Kent Country Parks

Shorne Woods Country Park Management Plan 2021-2026

Updated: January 2025 by Mark Gracey - Ranger Services Manager

This management plan has been produced to be as accessible as possible to all and meets KCC accessibility guidelines.

Contents

1 BACKGROUND INFORMATION

1.1 Location and Site Description

Shorne Woods Country Park (OS Grid Reference TQ 684699) is in the civil parish of Shorne, in the district of Gravesham. The site totals 118 hectares, with Shorne Wood covering approx 70 hectares, Randall Wood approx. 32 hectares, and Brewer's Wood 17 hectares.

Shorne Woods Country Park is a Site of Special Scientific Interest (SSSI) within the Kent Downs Area of Outstanding Natural Beauty (KDAONB) and part of the London Metropolitan Green Belt. There are a wide variety of natural habitats to enjoy throughout all seasons of the year and 118 hectares (ha) (292 acres) of park to explore and exercise in. As a SSSI all work carried out on site must have permission of Natural England and the Forestry Commission before it is carried out and any works affecting water courses must have Environment Agency permits. All major clearance works and archaeological works from 2006 to 2011 were carried out as part of the Heritage Lottery Project (HLF) and there is a 25- year commitment to maintain the work started by the HLF project. The biodiversity enhancement works funded by National Highways have a 30-year commitment to maintain the work.

The Park was historically part of the pleasure grounds of the Cobham Hall Estate. From the 1920s to the 1970s, clay extraction for the local cement industry occurred. The old clay pits created the flat, grassy areas that are now home to the picnic and play areas, Visitor Centre, and car park. Prior to this, the whole of the park would have been covered by ancient woodland.

The Park opened in 1987, having been purchased by Kent County Council (KCC) in 1982. In 2001 Randall and Brewers Woods, two neighboring woodlands, were also purchased with an HLF grant. An HLF project has supported access and nature conservation work enabling these areas to open to the public in June 2008. A new award-winning Visitor Centre championing sustainable technologies and construction was opened in 2006 funded principally by the Office for the Deputy Prime Minister and grants from organizations such as EDF, AONB and the Forestry Commission. In 2013 a further 2ha of Brewers Wood were purchased with an HLF 'Your Heritage' grant. This area was opened to the public in 2014.

