brief description of the conservation statuses in this section is given here and has kindly been provided by Mike Edwards.

**The old RDB (Red Data Book) Conservation Status** categories were based purely on the number of 10km squares which a species was known to have been recorded from, with a base-line date of 1970. These categories are obviously susceptible to the progressive accumulation of new records over time. This is especially so as, for some species in particular, non-specialist recording has increased significantly. There are also known changes in range and abundance which have been increasingly commented on by specialists.

The old system graded species like this:

**RDB 1.** Endangered. Species currently (post 1970) known to exist in five or fewer ten-kilometre squares.

**RDB 2.** Vulnerable. Species in severely declining or vulnerable habitats, or of low known populations. Known to exist (post 1970) in ten, or fewer, ten-kilometre squares.

**RDB 3.** Rare. Species with small populations, not at present Endangered or Vulnerable, but which are felt to be at risk. Species currently known to exist (post 1970) in fifteen, or fewer, ten-kilometre squares.

**RDB K.** Species of undoubted RDB rank, but with insufficient information for accurate placement; includes possible recent arrivals.

**Nationally Scarce.** Species currently (post 1970) known to exist in one hundred, or fewer, ten-kilometre squares.

In some groups these are further sub-divided into:-

**Nationally Scarce a.** Species currently (post 1970) known to exist in thirty, or fewer, ten-kilometre squares.

**Nationally Scarce b.** Species currently (post 1970) known to exist in thirty-one to one hundred ten-kilometre squares.

**The new IUCN-type Red Data Book Conservation Status** categories are based on perceived threat, of which distribution is only one part, the other being related to the population trend over the 10 years previous to the assessment, for the species in question. Such trends may be inferred from accumulated specialist knowledge, but, as the quantity and quality of data improves increasing effort is being made to model such changes. The output of such modelling being then compared with the specialist knowledge. Species with a negative trend may not be inherently rare, it is the decline which is the significant factor.

The new system grades species like this:

**Regionally Extinct (RE).** See group-appropriate Red List for criteria. In general, a sufficiently long time has elapsed since the last record of this species.

**Critically Endangered (CE).** Species with a very severe decline in population trend or geographic range within the area considered.

**Endangered (E).** Species with a severe decline in population trend or geographic range within the area considered.

**Vulnerable (V).** Species with a marked decline in trend or geographic range within the area considered.

**Near Threatened (NT).** Species which are suspected to qualify for Vulnerable, but where the data does not quite support such a category.

**Least Concern (LC).** Species which show no marked negative population trend or geographic range. Indeed they may have positive values for either or both.

There will be a number of species where it has been considered that there is insufficient information to provide a supported grading, such species are called Data Deficient (DD). There are also categories for invasive (with anthropogenic agency) species, which are usually assessed as Not Applicable (NA).

The IUCN Red List system was primarily developed for assessing large mammal populations and fish stocks, adapting it for invertebrates is, inevitably, an experimental process and it is to be expected that there will be variability in its application and interpretation between groups. However, each published GB Red List has information on the actual way in which decisions have been arrived at. These should be consulted where necessary.

### **There is no inherent equivalence between the old and new systems**

Great Britain has a considerable environmental gradient from north to south and, to a lesser extent, east to west. Species which are stable in their trend or geographic extent may still be considerably limited by the availability of suitable habitat resources. In order that such species do not get missed from

conservation considerations a second, parallel, system of GB scarcity has been developed. This is similar to the old Conservation Status system in that it is based on the number of 10km squares which the species is known from, in a given time period, usually 30 years previous to the date of the assessment.

Categories for this National Scarcity rating are:

**NR**, with 1-15 10Km occupied squares

**NS**, with 16 to 100 10Km occupied squares.

Clearly both systems will require periodic revision if they are to remain relevant to the needs of a modern country and the conservation of its fauna.

### **3.3.2.1: Habitats/communities**

The following NVC communities were recorded at Seaford Head by Graeme Lyons in 2012. (Map 9 in Appendices) A brief description of the communities is provided along with any relevant information specific to the site. This includes whether the community is a good fit or not, key species driving the ecology and the presence of any rare species.

Some 27 NVC communities were recorded. This large number is a reflection of how diverse the site is.

**SD1 – Curled Dock *Rumex crispus* – Yellow-horned Poppy *Glaucium flavum***

Small areas of this community occur on the shingle around the small saltmarsh. The community seen at Seaford is **SD1a typical sub-community**. This community is nationally uncommon. SD = Sand Dune.

**MC5 – Thrift *Armeria maritima* – Sea Mouse-ear *Cerastium diffusum* maritime therophyte community.**

Occurs along the cliff tops but is difficult and dangerous to map accurately. The community occurs down the face of the cliff and can be seen on the cover photo to the right of the bare patches of loess. The accuracy of the areas of this community is therefore likely to be quite low. This community is associated with the loess (windblown sand deposits) that cap the chalk cliffs along much of Seaford Head. It is also the main nesting area of the rare bee *Anthophora retusa*.

**MC5d – Thyme-leaved Sandwort *Arenaria serpyllifolia* sub-community** best describes this at Seaford Head. MC = Maritime Cliffs.

**MC11 – Red Fescue *Festuca rubra* – Wild Carrot *Daucus carota* maritime grassland**

This community occurs in very thin strips immediately adjacent to the cliff tops. Dominated by a carpet of Red Fescue and the occasional tussock of Cocksfoot and punctured throughout with the flowers of Wild Carrot. Occasionally Knapweed, Agrimony and Restharrow appears as the community grades into something closer to MG5. MC11 is restricted to the cliff tops above the chalk.

**MC11c – Salad Burnet *sanguisorba minor*** is the most abundant community

**MC11b – Restharrow *Ononis repens*** occurs in one small area.

**MG1 – False Oat-grass *Arrhenatherum elatius* grassland**

Unmanaged grassland on more neutral soils tend towards this community. False Oat-grass becomes the overwhelming dominant grass and species-richness is eventually lost with time. False Oat-grass cannot compete with grazing or a regular cutting regime.

**MG1d – Knapweed *Centaurea nigra*** this sub-community is more floristically rich and less overwhelmingly dominated by False Oat-grass.

**MG1c – Wild Parsnip *Pastinaca sativa* sub-community** also present along the cliff tops in places. MG = Mesotrophic (neutral) grassland.

**MG5 – Knapweed *Centaurea nigra* – Crested Dogstail *Cynosurus cristatus***

This is a very variable community. MG5 is best known as the species-rich neutral hay meadows, often on heavy soils like those in the Weald. Knapweed is a constant indicator of this community as is Red Fescue, Ribwort Plantain, Bird's-foot Trefoil, Agrimony and Selfheal. In addition to the usual constants, the sub-

community recorded at Seaford Head is **MG5b – Lady’s Bedstraw *Galium verum* sub-community** which displays many species present in the CG communities such as Lady’s Bedstraw, Salad Burnet and Glaucous Sedge. This community grades into the CG communities. The regular mowing and removal of cuttings followed by grazing by rabbits have perpetuated this community. This community is nationally uncommon.

**MG6 – Perennial Rye-grass *Lolium perenne* – Crested Dogstail *Cynosurus cristatus* grassland**

This is the semi-improved neutral pasture that is so abundant throughout the country. It will have had at some point in its history a level of input that has increased the fertility of the soil. **MG6c – Yellow Oat-grass *Trisetum flavescens*.** In this sub community, a number of chalk related species are recorded.

**MG7 – Perennial Rye-grass *Lolium perenne* leys**

Even more nutrient enriched than MG6. This grassland is often dominated by tall, lush plants of Perennial Rye-grass. White Clover is often the only other species. This could indicate an area that was either heavily enriched in the past or is where livestock perhaps spend much of their time. The sub-community here is best described as **MG7a Perennial Rye-grass *Lolium perenne* – White Clover *Trifolium repens* ley.**

**CG2 – Sheep’s Fescue *Festuca ovina* – Meadow Oat-grass *Helictotrichon pratensis* grassland**

Of the three CG NVC communities at Seaford, this is probably the richest. It is also by far the most tightly grazed and in all cases where CG2 is found at Seaford, it is very heavily grazed by rabbits. All the CG2 at Seaford was recorded as **CG2a – Dwarf Thistle *Cirsium acaule* – Squinancywort *Asperula cynanchia* sub-community.** This community is nationally uncommon. CG = Chalk-grassland.

**CG3 – Upright Brome *Bromus erectus* grassland**

In this NVC community, Upright Brome comes to dominate in the sward giving it a highly distinctive look from the tightly grazed CG2. CG3 becomes the dominant

chalk-grassland to the west of the sit on the golf course. All of the CG3 recorded was of the **CG3b – Knapweed *Centaurea nigra* sub-community** which usually has Upright Brome at more than 50% cover and an increase in the number of coarse dicotyledons. Clustered Bellflower was recorded in this community to the west of the golf course. This community is nationally uncommon.

**CG4 – Tor-grass *Brachypodium pinnatum***

This community is dominated by Tor-grass. This course grass is often the cause of much alarm on chalk-grassland sites. It must be remembered that it is native and despite the fact that it can spread and take over areas of more species rich CG2 and CG3, there is no evidence for this at Seaford yet. This baseline NVC can easily be used to track the spread of CG4 at Seaford. Grazing in the growing season with cattle rather than sheep is thought to be better at controlling Tor-grass and breaking up its dominance. The large patch of CG4 to the south provides a benefit too by sheltering the Moon Carrot from the grazing pressure of the rabbits. At Seaford, **CG4b Knapweed *Centaurea nigra* – Rough Hawkbit *Leontodon hispidus*** was the only sub-community recorded. This tends to be dominated by Tor-grass.

**U1 – Sheep's Fescue *Festuca ovina* – Common Bent *Agrostis capillaris* – Sheep's Sorrel *Rumex acetosella* grassland**

In this tightly grazed acid grassland, a number of small plants fight for dominance and the sward is usually kept open by rabbit grazing. At Seaford Head this community is represented by a single polygon on the top of a hill topped by gorse and bracken to the northwest of the golf course and is best described as **U1b – typical sub-community. This community is nationally uncommon. U = acid grasslands.**

**U4 – Sheep's Fescue *Festuca ovina* – Common Bent *Agrostis capillaris* – Heath Bedstraw – *Galium saxatile* grassland**

In this very grassy sward dominated by fescues, a strange mixture of acid loving and chalk loving plants can be found. To the north of the golf course, there is clearly a very dynamic underlying geology and this is reflected in the vegetation.

**U4c – Yorkshire Fog *Holcus lanatus* – White Clover *Trifolium repens* best**

describes this sub-community. The presence of Wild Thyme is also indicative. This community is typically a north western community but is the best fit in this case.

**U20c – Bracken *Pteridium aquilinum* – Heath Bedstraw *Galium saxatile* community**

Dense stands of Bracken to the northwest of the golf course are best described as **U20c species-poor community**.

**W8 – Ash *Fraxinus excelsior* – Field Maple *Acer campestre* – Dog's Mercury *Mercurialis perennis* woodland**

This is the main type of woodland that grows on base-rich soils in the area. Where it grows as secondary woodland, it is often incredibly species poor and the canopy is dominated by Ash and Sycamore. The one block of mature woodland on the site is home to a rookery and breeding Stock Dove. W = Woodlands.

**W21 – Hawthorn *Crataegus monogyna* – Ivy *Hedera helix***

Although Blackthorn may be the most abundant component in the scrub at Seaford, it is never the only component and this means that W22 (blackthorn scrub) is not represented on the site. Interestingly, the richest type of hawthorn scrub (**W21d – Wayfaring-tree *Viburnum lantana* sub-community**) is present but only occasionally and where it is present it is usually overwhelmingly dominated by Wild Privet and/or Old Man's Beard. The most frequent type is **W21c False-brome sub-community** which typically has some chalk-scrub associates but these appear as scattered bushes. On the heavier soils, the community is better described as **W21a – Ivy *Hedera helix* – Nettle *Urtica dioica* sub-community**.

**W23 – Gorse *Ulex europaeus* – Bramble agg. *Rubus fruticosus* scrub**

Small patches of Gorse appear around the site but it is particularly prominent in the more acidic northwest end of the golf course.

**W24 – Bramble *Rubus fruticosus* agg. – Yorkshire Fog *Holcus lanatus* underscrub**



Scattered patches of Bramble occur throughout the site. Where grassland is being taken over by Bramble, the community is denoted as MG5/W24 for example.

**W25a – Bracken *Pteridium aquilinum* – Bramble agg. *Rubus fruticosus* underscrub**

Several patches of Bracken and Bramble with a fine display of Bluebells in the spring are better noted as W25 than U20. **W25a – Bluebell *Hyacinthoides non-scripta* sub-community.**

**SM8 – Glasswort *Salicornia* saltmarsh**

Several small areas of this early successional saltmarsh community occur to the east. They are usually dominated by nothing more than Glasswort and contain a lot of bare mud. SM = Salt Marsh.

**SM16 – Red Fescue *Festuca rubra* saltmarsh**

Red Fescue is somewhat of a red herring when describing this community which is, in the case of Seaford, mostly dominated by **Saltmarsh Rush *Juncus gerrardi* and is represented by the sub-community SM16b** which is known to be dominated by this rush. Only small fragments occur in the small saltmarsh to the east.

**‘SM21 type’ vegetation**

Note, SM21 is a nationally rare NVC community restricted to the North Norfolk coast. The community described here is perhaps the closest fit. It lacks Shrubby Sea-blite but it is dominated by Rock Sea-lavender at Seaford Head.

**SM24 – Sea Couch *Elymus pycnanthus* salt-marsh community**

Dense stands of the bluish Sea Couch grass can be found on the salt marsh. Note that by 2018, this habitat has been lost from the lagoon due to changes in salinity through shingle movements.

**SM27/SD1a**

An area of saltmarsh/sand dune interface is found to the south of the saltmarsh. The dominant plant is Sea Mayweed. *Philorhizus vectensis* (Ground Beetle) was recorded in this area. This community is nationally uncommon.

**SM28 – Common Couch *Elytrigia repens* upper salt-marsh community**

One small patch of this community was recorded on the top of the cliffs.

**OV24 – Nettle *Urtica dioica* – Goosegrass *Galium aparine* community**

Small patches of this community occur where some level of localised nutrient enrichment has taken place, usually where cuttings have been dumped over many years. OV = Open Vegetation.