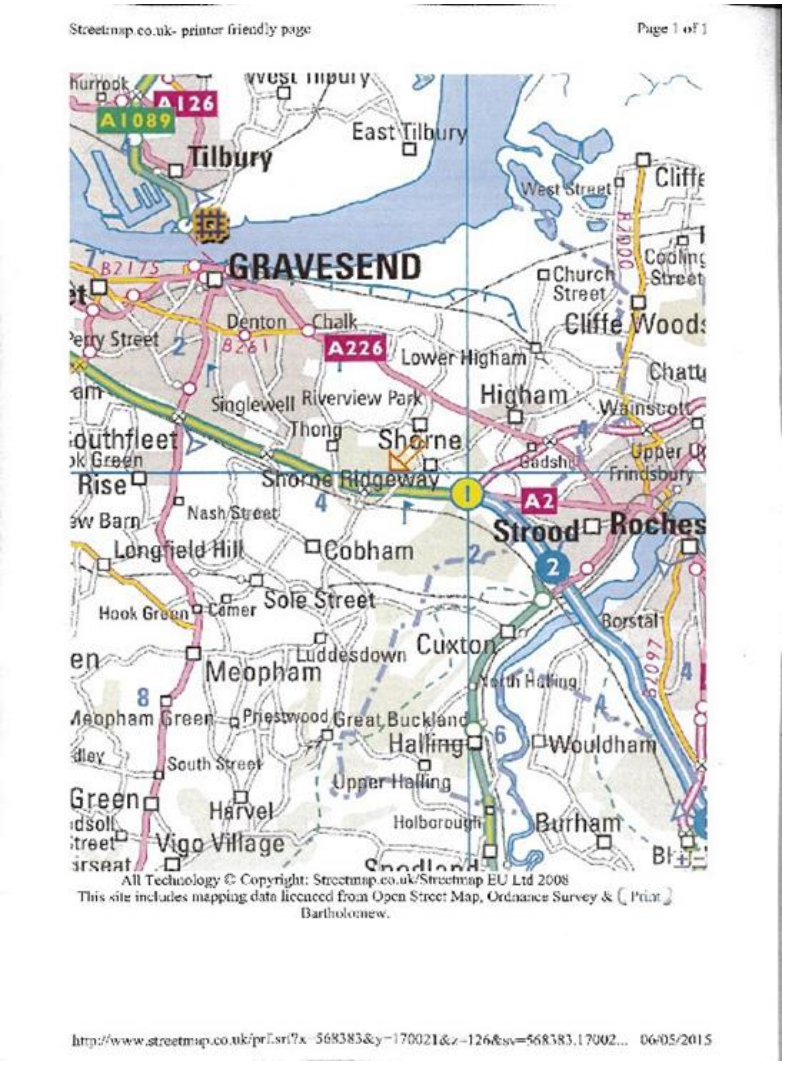
1.2 Contact Details

- Address: Shorne Woods Country Park, Brewers Road, Shorne, Kent, DA12 3HX
- Telephone Number: 03000 414747

1.3 Directions to Site

Shorne Woods is signposted off the A2 road between Gravesend and Rochester at the Cobham/ Shorne/ Higham junction. The nearest train station is at Higham or Sole Street approximately 3 miles. The site is serviced by the 416 bus service run by Red Route. A site location plan is given in *Figure 1* below.

Figure 1



1.4 Map Coverage

Shorne Woods Country Park is covered by the following Ordnance Survey maps.

- Landranger sheet No. 178, scale 1: 50,000
- Explorer sheet No. 163, scale 1: 25,000

The site is shown on many historic maps, which are valuable for the interpretation of the ecological context, and land use history.

- Kent - 1869, 1876, 1897, 1909, 1933 at 1: 10,560 scale
- Kent - 1897, 1909, 1946 at 1: 2,500 scale

1.4.1 Photographic Coverage

General views within the wood complex are available and held by Kent County Council, who also hold the following past aerial photographs:

- 1945,1961, 1967 and 1985,1990, 1995,1999, 2005, 2013 scale approx. 1: 10,000
- 1972, scale approx. 1: 25,000

An aerial photo from 2023 is shown in Figure 2 below.

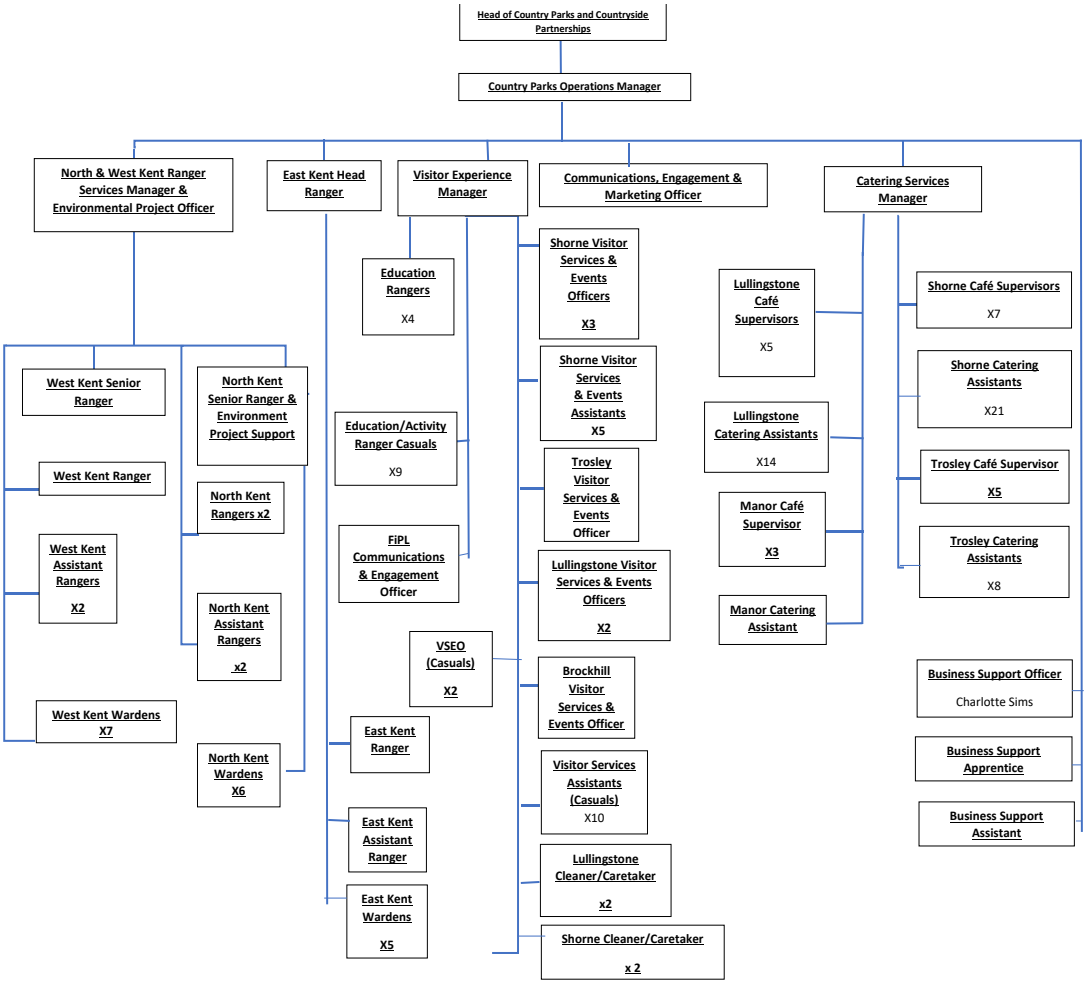
2 Management of the Site

Shorne Woods Country Park is owned and managed by Kent County Council (KCC).

Shorne Woods Country Park forms part of a network of 9 county council-owned sites, which total 810 hectares. They cover a wide range of habitats including chalk grassland, deciduous and coniferous woodland, and meadow. They are managed to increase interest in, and understanding of, nature conservation.

This management plan will run from January 2021 until January 2026. The management plan is reviewed and updated annually by the Ranger Services Manager as part of the Green Flag process. Most of the management work outlined in this Management Plan will be undertaken by KCC staff and volunteers, who own a range of equipment for general estate maintenance.

A brief outline of the structure is shown here in figure 3.



3 Wider Policies and Strategies Affecting the Site

3.1 Statutory Designations Site of Special Scientific Interest (SSSI)

The wood complex is part of the larger Shorne and Ashenbank Woods SSSI (designation details shown in Appendix *1)* which was initially designated in 1968. Accordingly, the site has been notified under *Section 28* of the *Wildlife and Countryside Act 1981* (*as amended*). Local Authorities and other public institutions also have a statutory duty to further the conservation and enhancement of SSSIs both in carrying out their operations, and in exercising their decision-making functions, which includes planning decisions. All areas outside of the car park and visitor centre are protected under the SSSI rules. This management plan is consented by Natural England.

In April 2011 the site was assessed and deemed to be in favourable condition.

The SSSI contains four SSSI units, although only two of these are owned by Kent County Council, Unit 1 covers Brewer's Wood and Unit 2 covers Shorne Wood, Randall Wood and Randall Heath.

3.2 Kent Downs National Landscape

The park acts as a northern gateway to the Kent Downs National Landscape (KDNL) with boundary of the park acting as the boundary of the KDNL.

The park is a nominated Geosite in the KDNL's proposed Cross-channel Geopark project running from 2022-2025.

3.3 London Metropolitan Green Belt

The park sits within the London metropolitan green belt area and fulfills the key role of paragraph 145 in the National planning policy framework section 13 on green belts which states 'local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation'.

3.4 Tree Preservation Order (TPO)

Shorne Woods (except for the clay pit) is subject to a TPO [Tree Preservation Order No. 1 1972]. Before any felling or coppicing can be carried out, formal approval must be sought from the appropriate authority, currently Gravesham Borough Council, unless the compartment is covered by the Woodland Grant Scheme or is for essential health and safety work. All trees including regenerating trees are covered by the order.

3.5 Non-statutory Designations or significant details

Under the provisional Ancient Woodland Inventory (Pritchard *et al.* 1994), three areas of the woodland in Shorne Woods Country Park are designated as ancient semi-natural woodland these are:

- most of the Randall Wood,
- most of the Brewer's Wood, and
- a small pocket in the south west corner of Shorne Wood.