**OV25 – Nettle *Urtica dioica* – Creeping Thistle *Cirsium arvense* community**

Dominated by the two community constants, a large patch of this community occurs in the MG6/MG7 field to the north of the nature reserve. It is no doubt a result of repeated supplementary feeding and the associated dunging and disturbance caused by the cattle. It would be very difficult to reverse. It also the location of a number of vigorous plants of Henbane.

**OV27 – Rosebay Willowherb *Chamerion angustifolium* community**

Scattered patches of Rosebay Willowherb occur around the site. Like OV24, they are typically small and scattered.

### 3.3.2.2: Flora

**A comprehensive species list for the site is kept by the Senior Ecologist derived from data from the Sussex Biodiversity Record Centre and the Land Management team's surveys.**

#### **Vascular plants**

A total of 335 vascular plants have been recorded (including one conifer: Yew, as well as five ferns. Of these, 7 (2.1%) have conservation status.

Species	Vernacular	Last record	Conservation status
<i>Cynoglossum officinale</i>	Hound's-Tongue	1999	RedList GB post2001 NT
<i>Euphrasia pseudokernerii</i>	Chalk Eyebright	2017	RedList GB post2001 VU, UK BAP Priority
<i>Hyoscyamus niger</i>	Henbane	2017	RedList GB post2001 VU
<i>Phyteuma orbiculare</i>	Round-Headed Rampion	2011	Nat Scarce
<i>Seseli libanotis</i>	Moon Carrot	2017	Nat Rare, RedList GB post2001 NT
<i>Spiranthes spiralis</i>	Autumn Lady's-tresses	2015	RedList GB post2001 NT
<i>Viola canina</i>	Heath Dog-Violet	2007	RedList GB post2001 NT

#### Moon Carrot *Seseli libanotis*

This Nationally Rare and Near Threatened plant is known from very few locations in the UK and only one other location in Sussex. Even on Seaford Head it is restricted to a relatively small area of only a few square metres with two small satellite colonies to the east. Although it resembles Wild Carrot, the location and species was thought to be suitably iconic enough to appear on the front of the 2018's 'Flora of Sussex'. Growing on chalk-grassland its main threats are over-grazing by rabbits, under-grazing and the encroachment of scrub and Tor-grass. The five year mean in the number of plants was 1290 and the last count in 2017 was 1483.

#### Green-winged Orchid

Growing on the golf course side of the reserve, this species is a good example of how green-keeping and SWT engagement can also benefit wildlife.

#### Henbane

This Vulnerable plant grows appears in enriched areas after they have been disturbed. It is sporadic in nature and often disappears after the disturbance element has been removed.

#### Saline lagoon flora

A very small area of saline lagoon, saltmarsh and vegetated shingle is present to the east of the site. This includes plants such as Rock Sea-lavender, Sea Milkwort, Yellow Horned-poppy and Sea-kale. Due to the changing nature of this area, from both natural incursion and the deliberate placement of shingle by the Environment Agency, the vegetation has changed. The species and communities are moving more towards a lower saltmarsh community, therefore becoming more halophytic. Species such as Sea Couch have moved out and Sea Milkwort has also perhaps gone extinct on the site.

### Significant non-native invasive plants

Species	Vernacular	Last record
<i>Allium triquetrum</i>	Three-cornered Garlic	2005
<i>Centranthus ruber</i>	Red Valerian	2005
<i>Cotoneaster horizontalis</i>	Wall Cotoneaster	2005
<i>Fallopia baldschuanica</i>	Russian Vine	2005
<i>Fallopia japonica</i>	Japanese Knotweed	2016
<i>Hyacinthoides hispanica</i>	Spanish Bluebell	2016
<i>Petasites fragrans</i>	Winter Heliotrope	2005
<i>Quercus ilex</i>	Evergreen Oak	2005

Russian-vine is a particular problem to the west of the site towards the northern end of the golf course and extensive work has been carried out to clear it. It clearly spread from an adjacent garden. Wall Cotoneaster has invaded an area of chalk-grassland to the south of this again on the west side. Evergreen Oak or Holm Oak has the potential to be problematic on the western side also and small seedlings should be controlled to prevent it spreading.

### Bryophytes

In total only 26 species have been recorded, this is comprised of one liverwort and 25 mosses. Of these, two have conservation status (7.7%). They are *Bryum torquescens* (nationally scarce species last recorded in 2013) and *Weissia condensa* (a nationally scarce and Section 41 species last recorded in 1994). Casual recording of bryophytes by local groups and specialists is encouraged.

### Fungi

A total of 49 fungi have been recorded. In 2014 the uncommon grassland fungi Mousepee Pinkgill *Entoloma incanum* was recorded on tightly grazed CG2 grassland at Hope Gap. Casual recording of fungi by local groups and specialists is encouraged.

## Lichens

A total of 28 lichens have been recorded showing the site is relatively under-recorded for this taxa but is unlikely to be a high-priority habitat for it either. Three species (10.7%) have conservation status.

Species	Last record	Conservation status	Autecology
<i>Agonimia gelatinosa</i>	1994	Nat Scarce	
<i>Cladonia cariosa</i>	2012	Nat Scarce	Recorded on chalk in the Trenches
<i>Cladonia convoluta</i>	1994	Nationally Rare, RedList GB post2001 VU, UK BAP Priority	

## 3.3.2.3: Fauna

### Arachnids

A total of three ticks & mites, three harvestmen and 49 spiders have been recorded. Of the spiders, five (10.2%) have conservation status which is quite high for this taxa. Spiders have been relatively well covered yet the site might still have interesting species that have not been discovered yet. Of the five scarce species, three are grassland species and two are associated with coastal habitats in the small saltmarsh area.

Species	Last record	Conservation status	Autecology
<i>Alopecosa cuneata</i>	2016	Nationally scarce	A chalk-grassland wolf spider
<i>Hypsosinga albobittata</i>	2016	Nationally scarce	A distinctive orb weaver of poor grassland
<i>Agraeocina striata</i>	2016	Nationally scarce	A wetland spider found on the saltmarsh
<i>Ozyptila clavata</i>	2013	Nationally scarce, UK BAP Priority	A scarce chalk-grassland crab spider
<i>Silometopus ambiguous</i>	2016	Nationally scarce	A money spider found on the saltmarsh

### Birds

A total of 177 birds have been recorded. It is the second most speciose reserve after Rye Harbour for birds. Of these, 91 (51.1%) are considered Amber or Red-listed from the 'Birds of Conservation Concern 4' published by the BTO in 2015.

However, only a small proportion of these are breeding on the reserve. Further to the red and amber-listed species, some additional scarce migrants have also been listed.

Vernacular	Last record	Status	Notes
Avocet	2013	Amber	Scarce migrant
Bar-tailed Godwit	2013	Amber	Migrant
Black-headed Gull	2016	Amber	Breeding in County
Brent Goose	2016	Amber	Migrant
Bullfinch	2007	Amber, S41	Breeding
Common Gull	2016	Amber	Winter visitor
Common Sandpiper	2015	Amber	Migrant
Common Shelduck	2017	Amber	Breeding locally
Dartford Warbler	2009	Amber	Scarce migrant
Dunlin	2015	Amber	Migrant
Duncock	2016	Amber, S41	Breeding
Fulmar	2016	Amber	Breeding on cliffs
Great Black-backed Gull	2016	Amber	Breeding locally
Great Skua	2006	Amber	Migrant, occasionally passing over head
Green Sandpiper	2015	Amber	Migrant
Greenshank	2014	Amber	Migrant
Grey Plover	2013	Amber	Migrant
Honey-buzzard	2014	Amber	Migrant
House Martin	2016	Amber	Migrant
Kestrel	2017	Amber	Breeding locally
Kingfisher	2008	Amber	Breeding in county
Lapland Bunting	2010	Amber	Scarce migrant
Lesser Black-backed Gull	2016	Amber	Breeding in county
Mallard	2016	Amber	Breeding locally
Marsh Harrier	2016	Amber	Migrant
Meadow Pipit	2016	Amber	Breeding
Mediterranean Gull	2015	Amber	Winter visitor
Merlin	2016	Amber	Winter visitor
Montagu's Harrier	1950	Amber	Scarce migrant
Mute Swan	2016	Amber	Breeding locally
Osprey	2016	Amber	Migrant
Oystercatcher	2016	Amber	Breeding locally
Quail	1992	Amber	Scarce migrant
Redshank	2015	Amber	Breeding locally
Redstart	2016	Amber	Migrant
Reed Bunting	2016	Amber, S41	Winter visitor
Shore Lark	2005	Amber	Migrant

Short-eared Owl	2016	Amber	Winter visitor
Snipe	2016	Amber	Winter visitor
Snow Bunting	2015	Amber	Winter visitor
Stock Dove	2015	Amber	Breeding in Harry's Bush
Stone-curlew	2003	Amber, S41	Migrant
Swift	2016	Amber	Migrant
Tawny Owl	2013	Amber	Breeding locally
Teal	2016	Amber	Winter visitor
Turnstone	2013	Amber	Winter visitor
Willow Warbler	2017	Amber	Migrant
Wood Sandpiper	2015	Amber	Migrant
Arctic Skua	2006	Red	Migrant. Occasionally flies over reserve
Black Redstart	2016	Red	Migrant
Black-tailed Godwit	2014	Red	Migrant
Cirl Bunting	1978	Red, S41	Scarce migrant
Corn Bunting	2016	Red, S41	Breeding locally
Cuckoo	2016	Red, S41	Breeding or breeding locally
Curlew	2016	Red, S41	Winter visitor
Dotterel	2014	Red	Scarce migrant
Fieldfare	2016	Red	Winter visitor
Golden Oriole	2016	Red	Scarce migrant
Grasshopper Warbler	2016	Red, S41	Migrant
Grey Partridge	1994	Red, S41	Scarce resident not breeding
Grey Wagtail	2016	Red	Migrant
Hen Harrier	1993	Red, S41	Scarce migrant
Herring Gull	2016	Red, S41	Breeding locally
House Sparrow	2016	Red, S41	Breeding on edge of reserve
Kittiwake	2016	Red	Breeding locally on cliffs to west
Lapwing	2016	Red, S41	Breeding in county
Lesser Redpoll	2016	Red, S41	Winter visitor
Linnet	2016	Red, S41	Breeding
Marsh Warbler	2016	Red	Scarce migrant
Mistle Thrush	2016	Red	Possibly breeding locally
Nightingale	2016	Red	Migrant
Pied Flycatcher	2016	Red	Migrant
Red-backed Shrike	1992	Red	Scarce migrant
Redwing	2016	Red	Winter visitor
Ring Ouzel	2016	Red, S41	Migrant
Ringed Plover	2014	Red	Breeding locally
Shag	2015	Red	Winter visitor to sea
Skylark	2017	Red, S41	Breeding
Song Thrush	2016	Red, S41	Breeding
Spotted Flycatcher	2016	Red, S41	Migrant

<b>Starling</b>	2016	Red, S41	Breeding locally
<b>Tree Pipit</b>	2016	Red, S41	Migrant
<b>Tree Sparrow</b>	2013	Red, S41	Breeding in county on Pevensey Levels
<b>Turtle Dove</b>	2016	Red, S41	Migrant
<b>Twite</b>	1992	Red, S41	Scarce migrant
<b>Whimbrel</b>	2016	Red	Migrant
<b>Whinchat</b>	2016	Red	Migrant
<b>Wood Warbler</b>	2016	Red, S41	Migrant
<b>Woodcock</b>	2013	Red	Migrant
<b>Yellow Wagtail</b>	2016	Red, S41	Migrant
<b>Yellowhammer</b>	2016	Red, S41	Breeding locally
<b>Alpine Accentor</b>	1921	None	Very scarce migrant
<b>Barred Warbler</b>	2014	None	Scarce migrant
<b>Bee-eater</b>	2002	None	Scarce migrant
<b>Black Kite</b>	2009	None	Scarce migrant
<b>Booted Warbler</b>	2013	None	Scarce migrant
<b>Great Grey Shrike</b>	2010	None	Scarce winter visitor
<b>Hoopoe</b>	2010	None	Scarce migrant
<b>Icterine Warbler</b>	2009	None	Scarce migrant
<b>Little Bustard</b>	1846	None	Very scarce migrant
<b>Olive-Backed Pipit</b>	2003	None	Scarce migrant
<b>Ortolan Bunting</b>	2016	None	Scarce migrant
<b>Pallas's Warbler</b>	2011	None	Scarce migrant
<b>Red-breasted Flycatcher</b>	2009	None	Scarce migrant
<b>Serin</b>	2010	None	Scarce migrant
<b>Tawny Pipit</b>	2013	None	Scarce migrant
<b>White Stork</b>	1994	None	Scarce migrant
<b>Woodchat Shrike</b>	1952	None	Scarce migrant
<b>Wryneck</b>	2016	None	Scarce migrant
<b>Yellow-browed Warbler</b>	2016	None	Scarce migrant

## Migratory birds

The role of Seaford Head is significant for migrant bird species in both the spring and even more during the autumn. Along with the nearby Beachy Head, it stands out as one of the two most important migrant staging posts in Sussex, both for the cover and shelter it offers and the food resources it provides. Over the past decade it has produced an impressive range of rare species including two Booted Warblers, Black-winged Pratincole, several Icterine and Barred Warblers, Ortolan Bunting, Black Kite and Red-footed Falcon. Ultimately, however, its enduring



value can be measured by the impressive numbers of common migrants passing through. In view of the increasing threats to and pressures on migrant bird species globally it is imperative that the reserve continues to play its part in protection and conservation. To this end, data on annual trends of both migrants and breeding species has been collected and tabulated for the last decade and this work will continue into the future under the auspices of two local volunteers.

### Breeding birds

By comparison, the assemblage of breeding birds at Seaford Head is not as important. Dominated by scrubland birds, the most abundant species at the time of writing was Dunnock. Warblers are fairly well represented and species such as Stonechat and Linnet also utilise the scrub. Skylarks and Meadow Pipits can be seen in the more open areas while Fulmars, Ravens and Jackdaws next along the cliffs.

### Herptiles

Four species of reptile have been recorded but no amphibians. The site is a good spot for Adders and a survey to assess the locations of the hibernacula is taking place at the time of writing using a standardised methodology. No amphibians have been recorded and the site it is not thought to be a significant site for them due its dryness.

### Insects

#### Beetles (Coleoptera)

A total of 196 species have been recorded making this a well recorded group, 30 (15.2%) of which have conservation status. This is quite a high proportion. Many of these are phytophagous species, species that feed on the foliage of vegetation and further to this, many of these are specialists feeding on only one species of plant or family of plant.

Species	Last record	Conservation status	Autecology
<i>Anisodactylus poeciloides</i>	2016	Nationally scarce	A saltmarsh ground beetle rare in Sussex
<i>Bembidion iricolor</i>	2016	Nationally scarce	A ground beetle in saltmarsh and tidal litter
<i>Bembidion normannum</i>	2016	Nationally scarce	A ground beetle in saltmarsh and tidal litter
<i>Berosus fulvus</i>	2015	RedList GB post2001 VU	A rare saline tolerant water beetle
<i>Cassida nobilis</i>	2016	Nationally scarce	A generalist tortoise beetle
<i>Cathormiocerus aristatus</i>	2016	Notable B	A weevil in roots on dry, open places near coast
<i>Cathormiocerus spinosus</i>	2016	Notable A	A weevil in roots in dry sandy or chalky soils
<i>Cryptocephalus bilineatus</i>	2017	Nationally scarce	A leaf beetle that feeds on bedstraws
<i>Cyclodinus constrictus</i>	2016	Nationally scarce	In sandy habitats
<i>Dasytes plumbeus</i>	2016	Nat Scarce	Adults need grassland, larvae in dead wood
<i>Dicheirotrichus obsoletus</i>	2016	Nationally scarce	A saltmarsh ground beetle
<i>Dyschirius salinus</i>	2016	Nationally scarce	A saltmarsh ground beetle
<i>Enochrus halophilus</i>	2015	Nat Scarce	A saline tolerant water beetle
<i>Epitrix atropae</i>	2016	Nationally scarce	A flea beetle that feeds on Deadly Nightshade
<i>Gronops lunatus</i>	2012	Notable B	A weevil on spurreys in saltmarshes and sandy places
<i>Hippodamia variegata</i>	2012	Notable B	The Adonis Ladybird, often coastal
<i>Hypera meles</i>	2013	Notable A	A weevil that is now relatively common, on clovers
<i>Mogulones geographicus</i>	2016	Notable B	A scarce weevil that feeds on Viper's Bugloss
<i>Omalopecta ruficollis</i>	2016	Nationally scarce	A scarce downland chafer
<i>Philorhizus vinctus</i>	2012	Nationally Rare, RedList GB Pre94 NT, UK BAP Priority	A rare coastal carabid recorded on the saltmarsh
<i>Protopion difforme</i>	2016	Notable B	A small weevil in damp grassland on clovers
<i>Pseudorchestes pratensis</i>	2016	Notable B	A tiny weevil on Knapweed in chalk grassland
<i>Pyrochroa coccinea</i>	2014	Notable B	Black-headed Cardinal Beetle. Feeds on dead wood
<i>Rhagonycha lutea</i>	2015	Nat Scarce	A small soldier beetle usually on woodland edge
<i>Scymnus schmidtii</i>	2016	Notable B	A small ladybird found in dry grasslands
<i>Smicronyx reichi</i>	2016	RedList_GB_Pre94-R	A tiny weevil on centaureas and Yellow-wort
<i>Trechus fulvus</i>	2016	Nationally scarce	A coastal carabid
<i>Trichosirocalus dawsoni</i>	2001	Notable B	A weevil on Buck's-horn and Sea Plantain
<i>Trypocopris vernalis</i>	2014	Nationally scarce	A dor beetle usually on chalky soils
<i>Zacladus exiguus</i>	2016	Notable B	A weevil that feeds on cranesbills

Almost a third of all the beetles with conservation status at Seaford Head have been found in the tiny saltmarsh and lagoon area. This is an incredibly rare resource in Sussex and should be protected from any further deposition of shingle.

## Butterflies and moths (Lepidoptera)

A total of 208 butterflies and moths have been recorded. This is comprised of 33 butterflies and 175 moths.

### Butterflies

Of the 33 species recorded, eight (24%) have conservation status. Many of these are associated with chalk-grassland and are still regular at Seaford Head. Hope Bottom and Hope Gap are typically the best areas for butterflies although some areas on the western side of the site are also good for species such as Dingy and Grizzled Skipper.

<b>Species</b>	<b>Vernacular</b>	<b>Last record</b>	<b>Conservation status</b>
<i>Coenonympha pamphilus</i>	Small Heath	2017	RedList GB post2001 NT, UK BAP Priority
<i>Cupido minimus</i>	Small Blue	2013	RedList GB post2001 NT, UK BAP Priority
<i>Erynnis tages</i>	Dingy Skipper	2017	RedList GB post2001 VU, UK BAP Priority
<i>Hesperia comma</i>	Silver-spotted Skipper	2017	RedList GB post2001 NT
<i>Lasiommata megera</i>	Wall	2017	RedList GB post2001 NT, UK BAP Priority
<i>Polyommatus bellargus</i>	Adonis Blue	2017	RedList GB post2001 NT
<i>Polyommatus coridon</i>	Chalk Hill Blue	2017	RedList GB post2001 NT
<i>Pyrgus malvae</i>	Grizzled Skipper	2017	RedList GB post2001 VU, UK BAP Priority

### Moths

Of the 175 moths recorded, the following are listed as having conservation status. Many of these are however the 'research' BAP which was never meant to have as full a status as the more typical BAP species (here Forester and Barred Tooth-striped being the only BAP species not on the research BAP list). Therefore it is best to consider that only these and the 12 species that are considered 'Notable' or 'RDB' are seen as having conservation status and

influencing management. The site is likely to hold far more species than this therefore moth-trapping by volunteers and local experts is strongly encouraged.

Species	Vernacular	Last record	Cons status	Autecology
<i>Acronicta rumicis</i>	Knotgrass	2015	UK BAP Priority 'research only'	
<i>Adscita statices</i>	Forester	2012	UK BAP Priority	See below
<i>Agonopterix pallorella</i>	Pale Flat-body	2017	Notable B	Feeds on Knapweed
<i>Agrochola lychnidis</i>	Beaded Chestnut	2014	UK BAP Priority 'research only'	
<i>Allophyes oxyacanthae</i>	Green-brindled Crescent	2016	UK BAP Priority 'research only'	
<i>Apamea oblonga</i>	Crescent Striped	2015	Notable B	A saltmarsh species
<i>Bembecia scopigera</i>	Six-Belted Clearwing	2016	Notable B	Feeds on <i>Lotus</i>
<i>Caradrina morpheus</i>	Mottled Rustic	2015	UK BAP Priority 'research only'	
<i>Ceramica pisi</i>	Broom Moth	2016	UK BAP Priority 'research only'	
<i>Ectoedemia agrimoniae</i>	Agrimony Pigmy	2013	pRDB3	See below
<i>Eilema caniola</i>	Hoary Footman	2016	Notable B	Now much commoner
<i>Hoplodrina blanda</i>	Rustic	2015	UK BAP Priority 'research only'	
<i>Meganola albula</i>	Kent Black Arches	2015	Notable B	Now much commoner
<i>Melanthia procellata</i>	Pretty Chalk Carpet	2016	UK BAP Priority 'research only'	
<i>Pediasia contaminella</i>	Waste Grass-veneer	2015	Notable B	
<i>Photedes fluxa</i>	Mere Wainscot	2015	Notable B	
<i>Pyrausta ntrinalis</i>	Scarce Purple & Gold	2016	Notable B	See below
<i>Scopula marginipunctata</i>	Mullein Wave	2015	UK BAP Priority 'research only'	
<i>Scrobipalpa instabilella</i>	Saltern Groundling	2015	Notable B	
<i>Spilosoma lutea</i>	Buff Ermine	2015	UK BAP Priority 'research only'	
<i>Trichopteryx polycommata</i>	Barred Tooth-striped	2017	UK BAP Priority, Notable A	See below
<i>Tyria jacobaeae</i>	Cinnabar	2017	UK BAP Priority 'research only'	

### **Barred Tooth-striped *Trichopteryx polycommata* – UK BAP, Notable A**

This species is very scarce in Sussex, restricted to a few downland sites where plentiful Wild Privet grows. Seaford Head is the most significant colony of this key moth in Sussex and possibly even the UK. The main areas on the site are Hope Bottom and Hope Gap where there is an abundance of Wild Privet.

### **Forester *Adscita statices* – UK BAP**

Only recorded as two individuals on two occasions in roughly the same area on the coastal grassland to the east of Hope Gap in 2012 and again in 2016. The forester moths can be difficult to separate from one another but the male's antennae and the available food plants help. Cistus Forester is not likely on the

site as the larvae feed only on Common Rock-rose and that is not present in this area of Seaford Head. The Scarce Forester has strikingly different antennae in the males from the other two forester species, identifiable even without a hand lens. These feed on Knapweed. The two male Foresters recorded at Seaford Head have been confirmed by close examination of antennal segments. This species feeds on the least calcareous demanding plant that the three foresters need, being Common Sorrel, a plant unlikely to grow in typical chalk-grassland. Where these Foresters have been recorded coincides with the loess cap to the east of Hope Gap away from CG communities. Further searching for this species should be concentrated in these areas. Population levels are clearly very low.

#### **Scarce Purple & Gold *Pyrausta ostrinalis* – Notable B**

Recorded on the short, tightly-grazed, south-facing CG2 slope at Hope Gap. In Sussex, this species is restricted to this particular area of the South Downs. A tiny day flying species, it is always difficult to find in among the far more abundant *Pyrausta despicata* and *nigrata*.

#### **Agrimony Pygmy *Ectoedemia agrimoniae* – pRDB3**

The record at Seaford Head is the only record of this tint micro moth in the last 100 years. As the distinctive purple cocoon was found in a leaf mine on the food plant, then breeding on the site has been confirmed. This was along Hope Bottom.

#### **Crickets, grasshoppers and allies (Orthoptera)**

Nine species have been recorded, the only species with a conservation status being Lesne's Earwig *Forficula lesnei* (nationally scarce) last recorded in 2016. A small earwig that is often associated with Old-man's-beard.

#### **Bees, ants, wasps, sawflies and parasitic wasps (Hymenoptera)**

A total of 156 species have been recorded at Seaford Head, the third highest total after Iping & Stedham Commons (265) and Rye Harbour (189), largely down

to it being thoroughly covered by Steven Falk. Of these, 41 (26.2%) are considered to have conservation status.

The conservation statuses of this taxonomic group are about to be updated as they are long in need of revision. They are included here for completeness but some of these are no longer considered rare or scarce. Note that only the Aculeate Hymenoptera (bees, ants and wasps) have ever had conservation statuses.

Species	Vernacular	Last record	Conservation status	Autecology
<i>Andrena florea</i>	Bryony Mining Bee	2016	RedList GB Pre94 R	On bryony
<i>Andrena fulvago</i>	Hawksbeard Mining Bee	2007	Notable A	On yellow composites
<i>Andrena hattorfiana</i>	Large Scabious Mining Bee	2008	RedList GB Pre94 R	On Field Scabious & Greater Knapweed
<i>Andrena minutuloides</i>	Plain Mini-miner	2007	Notable A	Open chalk downland, umbellifers
<i>Andrena nigriceps</i>	Black-headed Mining Bee	2007	Notable B	A scarce generalist
<i>Andrena nitidiuscula</i>	Carrot Mining Bee	2005	RedList GB Pre94 R	Mainly umbellifers
<i>Andrena niveata</i>	Long-fringed Mini-miner	2007	RedList GB Pre94 VU	Crucifers
<i>Andrena pilipes</i>	Black Mining Bee	2018	Notable B	Coastal cliffs, spring grassland and scrub flowers
<i>Andrena proxima</i>	Broad-faced Mining Bee	2005	RedList GB Pre94 R	Umbellifer-rich grassland
<i>Andrena trimmerana</i>	Trimmer's Mining Bee	2018	Notable B	A generalist
<i>Andrena varians</i>	Backthorn Mining Bee	2018	Notable B	Blackthorn, Ground-ivy
<i>Anthophora quadrimaculata</i>	Four-banded Flower Bee	2005	Notable B	Labitates, particularly Black Horehound
<i>Anthophora retusa</i>	Potter Flower Bee	2018	RedList GB Pre94 EN, UK BAP Priority	See below
<i>Aporus unicolor</i>	Aporus unicolor	2005	Notable A	Coastal sites. Preys on Purse-web Spider
<i>Arachnospila wesmaeli</i>	Arachnospila wesmaeli	2007	Notable A	Sandy coastal sites, preys on spiders
<i>Bombus cullumanus</i>	Cullum's Bumble Bee	1923	RedList GB Pre94 EN	Probably extinct in UK
<i>Bombus humilis</i>	Brown-banded Carder-bee	2008	UK BAP Priority	Coastal (often chalk) grassland
<i>Bombus muscorum</i>	Moss Carder-bee	2007	UK BAP Priority	Damp grassland
<i>Bombus ruderarius</i>	Red-shanked Carder-bee	2003	UK BAP Priority	A scarce generalist
<i>Bombus ruderatus</i>	Large Garden Bumblebee	1924	Notable B, UK BAP Priority	A scarce generalist
<i>Bombus rupestris</i>	Red-tailed Cuckoo Bee	2003	Notable B	Cuckoo of <i>lapidarius</i> . No longer scarce
<i>Bombus subterraneus</i>	Short-haired Bumble Bee	1921	Notable A, UK BAP Priority	Extinct and being reintroduced
<i>Bombus sylvarum</i>	Shrill Carder Bee	1922	Notable B, UK BAP Priority	Coastal and brownfield sites
<i>Crossocerus distinguendus</i>	Crossocerus distinguendus	2008	Notable A	Preys on Diptera. Nests in ground, wood or walls
<i>Dasypoda hirtipes</i>	Hairy Legged Mining Bee	2007	Notable B	Yellow composites, often on heathland
<i>Didineis lunicornis</i>	Didineis lunicornis	2007	Notable A	Preys on hoppers

<i>Ectemnius ruficornis</i>	Ectemnius rubicola	2016	Notable B	Deadwood and umbellifers
<i>Lasioglossum leucopus</i>	White-footed Furrow Bee	2016	RedList GB Pre94 R	Now common
<i>Lasioglossum malachurum</i>	Sharp-collared Furrow Bee	2018	Notable B	Now common
<i>Lasioglossum pauxillum</i>	Lobe-spurred Furrow Bee	2008	Notable A	Now very common
<i>Lasioglossum xanthopus</i>	Orange-footed Furrow Bee	2014	Notable B	Cliffs, chalk-grassland and brownfield sites.
<i>Lestiphorus bicinctus</i>	Lestiphorus bicinctus	2007	Notable B	Associated with scrub, preys on hoppers
<i>Megachile leachella</i>	Silvery Leafcutter Bee	2008	Notable B	Mainly sandy & coastal habitats
<i>Melitta tricineta</i>	Red Bartsia Blunthorn Bee	2016	Notable B	On Red Bartsia
<i>Nomada fucata</i>	Painted Nomad Bee	2016	Notable A	Now commoner. Host is <i>Andrena flavipes</i>
<i>Nomada signata</i>	Broad-banded Nomad Bee	2007	RedList GB Pre94 VU	Scarce. Host is <i>Andrena fulva</i>
<i>Nysson trimaculatus</i>	Nysson trimaculatus	2007	Notable B	Cleptoparasite of <i>Gorytes</i> wasps
<i>Osmia bicolor</i>	Red-tailed Mason Bee	2013	Notable B	Chalk-grassland with snail shells for nesting
<i>Philanthus triangulum</i>	Bee Wolf	2015	Red List GB Pre94 VU	Now much more widespread
<i>Sphecodes rubicundus</i>	Red-tailed Blood Bee	2004	Notable A	Scarce. Hosts are <i>Andrena labialis</i> & <i>flavipes</i> .