In addition, one small area associated with a disused quarry (although not its entire footprint) is referred to as 'woodland cleared since the production of the 1st series OS maps'.

There is only one public right of way on the site entering at Brummel Hill Wood then following the bottom of the Knoll into Randall Wood. All other routes are permissive only.

The site is working with local partners to achieve designation as a Super nature reserve. This work is led by the KDNL, funded by the Lower Thames Crossing and involves over a 1000ha of the local area.

3.6 English Woodland Grant Scheme

The site was subject to the Woodland Grant Scheme (WGS) which ran from the 05.07.1996 until 31.03.2002. In the 1996-2002 WGS *Compartments 2d, 5c, 6e, 8a* were cleared of storm damage and invasive Rhododendron, and then plantations created after the 1987 storm were gapped up and maintained. The area around the

pond and viewpoint in *Compartments 4b* and *5a* was cleared, and the whole scheme area was subject to Rhododendron and Sycamore control. Further WIG grants funded woodland works until 2016.

A woodland management plan was agreed in Jan 2021 which gives felling permissions for the next 10 years of woodland works. This is agreed with the Forestry Commission and consented by Natural England in addition to this management plan and is available on request.

3.7 Heritage Lottery Fund

In 2004, Shorne Woods Country Park was awarded nearly £1 million from the Heritage Lottery Fund. KCC contributed £281,543.96 and other grants contributed £161,619.04 including grants from the Kent Downs AONB, Forestry Commission, Woodland Trust and Natural England. Funding was for improved site access, biodiversity, interpretation and facilities, a Project Officer, an Environmental Education Officer, a Community Archaeologist, and improved parking. This money has been invested in the site over a 5-year period ending in July 2011 and there is a 25-year obligation to maintain all aspects of HLF funded work. All work was agreed with Natural England and the Forestry Commission and is detailed in reports including:

- *An Audience Development Plan*: The Tourism Company (2005)
- *An Integrated Operations Plan*: Clarity Rural Consultants (2005a)
- *A Conservation Management Strategy*: Clarity Rural Consultants (2005b)
- *An Access Strategy:* Kent County Council (2005)

The reports were undertaken with extensive community engagement including public meetings at Shorne Village Hall and site events publicising the proposed changes.

A breakdown of the expenditure areas is shown below:

- Biodiversity improvements- £294,728
- Access improvements- £196,707
- Marketing and education- £305,470
- Car park improvements- £317,021
- Heritage- £165,340

- Professional fees- £127,474

In 2013 an additional HLF 'Your Heritage' grant of £90,000 was achieved to purchase 2ha of woodland in Brewers Wood and integrate it into the main site and provide interpretation on woodland management.

3.8 Green Flag and South and South-east in Bloom awards

Shorne Woods Country Park has been awarded the Green Flag award every year since 2008. As part of this process the site has an annual inspection based on a desk-based assessment and field evaluation. This award is awarded every year to parks that show continuous improvement in all areas encompassing all aspects of the park management and organisational infrastructure including conservation, customer focus, Finance, community engagement and health and safety.

The park has won the South and South-East in bloom gold award for country parks every year since 2010.

Both these schemes are judged by independent judges annually against a set-criteria used as a standard nationwide for country parks.

3.9 Biodiversity Action Plans

Three habitat types on the site are given priority under the Local Biodiversity Action Plan (Kent Biodiversity Action Plan Steering Group 1997), these are 'woodland and scrub', 'lowland wood-pasture and historic parkland', and 'heathland and mire'. The site also has suitable habitat for several species listed in the Kent Species Action Plan including Dormouse, Serotine bat, and Great Crested Newt, the latter being abundant throughout compartment 10.

3.10 Archaeology

The principal legislation affecting monuments in England is the *Ancient Monuments and Archaeological Areas Act 1979,* as amended by the *National Heritage Act 1983*.

The features at Shorne Woods are of regional importance but are not candidate Scheduled Ancient Monuments (SAMs).

3.11 Kent County Council Internal Policy and strategies

The parks have their own 2023-2028 strategic plan that links into wider KCC objectives. https://www.kent.gov.uk/__data/assets/pdf_file/0003/148854/Kent-Country-Parks-Strategy-2023-28.pdf

The site adheres to the Kent County Council Environment Policy (2015) and Kent County Council general statement of policy on health, safety, and welfare at work (October 2021).