### ***Anthophora retusa* – Potter Flower-bee**

This once much more widespread bee is now restricted to a handful of sites in the UK and is one of our most declined bees. Seaford Head is a stronghold for this species. It requires nesting habitat, loess and plentiful nectar sources during its emergent period. It is similar to the much commoner *Anthophora plumipes* which flies earlier in the year but often utilises many of the same nectar sources. Ground-ivy, which is particularly abundant at Seaford Head, is a key nectar source.

### **True bugs (Hemiptera)**

A total of 71 bugs have been recorded of which three have conservation statuses attached to them (3.2 %). *Lygus pratensis* would not even be assessed as nationally scarce now if a review were carried out, it is now one of the commonest mirids encountered and is included here only for completeness. The Scarab Shieldbug has very recently been reclassified as nationally scarce, it is usually only encountered by suction sampler in short turf.

Species	Last record	Conservation status	Autecology
<i>Lygus pratensis</i>	2016	RedList GB Pre94 R	Now extremely common in most places.
<i>Reptalus panzeri</i>	2010	Notable B	Associated with dry grasslands
<i>Sigara selecta</i>	2016	Nationally scarce	A water boatman recorded in the lagoon. Tolerates brackish conditions.
<i>Thyreocoris scarabaeoides</i>	2013	Nationally scarce	Scarab Shieldbug, short chalk grassland around Hope Gap

### True flies (Diptera)

A total of 128 species have been recorded showing Seaford Head as being fairly well recorded for flies. Of these, six species (4.7%) have conservation status. This is fairly typical for Diptera given that fewer species have conservation statuses.

Species	Last record	Conservation status	Autecology
<i>Atylotus latistriatus</i>	2016	Nationally Scarce	A saltmarsh horsefly
<i>Atylotus rusticus</i>	2016	Nationally Rare	A coastal grassland horsefly
<i>Bombylius discolor</i>	2016	Nationally scarce	Dotted Bee-fly
<i>Coenosia Karli</i>	2016	Notable	
<i>Pherbellia griseola</i>	2016	Notable	
<i>Stratiomys longicornis</i>	2016	Nationally scarce	Larvae recorded in the saltmarsh

### Slugs and snails (Mollusca)

A total of 35 molluscs have been recorded. Only one species (2.9%) recorded has a conservation status, the nationally scarce snail *Candidula gigaxii*, recorded in 2001. The site is significant for the local Heath Snail *Helicella itala* which is extremely abundant to the south facing, tightly rabbit-grazed chalk-grassland of Hope Gap.

### Mammals

Six mammals have been recorded and none of these are considered rare or scarce. The site is clearly under-recorded for mammals but in this habitat this taxa is not thought to have a significant impact on the management and is therefore a low priority for systematic monitoring.



Rabbits are the most abundant mammal on the reserve and provide some important grazing around the CG2 and bryophytes communities. However rabbit grazing is very selective and over grazing in localised areas has led to very limited flora and invertebrate composition.

Badgers are present on the site and being aware of the locations of sets is useful to aid future management.

### **3.4: Cultural**

#### **3.4.1: Archaeology**

There are a great number of archaeological features on the Reserve and it is essential that any management operations do not harm them. We will be working with the County Archaeologist to formulate a plan which specifically deals with these features and work which could be undertaken to enhance them. None are designated although the Iron Age Fort on the golf course adjacent to the eastern Reserve boundary is a Scheduled Ancient Monument (SAM).

Luke Barber, Research Officer at Sussex Archaeological Society, has provided us with the following summary of 20<sup>th</sup> Century archaeology:

“The area is very rich in military remains of the 20th century. Although a number are to be found just outside the nature reserve's boundaries, on agricultural land and on the golf course, many fall within the reserve itself and need consideration in any management plan. During the Great War Seaford was home to two large associated camps: north camp (near Blatchington) and south camp (at Chyngton). These were extensive establishments that housed around 15,000 men. The South Camp, initially tented but fully hatted by early 1915, continued at full capacity until 1919 when the final troops were demobilised. Subsequently parts of it were used for summer training in the 20s and 30s but by this time most of the camp had been removed. Although the majority of the area once occupied by South Camp has now been built over some open areas remain. Most is now situated on periodically cultivated land just outside the reserve but a section

survives on the northern slopes of Seaford Head, adjacent the golf course. This area, being within the Reserve, is not cultivated and consists of large areas of scrub/thorn interspersed with areas of downland grass. This is the only area where extant earthwork remains of Seaford's Great War camps remain. There are some well-defined hut terraces as well as many more subtle earthworks of hut terraces/bases and roads, mainly now surviving within scrub areas. The full extent of the below ground remains is uncertain but trial archaeological excavations in one of the associated chalk pits has shown the potential for deposits and finds of the period to be high. As well as huts there are the remains of one of the parade grounds and the assault course within this area. Damage to these deposits from rabbits has been noted as significant.

Overlying part of the South Camp is an extremely well-preserved section of practise trenches. They consist of a 1st, 2nd and reserve lines linked by at least two communications trenches. Although a significant portion survives on open grassland the system extends a long way to the north where it is currently covered by dense thorn. The canopy of thorn has protected the earthworks from the elements, particularly as they are not consolidated by grass, and in places edges are still nearly vertical. Although this trench system is of Great War form it is now considered it belongs to the inter-war period. It is a very rare survivor.

The 2nd World War saw the area of the reserve being used for both defence and training. Although most of the hard defences of the Cuckmere Haven were located on the east side, the west side also contained pill boxes and the western side of the anti-tank wall. Most of these features still remain in various states of decay. Scattered over the area of interwar trenches are a number of small 2-man slit trenches that are likely to be of this period. A whole row of similar trenches survive as well-preserved earthworks on the cliff top overlooking Cuckmere Haven. These are in an area of short grass and do not appear to be suffering from animal activity. Parts of the concrete tank road and turning loops, used as part of the firing range, survive in the area around South Barn, with further remains of range structures surviving in the pasture field to the south. Further earthworks in the dry valley running down to Hope Gap have also been exposed

by recent scrub clearance. The date and function of these is uncertain but they do appear to be military trenches. It emphasises the likelihood of further military features remaining undiscovered in many of the dense areas of scrub within the nature reserve."

The Cable Hut, which is privately owned, located by the Cuckmere Estuary (TV 5075 0146) is of historic importance being where telephone cables to France were installed in 1918. The Coastguard Cottages were built in the 1820's to try to combat smuggling.

We plan to install interpretation boards on the site where appropriate to raise the profile of the archaeology.

### **3.4.2: Past land use**

#### **3.4.2.1: Pre circa 1939**

From the Middle Ages until the 1930's sheep farming formed the major activity on much of the South Downs. Arthur Young in his 'General View of the Agriculture of The County of Sussex (1813)' stated that, "...between Eastbourne and Steyning there were about 200 000 ewes kept, with numbers rising to 270 000 sheep in the summer."

#### **3.4.2.2: Post circa 1939**

There were army camps on the site during WW2 as described above. After the War it seems the area was grazed and locals can remember sheep grazing the here in the 50's and 60's with a shepherd being based at Hope Gap.

### **3.4.3: Present land use**

The Local Nature Reserve was designated in 1969 and was managed by Lewes District Council. In 2005 responsibility was devolved to Seaford Town Council with the South Downs Joint Committee taking over management. In 2011 the South Downs National Park was formed and responsibility was passed back to Seaford Town Council. In 2013 Sussex Wildlife Trust were appointed as managers with a 25 year management lease being signed in 2017.

#### **3.4.4: Past management for nature conservation**

Management for nature conservation has been in place since 1969. Limited management records exist but all those involved aimed to improve the chalk grassland and the diversity of the scrub and woodland. This is supported by anecdotal accounts from past Rangers for the site. There was a short gap in active habitat management between 2015 and 2013.

The following habitat management took place:

##### *Scrub Clearance / Control*

Clearance of scrub by mechanical and hand cutting, ride installation and management, formation of scallops and glades. Some bramble and cotoneaster control using chemicals.

##### *Grazing*

Grazing using the local tenant farmer's cattle was carried out on the eastern side. Fencing, cattle grids and a water trough were put in place under the South Downs Joint Committee during the 1990's.

##### *Mowing*

Mowing took place on the eastern side of the reserve, along Hope Bottom, the cliff section to the west of Hope Gap, and on the open areas on the western side. The greenkeepers mowed the rides adjacent to the golf course on the western side to keep them open as fire breaks and access paths.

#### **3.4.5: Past status of the site**

Prior to designation the site was agricultural land. The site was designated as an LNR in 1969 and originally notified as part of the Seaford to Beachy Head Site of Special Scientific Interest (SSSI) in 1953. (Map 7 in Appendices)

### **3.4.6: Present legal status of the site**

The following designations are in place (Map 7 in Appendices)

- Site of Special Scientific Interest (SSSI) - Seaford to Beachy Head SSSI
- Local Nature Reserve (LNR)
- Local Geological Site
- Site of Nature Conservation Importance (SNCI)
- Seven Sisters Voluntary Marine Conservation Area
- Marine Conservation Zone Beachy Head West
- Sussex Heritage Coast
- RIGS (Regionally Important Geomorphological Site). The LNR contains two RIGS, Seaford Head and Cuckmere Haven.
- Within South Downs National Park

## ***3.5: People - Stakeholders, local communities***

### **3.5.1: Local communities and Stakeholders**

Seaford has a population of about 27,000 and is the largest town in the Lewes District. The reserve is a short distance from a number of other Sussex towns and cities including Brighton, Eastbourne, Newhaven and Hastings.

Anecdotal evidence suggests that the site is underused by local people. This may in part be due to the distance from the town centre and lack of public transport. Some perceive the site as a dog walking area not as a nature reserve. There are however a considerable number of people who regularly walk on the reserve and care deeply about it.

SWT works closely with a number of stakeholders including Seaford Town Council, Seaford Head Golf Club (owned by STC), National Trust, SDNPA, Owners of the Coastguard Cottages and Cable Hut, the tenant farmer, Lewes District Council, Environment Agency, ESCC, Seaford Natural History Society and the bird watching community. Maintaining good communication and working relationships with these groups has been essential to management of the reserve.

### **Seaford Community Wildlife Project**

This project, set up by Sussex Wildlife Trust and funded by the Heritage Lottery Fund, will run from September 2017 to September 2019. The two year project will provide a firm link between Seaford town and its nature reserve with a host of opportunities for the community to learn skills, volunteer and experience nature. It will build on practical conservation work on the nature reserve, enable wildlife habitat improvements to happen in school grounds and in the town and interpretation, signage and literature will encourage people to visit Seaford Head Nature Reserve. The Project Officer will work with the town council, local groups and the community to engage a range of people in learning activities to provide a burst of energy and enthusiasm to kick start a longstanding relationship with local nature.

#### **3.5.2: Access and Tourism**

The site is mainly accessed from South Hill Barn and walkers using the Vanguard Way. The eastern block is heavily visited as it provides the iconic view of the Seven Sisters. This view features in many tourist guides and is a significant location for Asian tourists. The free car park is often full in the summer. Access by coach is restricted due to the concrete access track and size of the car park. There are no figures for the number of visitors but it is estimated to be in the hundreds of thousands per year. A considerable number of local visitors are dog walkers which can cause issues for stock grazing. Certain areas also suffer where owners do not pick up after their dog. The western block is visited more by local people, the majority of whom are dog walkers. Access is across the golf course or along the coast from Seaford seafront.

Vanguard Way, a long distance trail from East Croydon to Newhaven, follows the River Cuckmere and passes through the reserve along the coast westwards towards Newhaven and provides a link to the South Downs Way.

#### **3.5.3: Interpretation provision**

A reserve leaflet was produced by SWT in 2015 in conjunction with Seaford Town Council, the National Trust and SDNPA and is due to be updated in

2018/19. There are leaflet holders provided by STC in the car park at South Hill Barn.

Several interpretation boards are located around the site and are due to be reviewed and updated in 2018. For proposed locations see Map 8 in Appendices. Both the SWT and Seaford Town Council websites have sections dedicated to the Reserve and information is posted on Facebook and Twitter.

#### **3.5.4: Educational use**

Due to its geology, geomorphology and views of the meanders of the Cuckmere the site is popular with school and college groups. SWT have an education base at Seven Sisters Country Park. Study groups from Juniper Hall Field Studies Centre visit the site regularly. Seaford Natural History Group have been involved with the site for a number of years and contribute to surveys and species records.

#### **3.6: *Landscape***

The landscape of the reserve is dominated by the stunning views of the chalk cliffs of the Seven Sisters with the Coastguard Cottages in the foreground and Beachy Head beyond. The site itself is of undulating grassland with north and south facing slopes and dry valleys and has its own unusual and notable features. Maritime chalk cliffs capped in places by loess deposits have resulted in solution pipes in the cliff face, and inland base-rich, neutral and acidic soils produce a variety of habitats. At the foot of the cliffs a wave-cut platform extends beyond the beach shingle.

#### **3.7: *Bibliography***

Castleden, R. (1996) Classic landforms of the Sussex Coast. Sheffield: Geographical Association

Larkin, M. (2006) In the Footsteps of Time – Geology and landscape of Cuckmere Valley and Downs. Ulmus Books

Lyons, G. (2012) Seaford Head Biological Monitoring Review. Sussex Wildlife Trust. Unpublished.

Lyons, G. (2018) Seaford Head Biological Monitoring Review. Sussex Wildlife Trust. Unpublished.

Phillips, A. (2013) Seaford Head Local Nature Reserve Management Plan 2013 – 2017

## **4: FEATURES, OBJECTIVES AND PRESCRIPTIONS**

### **4.1: Feature 1 - Grassland communities**

#### **4.1.1: Description**

A matrix of semi-natural and unimproved grassland exists across the site. Past history and geology influence the range of habitat and grassland types found here. Disturbance from its military history, past farming practices and previous management have created areas of improved and semi-improved grassland amongst areas of lowland chalk grassland and mixed scrub. In addition, the site contains Loess deposits of peri-glacial origin. These deposits have formed brown earth loams and sandy clays of an acidic and moist nature. This formation can be seen along the cliff edges. The Loess deposits are a key component of the RDB species *Anthophora retusa* presence on site.

#### **4.1.2: Objective 1**

Maintain, improve and extend where possible the current extent of lowland calcareous and semi-natural grassland to benefit a range of key species.

#### **4.1.3: Factors**

##### **1. Scrub encroachment leading to a loss of grassland**

Scrub species have encroached and invaded the grassland areas and in Compartment 10 there is a considerable amount of bramble in the sward. Left uncontrolled it will in time dominate the grassland completely and would threaten the relatively small populations of notable species such as Moon Carrot and Green Winged Orchid.



## **2. Invasive scrub species.**

Several invasive scrub species are present within the blocks of scrub as well as within the sward. On the western side of the Reserve Wall *Cotoneaster horizontalis* is of particular concern. Other species such as Traveller's-joy *Clematis vitalba* are also an issue.

## **3. Ragwort and creeping thistle**

The extensive presence of Ragwort and Creeping Thistle in the southern part of Compartment 10 have been noticeable at times. This may be cyclical but can also be related to over-grazing and should be monitored.

### **Fixed point photographs (Priority 1).**

Fixed-point photographs are to be taken every other year. Records to be evaluated by the Senior Ecologist. The photographs must be taken at the same place, at the same time of year and at the same time of day. This work is currently untaken by volunteers.

Monitor - vegetation structure. It is suggested that the Rapid Grazing Assessment is carried out annually on all areas grazed and that key plant species are mapped and counted across the site annually.

## **4. Rabbits**

There are a large number of rabbits on the Reserve and some areas such as those in Compartments 6, 7 and 10 are particularly affected by rabbit grazing.

### **Impact of rabbit grazing (Priority 2)**

Rabbit grazing helps to control vegetation growth but can have a negative impact. The impact of rabbit grazing can be assessed as part of the rapid grazing assessment.

## **5. Dog walkers & ability to graze**

The worrying of sheep at Seaford Head has influenced where grazing takes place. Dog faeces on the site can be an unwanted source of nitrification and can cause disease in stock.

Action is undertaken to reduce the level of dog attacks using a range of methods. Any dog attacks will be recorded and mapped in order to prioritise action such as extra signage, staff presence or direct action with the police.

**Reporting of irresponsible dog behaviour.** Reports of sheep worrying, sheep attacks and dog fouling to be kept as a record.

## **6. Ground conditions**

The western block can be inaccessible in wet periods during the winter and impact on the timing and duration of grazing. Grazing should take place during the end of summer and autumn to avoid damage to access routes.

### **4.1.3 Attributes**

#### **1 - Extent and quality of chalk grassland**

Change in size of area of chalk grassland will be mapped as part of the next NVC survey (**Priority 1**)

Quality of chalk grassland and diversity of species. As part of the senior ecologists review of sward quality (to be planned as part of the monitoring review for the site) it is important to monitor the presence and number of rare species.

This should include the following;

#### **Moon Carrot (Priority 1)**

Counted annually by the Seaford Head Natural Society using a standardised methodology in August. By sectioning out the area with ropes, double counting is avoided. Annual searches for satellite colonies are also made (such as the area recorded in 2017).

#### **Green-winged Orchid (Priority 2)**

Growing on the golf course side of the reserve, counting and mapping this plant using a GPS is a useful exercise.

#### **2 - Extent of the semi-natural grassland**

See 1 above.

#### **3 - Extent and presence of key invertebrate species (priority 1).**

Presence and location of Potter Flower Bee, Forester, Barred Tooth-striped moth to be monitored on an annual basis.

#### **Butterfly transect (Priority 2)**

A butterfly transect to be set up with the guidance of the Senior Ecologist focused around Hope Gap & Hope Bottom and the surrounding grassland. This is to follow

the standardised UKBMS methodology and to be carried out by volunteers of the SHNS.

As it is thought that only the Forester moth occurs at Seaford Head (of three UK forester species) then any Foresters should be added to the butterfly transects and all males checked to species level. The Scarce Purple & Gold is very small and fast and it may not be suitable to add this to the butterfly transect as it is likely to be distracting (there are potentially four other species of *Pyrasta* present on the site from which it must be distinguished).

On the chalk, butterflies are a more useful indicator than in other habitats in Sussex and this is the reason that a transect has been added to the site's monitoring strategy.

#### ***Anthophora retusa* survey (Priority 1)**

Carried out every three years (set up in 2018 and next repeated in 2021). Walk the site at least twice during the season (April to June with a focus in mid to late May) to count and map adults of *Anthophora retusa*, record to 8 figure grid references and record what the animals are feeding on. Also, once in the ten years of the plan Ground-ivy (**Priority 3**) to be mapped across the site to inform the *Anthophora retusa* survey.

Ground-ivy is a key plant species for many spring invertebrates at Seaford Head, most notably *Anthophora retusa*. Map at the 10 x 10 m level using the following scale once every five years. To be carried out by volunteers of the SHNS with the help of the Trust's Senior Ecologist.

- 1) Scattered plants
- 2) Denser plants growing in areas up to 50%
- 3) Dense patches of Ground-ivy > 50% in area

#### **Barred Tooth-stripe (Priority 1)**

Two visits a year from late March to late April to assess a yearly maximum for the species. In addition to the count, each individual to be GPS'd and a map

produced of where animals were recorded. This is much more desirable than assessing numbers by light-trapping. An attempt to assess the distance covered and number of people searching per unit time is also relevant.

#### **4.1.4 Management Rationale**

The lack of effective scrub control and inappropriate grazing in the past has allowed scrub species to invade the chalk grassland with a noticeable presence of bramble in the sward in some areas. The presence of Moon Carrot and Green-winged Orchids are under threat from scrub encroachment and as a priority should be part of the rotational scrub management regime. *Cotoneaster horizontalis* is present particularly in the open areas of Compartment 1. Intervention by chemical spraying and hand clearance has taken place since 2016 to try and control the spread and this work will continue in the current plan.

Despite the value scrub has across the site for migratory birds the level of scrub provides cover for a large population of rabbits. Their activities impact on the sward through over-grazing and soil disturbance. However due to the busy nature of the site rabbit control is difficult.

Bracken is in evidence on the western side but does not appear to pose a threat to the grassland. Future work could include the cutting and removal of arisings in these areas to encourage more diversity.

As a popular dog walking site any grazing is a challenge. Using sheep across the site has proved problematic. Compartment 10 is grazed using only cattle.

Using sheep in Compartment 1 is challenging but with good signage and regular patrolling has proved successful in regenerating the grassland. Public opinion towards the sheep is mixed however the good work to date has proved dog walkers and grazing can co-exist.

#### **4.1.5: Management List**

##### **1 – Grazing**

##### **Information to visitors – Grazing signage**

The reserve has few Public Rights of Way but numerous desire lines, especially on the western side adjacent to the golf course and close to residential areas. It

is very popular with dog walkers with the associated problems of dog faeces and attacks on sheep by dogs. The former can impact directly on vegetation and the health of stock as well as the perception of the site by visitors, the latter on the choice of grazing areas. Resistance from dog walkers has been particularly vociferous where grazing had not been carried out in the past and we have introduced sheep. By engaging with dog owners to explain the importance of grazing to habitat management attitudes have improved but some owners are still uncooperative. Continued dialogue and appropriate signage with up to date, relevant information are essential.

SWT twitter page @SussexGrazing exists to outline current grazing across our sites. This provides useful up to date information. The SWT website outlines our grazing management, procedures and policies including expected dog behaviour.

### **Grazing regime**

This site will be grazed using a combination of sheep and cattle. However as a popular dog walking area the use of sheep and cattle needs to be carefully handled and restricted to certain compartments. All grazing decisions must relate to ground conditions including over-grazing from rabbits and growing conditions. The regime will be monitored using the rapid grazing assessment designed by the senior ecologist. Grazing numbers for all livestock should fluctuate year on year.

Correct management for this habitat is to allow and encourage more plants to flower and to create a more diverse sward structure over the summer months. This will benefit a range of invertebrates. It is not the intention of the grazing regime to completely graze the site to a short lawn. However it needs to be recognised that under-grazing is as damaging and a build-up of thatch will eventually reduce the chalk grassland diversity. A regime of grazing in combination with mechanical cutting and removal of arisings will benefit all areas of grassland which are not heavily rabbit grazed.

The site is not enclosed or compartmentalised with traditional stock fencing. All grazing across the site is managed using electric fencing with appropriate

signage. This allows for flexibility and targeted grazing, while allowing access across the site for dog walkers when livestock are not present.

The current grazing regime consists of cattle grazing Compartment 10 between mid-summer to mid-spring months. The compartment is not grazed in its entirety but divided up into two or three grazing areas. These are moved around as the cattle create the correct sward conditions. At present this is restricted by only having one water trough in the compartment. To extend the water system by installing other water trough(s) will allow a more flexible, extensive approach to grazing this area. Livestock numbers should be no more than 10 - 12 in total. This grazing should extend into compartment 8 in the future if conditions allow. However areas in compartment 8 are overgrazed with rabbits and should not be included in any grazing compartment.

Compartment 1 is grazed with sheep from late summer onwards. Sheep numbers should be no more than 30 at any one time. Ground conditions when it is wet can make access difficult and sheep should be removed before this happens.

Because of the nature of the desire lines crossing this area grazing compartments are small, moved around as the sheep graze off the grass. It is important to ensure that well used paths and desire lines are kept open to avoid conflict.

**Rapid Grazing Assessment. The grazing is to be assessed at least once by a walkover survey using the RGA as an early warning sign for any serious under or over grazing. (Priority 1)**

### **Water supplies**

Ensure water supply is regularly checked and maintained as necessary.

An extension to the current water trough in compartment 10 will be implemented adding one or two extra troughs to the system. This will allow further refinement to grazing in this area. Water is provided via portable troughs in Compartment 1 as there is no water supply.

## **2 - Scrub control**

Not all scrub is deemed to be a negative. An intimate mosaic of grassland and scrub, especially chalk scrub and individual open grown clusters have great value for invertebrates and should be left or maintained where possible. As is the large block of scrub that dominates in Hope Bottom, being a key resource for migrant birds.

Priority should be given to clearing low established scrub, including bramble and *Cotoneaster*, that has little litter and still many of the chalk-grassland plants such as Moon Carrot present in the surrounding sward. More of value will be lost if these area are not removed.

Regenerating woody and ruderal growth from previously cleared areas will need several years of aftercare prior to starting any new large scale clearance work. Action needed is cutting regrowth in late summer/autumn, raking off arisings and burning brash. Where rotational regeneration is not wanted it must be treated with an approved herbicide in order to control regrowth. Grazing should take place as aftercare on these cleared areas.

Formulate a scrub priority management map in consultation with the Senior Ecologist.

## **3 - Volunteering**

The monthly local volunteer group and the South Downs National Park volunteers carry out habitat management under the guidance of the Site Ranger. With the creation of a two year Community Project in 2017 it is envisaged that youth volunteers groups will also be involved.

Seaford Natural History Society are keen supporters of the reserve and make a valuable contribution to the collection of species records under the guidance of SWT's Senior Ecologist.

## **4.2: Feature 2 – Scrub**

### **4.2.1: Description**

The main areas of scrub are within Compartments 1,2,3,4, and 8. Past photographic evidence shows that scrub has increased in area and density on both the east and west blocks of the site over the last 100 years, and in particular since the 1950's. Hope Bottom, Compartment 8, used to be much more open with scrub limited to the upper sides of the valley. The scrub here comprises mostly Elder, Hawthorn and Blackthorn with some Ash, Spindle and Gorse. There is a small planted area (c1970's) with Whitebeam and Field Maple at the northern end of the Compartment. Many trees show stunted growth due to thin soils and their exposure to coastal winds.

The largest scrub area on the western side is of similar species composition and is dissected by rides which were originally cut to provide fire breaks. In the past they have been maintained by the Greenkeepers by flailing and mowing resulting in straight edges and a very short sward with an abrupt, angular profile lacking in ecotone. Work carried out under the previous Management Plan (2013-2017) has made some improvement.

### **4.2.2: Objective 2**

Maintain current areas of scrub and manage to improve the structure and diversity and increase edge habitat. Maintain existing rides, ride edges, scallops and glades and create new glades and scallops on rotation. Manage scrub to improve and increase habitat for notable species such as *Anthophora retusa*.

### **4.2.3: Factors**

#### **1 – Migratory birds**

The area around Hope Gap and Hope Bottom is particularly notable for migrating birds. This must be taken into consideration when carrying out scrub management.

#### **2 – Potter Flower Bee - *Anthophora retusa***



The Potter Flower bee *Anthophora retusa* is an endangered RDB1 species and following the demise of a population at nearby High and Over, Seaford Head remains the most important site in Sussex for this species as well as nationally. It benefits from the areas of Ground-ivy along the Rides in Compartment 8.

### **3 - Barred Toothed-striped Moth - *Trichopteryx polycommata***

Found on wild privet around Hope Gap and particularly along the southern edge of scrub to the east of Hope Gap along the boundary of Compartments 7 and 8, where it forms one of the largest populations nationally, if not the largest.