As part of KCC the site also works within the ISO14001 quality standard.

Kent County Council has internal teams focused on climate change and monitoring KCCs climate change performance:

https://www.kent.gov.uk/environment-waste-and-planning/climate-change/climate-emergency-statement/our-climate-emergency-performance

There is also a carbon net zero action plan with an aim of being carbon neutral by 2030, that can be found here:

https://www.kent.gov.uk/__data/assets/pdf_file/0017/122291/KCC-Net-Zero-action-Plan.pdf

The parks are part of the Kent Nature partnership https://kentnature.org.uk/

3.12 National Highways, Lower Thames Crossing Project

Shorne Woods is immediately adjacent to the proposed Lower Thames Crossing (LTC) project and is eligible for funding through the National Highways designated funds and direct funding from the Lower Thames Crossing project.

The park received £186,623 of designated funds to replace all internal and external interpretation in 2022 and to enhance the acid grassland enclosure within the park.

Within the main LTC proposal, A ten-year biodiversity enhancement project to improve 32ha of woodland understory and create linking corridors started in 2022 and is due to continue until 2032 subject to the successful delivery of the projects Development Consent Order (decision due May 2025). A detailed separate project plan is available on request for this 10-year project, it is summarized within this plan.

4 VISION AND AIMS FOR THE SITE

4.1 Vision

Shorne Woods Country Parks aims to provide a welcoming, safe environment for all ages and backgrounds whilst protecting and conserving the Site of Special Scientific Interest. The site aims to raise awareness of sustainable energies, healthy living and recycling through the visitor centre and café.

4.2 General Aims

The overall vision for the country parks in Kent is for the county to be renowned for its great country parks, operating a service which meets the needs of the people of Kent and its visitors, and which is securely funded into the future.

4.3 Conservation Management objectives and obligations

Shorne Woods Country Park will be managed to provide several features including a woodland mosaic comprising a mixed age structure of broad-leaved coppice with standards and high forest which will be left as minimum intervention. The entire site is managed with biodiversity as a major objective; this complies with the UK Woodland Assurance Scheme. This states that a minimum of 15% of the woodland forest area should be managed with conservation and enhancement of biodiversity as a major objective. Wherever possible there will be no loss of important / veteran trees, with tree surgery being used wherever possible to extend the life of the tree. The full site is a SSSI.

Between 2006 and 2011 a large-scale programme of *Rhododendron ponticum* (Rhododendron) control has taken place to control this non-native species and the main goal for Shorne Woods Country Park will be the control of this invasive species. The site achieved its aim of the SSSI being deemed in favourable condition when assessed by Natural England in April 2011 and the aim of this plan is to sustain that. Areas of wood pasture, acid grassland, ponds and wetland will be maintained and enhanced where possible to further add to the site's overall biodiversity.

From 2022-2032, the National Highways funded, Biodiversity enhancement project aims to link the coppice woodlands across the site to the South and West through corridors and copses of woodland understory planting. More information on this can be found in section 5.

The park works with local landscape partners including Woodland Trust, Forest England, National Trust, Plantlife and the KDAONB to work collectively towards mutual goals which include the proposed Kent Geopark and exploring options for the local area to become a super nature reserve.

4.4 HLF Obligations for conservation

There are 25-year obligations specifically for conservation following on from the HLF project (ended July 2011) to ensure the terms of the HLF grant are met. These are:

- Monitor and re-treat any regeneration of Rhododendron Ponticum across the site.
- Monitor and re-treat any regeneration of Sycamore across the site (subject to change due to threat of tree disease and climate change impact on native tree species)
- Maintain the open glades (A- the old grass triangle, B- the oak glade, C- explorer/shared user junction and D- comp 13a, E- comp 12abc, F-comp 9a)
- Maintain the 4km ride network 3 zone system, centre 5m cut every year to maintain constant open space, adjacent 5m strips every 2nd year to maintain a constant grass and herb layer and the outer strips cut every 8-10 years to maintain a young coppice cycle.
- Record and monitor the restoration of acid grassland on Randall Heath, a Kent priority HAP project.
- Carry out surveys to monitor the success of the project work. These include the butterfly transect.