### **4 – Non-native Invasive Species**

Cotoneaster, *Cotoneaster horizontalis*, and Russian Vineweed, *Fallopia baldschuanica*, are non-native invasive species found in amongst the scrub. They tend to dominate more desirable species and their control is essential.

### **5 - The Public**

This is a high profile site with large visitor numbers in including local wildlife enthusiasts. Footpaths and established desire lines should be kept open. Scrub management can be seen as detrimental by the public and so suitable information must be provided.

#### **4.2.4: Attributes**

##### **1. Extent and presence of key species**

Location and populations of key species such as *Anthophora retusa*, Forrester moth, Barred Tooth-striped moth, Moon Carrot, Ground Ivy (As defined in previous section).

Breeding birds survey (Priority 2)

A four visit Common Birds Census to be carried out annually by volunteers of the SNHS. This will produce the number of territories on annual basis.

Migratory birds (Priority 1)

To annually produce maximum totals for spring and autumn migrants based on regular survey visits by local experts. Although not necessarily volunteers (local bird watchers would be up there anyway) it would be great to capture the important data being collected by them to inform the management of the site.

## **2. Extent and Quality of Scrub**

The extent, species composition, structure and age of scrub areas identifying the graduated profile of edge habitat and extent and location of glades and rides.

Aerial photography and fixed-point photography are important methods of identifying change across a site. As defined previously carry out an NVC Survey every 10 years. Previous survey carried out in 2012.

### **4.2.5: Management Rationale**

Areas of scrub across the site are of importance for migratory birds and other species however encroachment of scrub into areas of herb rich chalk grassland is detrimental. Thick blocks of even aged leggy scrub are not rich in food and nest sites. A balance is to be achieved by breaking up large areas, improving structure and controlling encroachment while leaving other areas which are important for bird and invertebrate populations.

By cutting scallops on rotation and allowing them to grow back, a more diverse age structure will be achieved.

There are now four main rides on the site, their width should be one and a half times the height of the surrounding vegetation so some widening is required in places. Maintaining the edges of the Rides ensures the presence of Ground Ivy. A sinuous ecotone is desirable and can be achieved by rotational clearance along rides and paths. Opening up a few more glades will also improve structure.

### **4.2.6: Management List.**

#### **1 – Scrub Management**

Continue cutting regime to maintain current areas of scrub and manage to improve the structure, diversity and increase edge habitat. Along scrub boundaries and along Rides R1- 4 create sinuous edges with a graduated profile to improve ecotone. Widen rides where required to maintain desired width. In Compartments 2, 3 and 8 create new scallops and glades on rotation, keeping some permanently open.

Monitor the edges of the large blocks of scrub and take action to ensure that they do not encroach.

Manage the areas of Wild Privet along the southern edge of Compartment 8 and in Compartment 7 to benefit the Barred Tooth-striped moth by cutting on rotation and creating a scalloped edge.

Formulate a priority scrub management map for the Reserve in consultation with the Senior Ecologist.

## **2 – Support to Golf Course**

Continue to work with the Greenkeepers to establish a favourable mowing regime along the rides in the western block Compartments 3, 4 and 5.

## **3 – Remove and Control Non-native Invasive Species**

Remove and control undesirable species occurring within the scrub. This includes Cotoneaster, especially in Compartment 1, and Russian Vineweed in Compartment 2. Work with owners of neighbouring properties to encourage them to deal with Russian Vineweed in their gardens. It is unlikely that these species can be removed entirely due to their tendency to layer and/or root from cuttings.

## **4 – Removal of Arisings**

Clear and burn all arisings minimising size and number of fire sites. Use chemical stump and foliar treatment where necessary to prevent regrowth.

## **6 – Create Invertebrate Nesting Sites**

Create mini-cliffs to provide nesting sites for invertebrates including Potter Flower Bee *Anthophora retusa* in locations to be agreed with ecologists.

### **4.3: Feature 3 – Coastal/Saline Lagoon**

#### **4.3.1: Description**

The chalk cliffs and the estuary of the River Cuckmere are dynamic features impacted by storms and associated erosion. The cliffs are susceptible to rapid and unpredictable change. The estuary is currently managed for flood control by the Environment Agency (EA). The small saline lagoon and saltmarsh area in Compartment 12 contain several rare species of beetle and spider. The lagoon has been partly filled with shingle by the EA as part of their flood defence

program, which has reduced its area and the diversity of flora and fauna such as Rock Sea-lavender. Shingle moving has also reduced the areas of vegetated shingle and associated species Yellow-horned Poppy and Sea Kale.

The chalk cliffs and the exposed cliff top loess are important for a number of birds such as Peregrine *Falco peregrinus*, and Raven *Corvus corax* as well as providing nesting sites for many invertebrates including *Anthophora retusa*. They are subject to erosion by natural processes and by the burrowing of rabbits neither of which can be managed.

Cliff safety has become an increasing issue for visitors and improved interpretation signs will contribute to cliff safety awareness.

#### **4.3.2: Objective 3**

Accept and allow for free functioning of coastal cliff erosion so that species assemblages associated with the cliff, undercliff and cliff-top habitats are maintained.

Maintain the boundary of the saline lagoon where possible, Compartment 12, to prevent unnatural shingle encroachment and loss of vegetated shingle areas while allowing natural processes and breaching by the sea.

#### **4.3.3: Factors**

##### **1 – Shingle Moving**

The requirements of the EA in managing the estuary for flood control conflict with those of habitat management. Although natural processes are preferred and protection of rare habitats and species desirable, it is also necessary to consider the needs of the residents, larger scale environmental issues and flood control.

##### **2 – Cliff Falls**

There is potential danger from cliff falls. The coast is a dynamic feature where management is often impossible to carry out. Cliff falls can happen at any time without notice. This can restrict survey and data collection.

##### **3 – Litter/Rubbish**

Saline lagoon, saltmarsh and vegetated shingle are habitats containing rare species needing protection. A large amount of rubbish much of which is related to

the fishing industry, is washed up on the beach and into the lagoon. This is potentially damaging and looks unsightly.

#### **4.3.4: Attributes**

Extent and quality of Saltmarsh species (Priority 3)

Map the salt marsh plant communities found in the lagoon including Rock Sea-lavender, Sea Milkwort, Yellow-horned poppy and Sea-kale. This assemblage of plants are good indicators for the health of the small remaining area of saltmarsh.

#### **4.3.5: Management Rationale**

Due to the processes of erosion along the cliff no management can be undertaken.

The saline lagoon is vulnerable to natural processes and washing in of shingle by the sea. It has suffered greatly in recent years from the intervention of the Environment Agency removing shingle from the Cuckmere Canal into this area. Several rare species with conservation status are or were present and is a very rare habitat in Sussex requiring protection.

#### **4.3.6: Management List**

##### **1 – Education/Interpretation**

Work with STC to educate the public about cliff falls and danger areas and ensure cliff-warning signs are in good order and in place. Ensure staff and volunteers work safely.

##### **2 – Partnership Working**

Work in partnership with the EA and relevant agencies to provide the best solution regarding shingle movements.

##### **3 – NVC Survey**

To be carried out every 10 years. Current survey carried out in 2012 (Lyons G).

##### **4 - Clear Rubbish/Litter**

Clear rubbish and litter on a regular basis and ensure removal from site.

## ***4.4: Feature 4 – Public Access, Engagement and Education***

### **4.4.1: Description**

Seaford Head with its iconic view of the Seven Sisters is a national and international tourist destination which is reflected by the number of visitors. Public access is good – see 3.2.4 Site Infrastructure.

Access points need to be in working order and routes must be kept clear. Grazing on both sides of the reserve with sheep and cattle is extremely important for conservation. It has an impact on the general public, mainly dog walkers. Warning signs and interpretation materials should contain relevant information explaining the conservation needs for chalk downland and habitat management generally.

Opportunities exist to educate the local community, schools and visitors in the importance of the South Downs and the conservation work undertaken. Local naturalists and bird watchers are keen to be involved in species recording and data collection, in particular Seaford natural History Society.

The two year (2017 - 2019) Seaford Community Wildlife Project aims to make links with local community and in particular local schools to raise awareness of the reserve.

### **4.4.2: Objective 4**

To provide for public access, use and enjoyment without compromising the conservation needs of the site. Provide interpretation materials to enhance visitors experience and inform them of the importance of the site for all its attributes as well as advising them of cliff safety. Engage with the local community and encourage participation in the practical management of the site and collection of natural and historical data to benefit the knowledge of the local area.

#### **4.4.3: Factors**

##### **1 - High Profile Site**

High footfall due to the view provided of the Seven Sisters impacts on the site in many ways. No statistics exist for visitor numbers.

##### **2 - Shared responsibility for signage and interpretation**

All interpretation and signage must be compatible with Seaford Town Council, the National Trust and SDNPA. Planning permission may be required.

##### **3 - Walkers with Dogs (see also Grazing)**

Engage with dog walkers to encourage responsible dog ownership and raise awareness of the impact of dog faeces on the site. Conflict between visitors and grazing means that the location of grazing areas in relation to public access must be considered and appropriate information and signage provided.

##### **4 – Activities**

There is possible conflict between high footfall and activities such as cycling and drone flying which may be detrimental to the site. Scattering of ashes and memorial flowers left on benches are common. The site is a very popular location for filming and all related activities must be authorised.

##### **5 - Litter/Rubbish (see also Saline Lagoon)**

The high volume of visitors gives rise to a considerable amount of litter. Litter bins are not practical due to lack of access to many areas.

##### **6 - Cliff erosion**

Cliff erosion may impact on public safety and the location of PROW.

#### **4.4.4: Attributes**

##### **Local Communities are aware of the Reserve**

##### **Local Schools use the Reserve as a Resource**

**Local People are Involved in helping maintain the value of the nature reserve through participation of its management.**

#### **4.4.5: Management Rationale**

The site receives high visitor numbers due to its location and proximity to the Seven Sisters. Opportunities exist to educate visitors in the importance of the South Downs, the habitat and the conservation work undertaken by SWT. Access points need to be in working order and routes must be kept clear.

#### **4.4.6: Management List**

##### **1 – Access**

Monitor paths, keep clear of vegetation and provide safe access for visitors to all parts of the site. Where possible ensure areas of bare ground are maintained. Support STC with managed retreat of cliff top path.

##### **2 – Interpretation**

Working with partners, and in conjunction with, the Community Wildlife Project, install and maintain appropriate and unobtrusive signage to inform and advise visitors of the points of interest. Explain the conservation needs for chalk downland and habitat management generally with specific reference to key species such as the Potter Flower Bee and Moon Carrot. (See also Section – grazing).

##### **3 – Signage**

In conjunction with partners install and maintain appropriate and unobtrusive signage to inform visitors of safety issues relating to the cliff edge. Inform visitors that certain activities such as cycling and drone flying are not permitted on the reserve. Provide up to date signage regarding grazing. (See also Section Grazing)

##### **4 – Litter/Rubbish**

Many groups and individuals carry out litter picking on the reserve and the beach. This needs to be co-ordinated and the rubbish removed from the site by Lewis District Council.

##### **5 – Volunteers**

Local people are involved with the Reserve and aware of opportunities to volunteer.



## **6 – Visitor Survey**

There is little information about visitors to the reserve. Gathering details such as numbers, reason for visit, and home location could help to inform management and for funding applications. Volunteers could be used to carry out a survey in the first five years of the plan.

## **7 – Engagement**

Encourage local community groups to use and enjoy the nature reserve through the mapping and recording features outside of the management plan.

The Seaford Natural History Society and local history groups could participate in increasing the knowledge base of the local area through recording and surveying of the site. Suggestions include the monitoring of reptiles by conducting a survey of where hibernacula are present. The mapping of **Heath Snail *Helicella itala*** **(Priority 3)** This large and distinctive snail could be mapped using the same methodology as that used for mapping key plant species. Biological monitoring will be supported and guided by the senior ecologist.

The site has been altered and impacted on by man for many years, especially in the early 20<sup>th</sup> century. The surveying of historical and archaeological features under the supervision of local archaeologists could help inform the local community of the lost history of the site.

## **7 – Education**

Promote educational use of the site with local schools and groups. Liaise with SWT Education Centre at Seven Sisters and the SWT Community Wildlife Project Officer during the term of the project.

### ***4.5: Feature 5 - Historical/Archaeological/Geological interest***

#### **4.5.1: Description**

The site has a number of archaeological features dating from the iron-age and relating to WW1 when there was a large army camp of around 15000 soldiers on and around the western side of the reserve.

The Coastguard Cottages built in the early 1800's, and the Cable Hut from which the first telephone cables connected with France, are both of significant historical importance but are privately owned and do not form part of the Reserve.

#### **4.5.2: Objective 5**

Identify areas of archaeological/historical/geological importance, and ensure that they are not damaged in the course of reserve management or by visitors. [Refer to SWT policy]. Provide interpretation to inform visitors of relevant points of interest.

#### **4.5.3 Factors**

##### **Loss of features through scrub encroachment.**

There are features on the site which are hidden by scrub.

##### **Damage and disturbance caused by metal detectorists, amateur archaeologists and geologists.**

Responsible use of the site is encouraged. Use of metal detectors is not permitted.

#### **4.5.4: Management Rationale**

SWT will not knowingly cause damage to features of historical/archaeological/geological interest. We will also endeavour to collate information to ensure that we know of any such features in areas under our control and so put ourselves in a position to avoid any damage.

#### **4.5.5 Management List**

##### **1 – General Management**

*Taken from SWT Archaeology on Trust reserves policy.*

We will:

- Audit all reserves for features of archaeological interest
- Statutory features (scheduled ancient monuments)
- Other known features.
- Likely interest

- List actions or potentially damaging operations that is likely to cause archaeological concern on our own nature reserves.
- Ensure that the Reserve Manager liaise with County Archaeologist when a potentially damaging operation is recognised.
- Endeavour to ensure that a recognised archaeologist is consulted in the compilation of reserve management plans, where reserves are known to be particularly important in archaeological terms.
- Ensure that features of archaeological interest are identified in nature reserve management plans and that the implementation of management conserves such features.
- We will not grant permission for metal detecting on our nature reserves except under very special circumstances.
- Take all known important features into account when planning and carrying out work

## **2 – Enhance Features of Interest**

Clear scrub to reveal features of archaeological interest

## **3 – Provide interpretation**

Review and update current interpretation boards on site and produce updated leaflet (part of Community Wildlife Project).

## ***4.6. Feature 6 – Legal and administrative obligations.***

### **4.6.1: Objective 6**

Ensure all legal and administrative obligations are met

### **4.6.2 Management List**

#### **1- The lease.**

Ensure SWT undertakes its obligations as laid out within the terms of the Lease.

#### **2- LNR Management Committee.**

Undertake to work with and support the needs of the STC management committee. Provide annual reports outlining activities.

#### **3 – Liaise with stakeholders and other relevant parties. (See 3.1.3)**

Maintain working relationships to improve communication and co-ordinate shared interests.

#### **4 - Maintain site safety through SWT policy.**

Refer to SWT working instructions for detail of H&S policy.

- Maintain site risk assessments annually.
- Ensure site safety maps are up to date.
- Ensure all contractors abide with Trust policy by providing task risk assessments, method statements where appropriate and that contractor staff are fully competent and trained for the task in hand.

## **5. PROJECT REGISTER**

### **Five Year Work Plan**

**1 – High Priority, 2 – Medium Priority, 3 – Low priority**

<b>Prescription</b>	<b>18/19</b>	<b>19/20</b>	<b>20/21</b>	<b>21/22</b>	<b>22/23</b>
Fixed point photography	1	1	1	1	1
Aerial photography	3	3	3	3	3
Controlled grazing	1	1	1	1	1
Monitor sheep worrying/attacks	2	2	2	2	2
Provide grazing notices	1	1	1	1	1
Scrub control – priority to low established scrub	1	1	1	1	1
Treat regrowth with approved herbicide as needed	1	1	1	1	1
Monitor and control scrub encroachment	1	1	1	1	1
Ride and glade creation and maintenance C 2,3 and 8	2	2	2	2	2
Create new scallops and glades, some on rotation in C2, 3 and 8	1	1	1	1	1
Manage wild privet C7 and 8	1	1	2	2	2
Remove and control invasive species such as Cotoneaster and Russian Vineweed	1	1	1	1	1
Work with neighbours to control encroachment of invasive species from gardens	2	2	2	2	2
Clear and burn arisings minimising number and size of fire site	1	1	1	1	1
Provide management support to Golf Course C3, 4, and 5 and Tenant farmer C13	1	1	1	1	1

Formulate scrub management priority map	2				
Create invertebrate mini-cliff nesting site	2				
Work with partners on education and signage regarding cliff safety	1	1	1	1	1
Provide interpretation material	1	2	2	2	2
Educational engagement/guided walks	2	2	2	2	2
PROW inspection and maintenance	1	1	1	1	1
Promote volunteer involvement	2	2	2	2	2
Install water trough(s) in Compartment 10	1				
Clear scrub to enhance archaeological features	3	3	3	3	3
Formulate archaeological plan	2				
Engage with dog walkers to raise awareness	2	2	2	2	2
Litter collection and disposal off site	1	1	1	1	1
Support and encourage volunteers	1	1	1	1	1
Community engagement	2	2	2	2	2
Education – involve schools (Community Wildlife Project)	2	2	2	2	2
Visitor survey		3			
Liaise with STC and support LNR Management Committee	1	1	1	1	1
Liaise with E.A. re shingle moving	1	1	1	1	1
Liaise with neighbours	1	1	1	1	1
Inspect for site safety	1	1	1	1	1

### Monitoring Priority Plan

Taxa	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Broad-spectrum Invertebrate survey										1
Barred Tooth-stripe	1	1	1	1	1	1	1	1	1	1
Butterfly transect		2	2	2	2	2	2	2	2	2
Forester and other day-flying moths		2	2	2	2	2	2	2	2	2
Heath Snail		3*	3*	3*	3*	3*	3*	3*	3*	3*
Moon Carrot	1	1	1	1	1	1	1	1	1	1
Green-	1	1	1	1	1	1	1	1	1	1

winged Orchid										
Henbane		3	3	3	3	3	3	3	3	3
Other plants mapped	3	3	3	3	3	3	3	3	3	3
Badgers	3	3	3	3	3	3	3	3	3	3
NVC						1				
Reptiles	3	3	3	3	3	3	3	3	3	3
Migratory birds		1	1	1	1	1	1	1	1	1
Breeding birds	2	2	2	2	2	2	2	2	2	2
<i>Anthophora retusa</i> survey		1			1			1		
Ground-ivy mapping		3					3			
Fixed-points	1	1	1	1	1	1	1	1	1	1
Rapid Grazing Assessment	1	1	1	1	1	1	1	1	1	1

\*=once in lifetime of plan

## 7. ACKNOWLEDGEMENTS

We would like to acknowledge the help of the following in producing this Management Plan:

Graeme Lyons, Senior Ecologist SWT

Seaford Natural History Society

Luke Barber, Research Officer, Sussex Archaeology Society

Seaford Head LNR Management Committee

Bob Self and Sussex Ornithological Society

Mike Edwards, Ecologist

The support of the Environmental Stewardship Scheme as part of the Rural Development Programme for England

## **8. APPENDICES**

Map 1 – Ownership

Map 2 – Aerial

Map 3 – Location

Map 4 – Rights of Way

Map 5 – Compartments & Rides – East





Map 6 – Compartments & Rides – West

Map 7 – Designations

Map 8 – Proposed Interpretation

Map 9 – NVC 2012

# Map 1 Seaford Head- Local Nature Reserve Ownership

-  LNR
-  Seaford Town Council
-  National Trust
-  East Sussex County Council

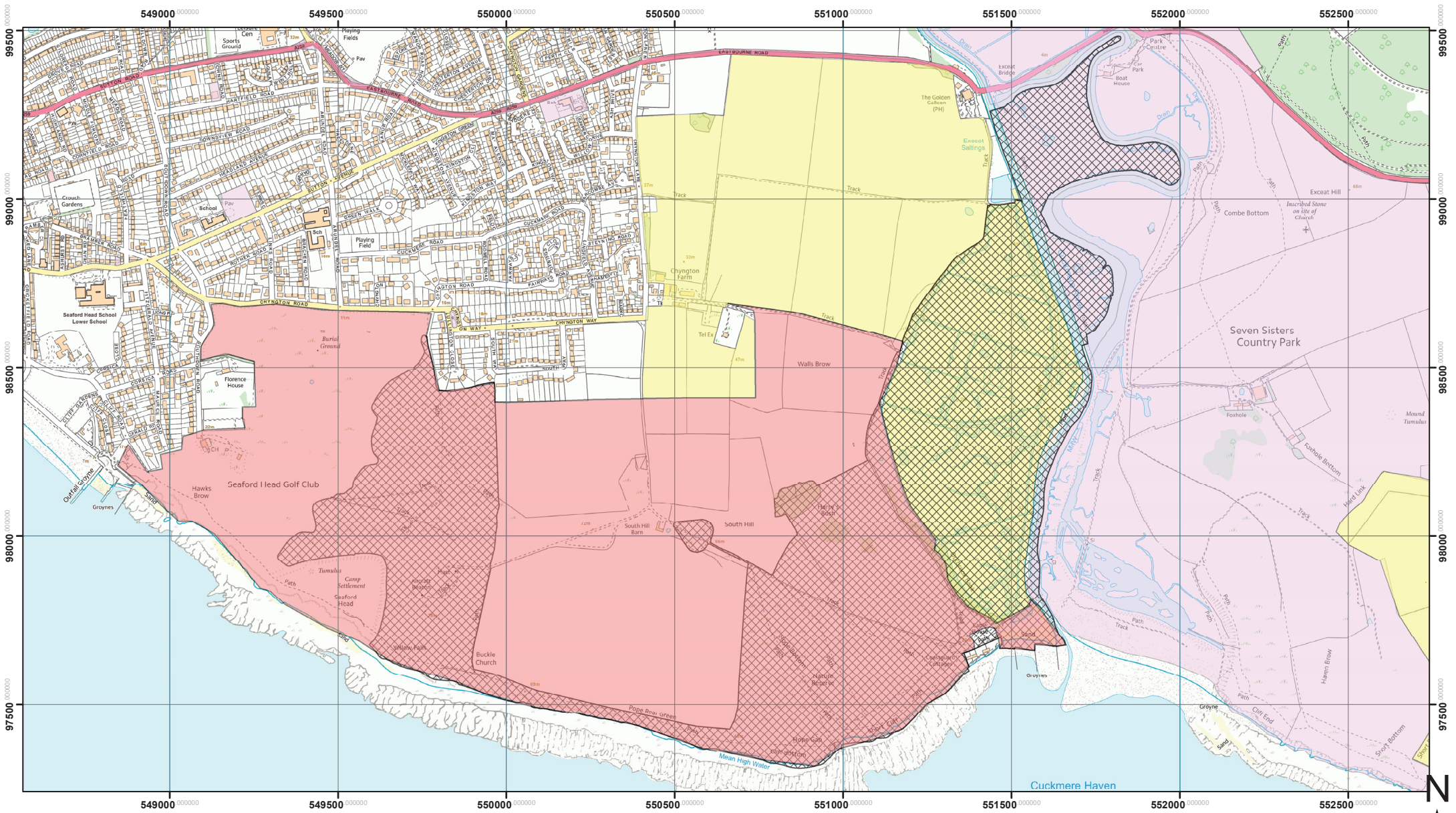
SWT Land Management Team

Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD

01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)



**Sussex**  
Wildlife Trust



This map is based upon or reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown Copyright. All Rights Reserved 2009.  
Unauthorised reproduction infringes Crown copyright and may lead to prosecution and/or civil proceedings.

Sussex Wildlife trust OS Licence Number: 100025883





# Map 2 -Seaford Head - Aerial

SWT Reserve

South Hill Barn Car Park

SWT Land ManagementTeam  
Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD  
01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)



Source: Esri, DigitalGlobe, GeoEye, Earthstar

This map is based upon or reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown Copyright. All Rights Reserved 2009.  
Unauthorised reproduction infringes Crown copyright and may lead to prosecution and/or civil proceedings.

Sussex Wildlife trust OS Licence Number: 100025883





# Map 3 - Seaford Head - Location

 Seaford Head

SWT Land Management Team

Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD



**Sussex**  
Wildlife Trust

01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)



This map is based upon or reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown Copyright. All Rights Reserved 2009. Unauthorised reproduction infringes Crown copyright and may lead to prosecution and/or civil proceedings.

Sussex Wildlife trust OS Licence Number: 100025883



# Map 4 - Seaford Head - Rights of Way

- ESCC Rights of Way ( Footpaths )
- South Hill Barn Car Park
- SWT Reserve

SWT Land Management Team  
Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD  
01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)



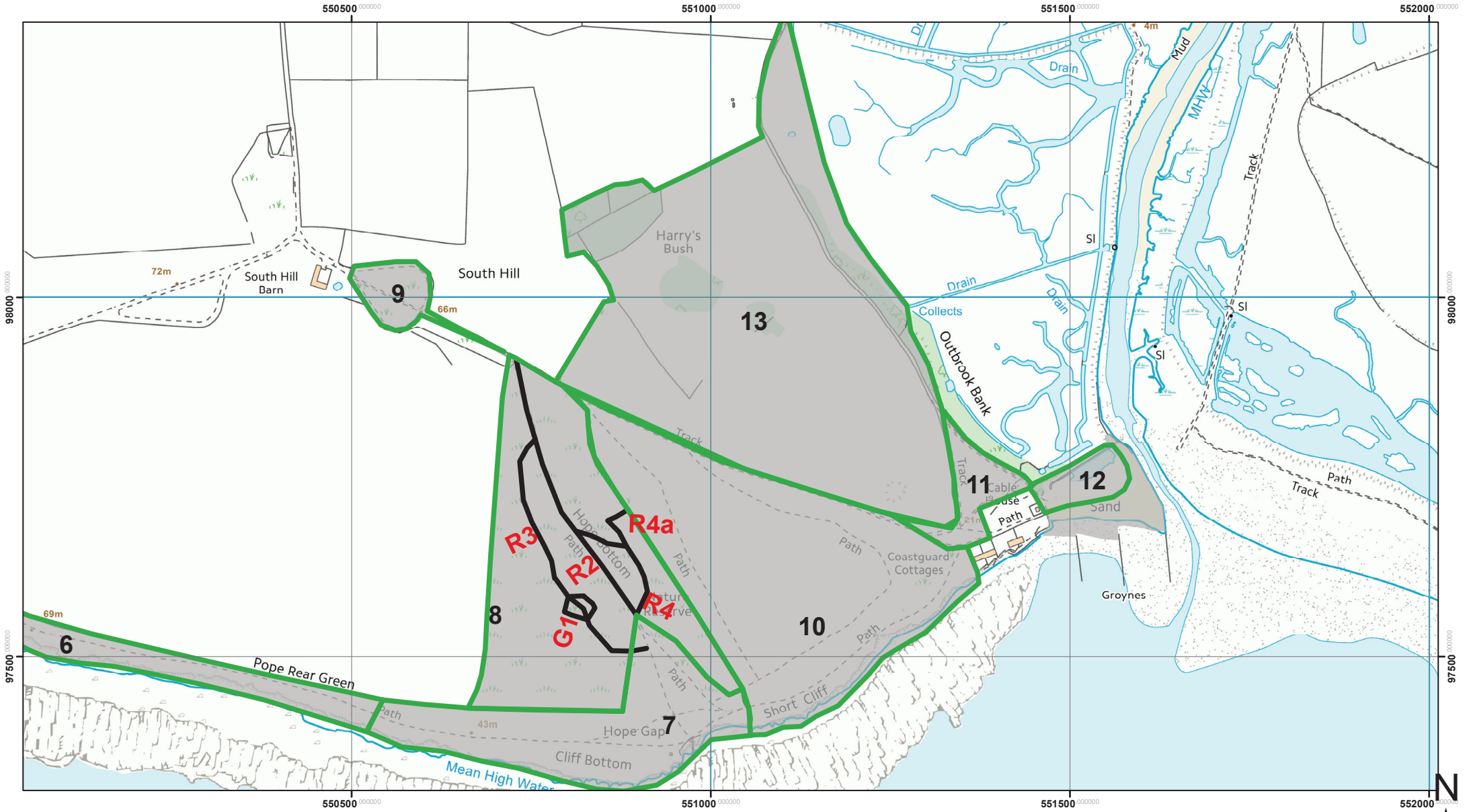
This map is based upon or reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown Copyright. All Rights Reserved 2009. Unauthorised reproduction infringes Crown copyright and may lead to prosecution and/or civil proceedings.



# Map 5 - Seaford Head - Compartments & Rides - East

- Compartments
- Rides
- SWT Reserve

SWT Land Management Team  
Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD  
01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)



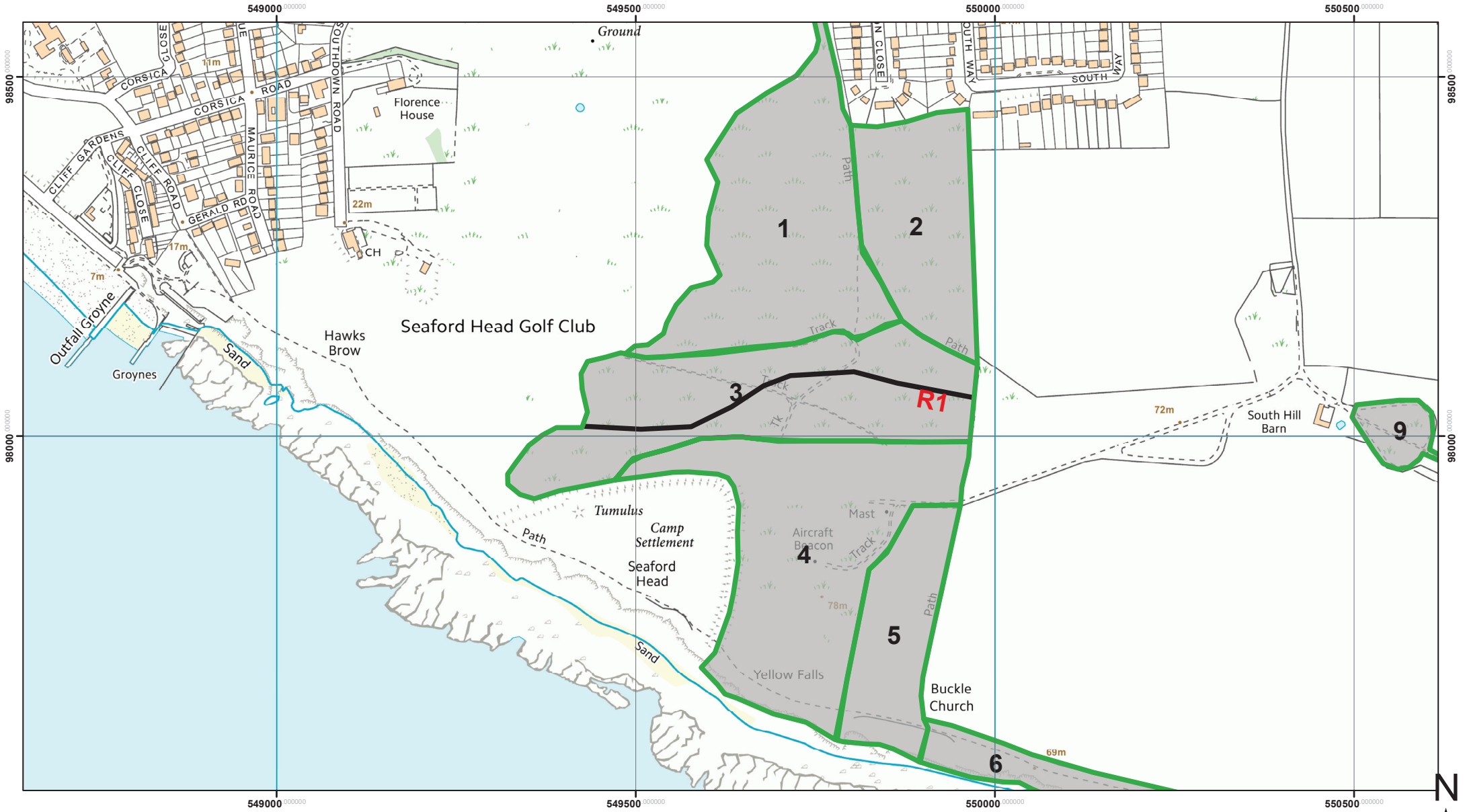
This map is based upon or reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown Copyright. All Rights Reserved 2009.  
Unauthorised reproduction infringes Crown copyright and may lead to prosecution and/or civil proceedings.



# Map 6 - Seaford Head - Compartments & Rides - West





- Compartments
- Rides
- SWT Reserve

SWT Land Management Team  
Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD  
01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)





# Map 7 - Seaford Head-Designations

-  SWT Reserve
-  LNR
-  Local Wildlife Site
-  SSSI

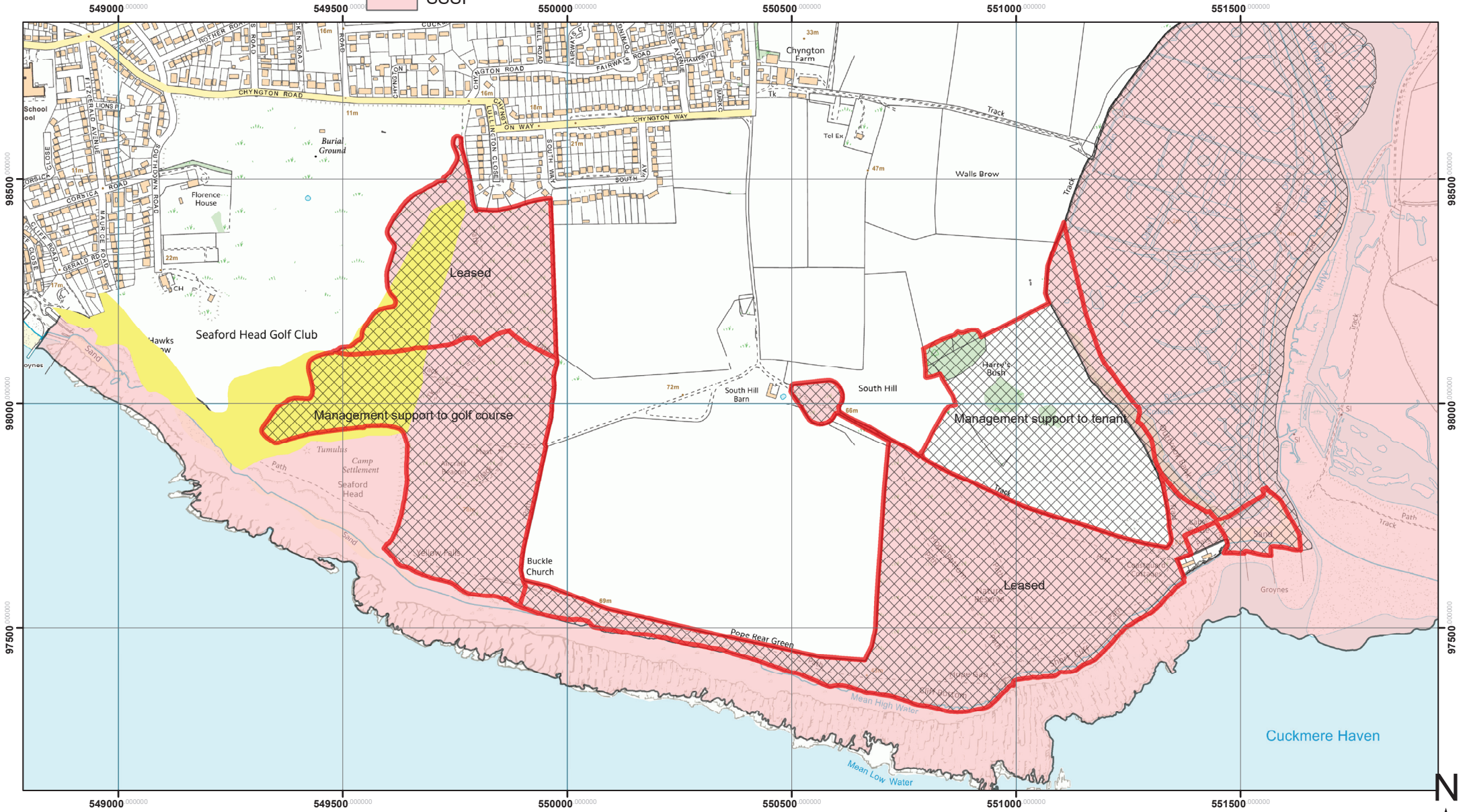
SWT Land Management Team

Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD

01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)

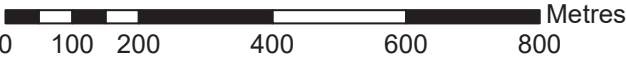


**Sussex**  
Wildlife Trust



This map is based upon or reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown Copyright. All Rights Reserved 2009.  
Unauthorised reproduction infringes Crown copyright and may lead to prosecution and/or civil proceedings.


Sussex Wildlife trust OS Licence Number: 100025883



# Seaford Head Nature Reserve. Proposed interpretation board site plan. June 2018

MAP 8



- 

Sussex Wildlife Trust Nature Reserve boundary
- 1

A1 upright noticeboard with pinboard

2

A1 upright noticeboard
- 3

A1 upright noticeboard with pinboard

4

A2 lectern style board
- 5

Oak slate entrance sign

6

A2 lectern style board
- 7

Oak slate entrance sign

8

A2 lectern style board





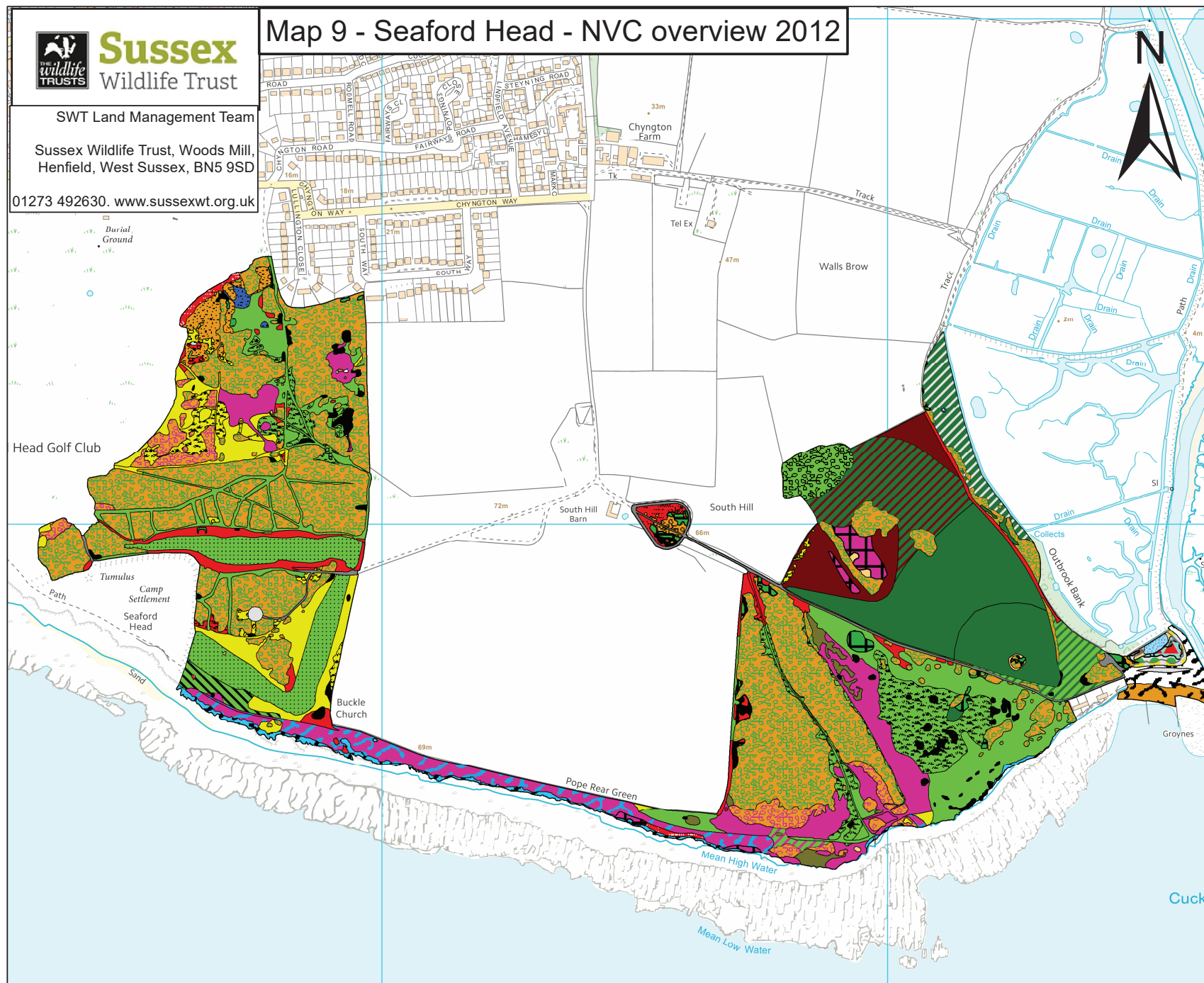
**Sussex**  
Wildlife Trust

SWT Land Management Team

Sussex Wildlife Trust, Woods Mill,  
Henfield, West Sussex, BN5 9SD

01273 492630. [www.sussexwt.org.uk](http://www.sussexwt.org.uk)

## Map 9 - Seaford Head - NVC overview 2012



### Legend

#### Seaford Head NVC 2012

##### NVC

- Bare
- Bare chalk
- Brackish Water
- Building
- CG2a
- CG2a with cotoneaster
- CG3b
- CG3b/W21d
- CG4b
- Green
- Hairy Sedge
- MC11b
- MC11c
- MC5d
- MG1b
- MG1c
- MG1d
- MG1d/W21c
- MG5b
- MG5b/CG2b
- MG5b/MC11c
- MG5b/MG6c
- MG5b/W21c
- MG6a
- MG6c
- MG6c/MG7a
- MG7a
- OV24
- OV25
- OV27
- S21
- S22
- SD1a
- SD1a/SM27
- SM16b
- SM21 type
- SM24
- SM28
- SM8
- Sand
- Shingle
- Track
- U1b
- U20c
- U4c
- W21a
- W21c
- W21d
- W23
- W24
- W25a
- W8