4.5 Visitor Services Objectives

Public enjoyment and recreation are a key feature of the site. The site aims to attract more visitors at all times of year. The site also aims to educate and inform the public on conservation and environmental issues whilst also promoting healthy living and wellbeing.

4.6 HLF obligations for visitor works

There is an obligation for the next 25 years to:

- Maintain the easy access extension routes to the Knoll and Randall Manor and easy access paths around the lakes and to the play areas.
- Maintain the shared user route in Brewers Wood and Randall Wood
- Maintain the explorer and heritage trails.
- Maintain 185 waymarker posts.
- Maintain the bridges and culverts on all routes.
- Maintain the interpretation within the visitor centre and out on site.

5 CONSERVATION MANAGEMENT

5.1 Physical

The climate in Kent is moderately Continental. In comparison to the rest of the British Isles, it generally has higher summer temperatures, whilst winter temperatures tend to be slightly lower than the rest of Southern England, with the county often being subject to brief cold spells. Rainfall levels tend to be below the UK average.

Shorne Woods Country Park lies on the Eocene deposits of clays, sands, and gravels which overlie chalk on the dip slope of the North Downs. The site was quarried 1930-1967, creating a flat, low-lying area with clay soils. The latter area is now largely colonised by trees, although there are some patches of open grassland, and several shallow ponds of varying size, which were artificially created after quarrying. Around the rim of the former quarry, the soil is deeper, and the vegetation is of mixed, ancient, semi-natural woodland which would formerly have been coppiced. At the western end of the site, the coppice woodland gives way to old heathland and wood pasture which has developed over sands and gravels; this part of the park is cut by some steep-sided valleys, through one of which flows a seasonal stream.

Randall and Brewer's Woods are representative of semi-natural woodland on Tertiary gravels, clays, and sands. Brewer's Wood lies over predominantly sand and gravel which support *Castanea sativa* (Sweet Chestnut) coppice with both *Castanea sativa* and *Quercus* sp. (Oak) standards. Randall Wood is more diverse with *Castanea sativa* coppice on sand and gravel but also extensive areas of woodland on clay.

Shorne Wood falls within the Kent Downs Area of Outstanding Natural Beauty and the North Kent Plain Natural Area as defined by Natural England. The North Kent Plain Natural Area consists of the strip of land between the North Downs and the Thames estuary. The topography is low-lying or gently undulating land, mostly below 50m altitude, but just exceeding 100 m in one or two places including Shorne. It is characterised by the clays and sands of the Tertiary era.

The North Kent Plain Natural Area includes large areas of semi-natural woodland, especially on heavier clay soils that are not suitable for farming. Although there are areas of high forest, the repeated felling, and re-growth of the coppice cycle has characterized these woodlands for centuries.

5.2 Habitats and Vegetation Communities

Shorne Woods is occupied by mature broad-leaved high forest with areas, mainly in the south-east of the site, consisting of broad-leaved coppice. A large section in the south-east of the site is occupied by a disused quarry; this 30ha area has been allowed to establish naturally as woodland dominated by Birch and grey willow with open areas of grassland, 3 areas have been managed as amenity grasslands. There are 14 ponds, mainly located in the disused quarry area, which support a range of aquatic and emergent plant communities. Randall Wood and Brewer's Wood consist of broad-leaved coppice, although some stands of high forest do occur, especially on the margins and adjacent to streams.

Woodland and scrub are a local biodiversity habitat in Kent. All three areas of woodland support stands of alder woodland, albeit limited in extent. Alder Carr is a rare woodland type in Kent, with the Kent Wildlife Habitat Survey (Kent Wildlife Habitat Survey Partnership 1995) holding only 19 records for this habitat type in Kent. The largest area is in Randall Wood in the valley adjacent to glade c.

All reports and species list are either stored electronically or paper copies held in the office at Shorne Woods Country Park. Annual ongoing records are kept from sightings by rangers while out in the field. They are collated each year and stored digitally to ensure ongoing records are kept outside of the formal surveys.

Surveys to identify the vascular plants occurring at the site and to classify the site's vegetation according to the National Vegetation Classification (NVC) system have been carried out by KWT. A vegetation survey of Shorne Woods Country Park was carried out in 1999 (Moyse 1999). The survey did not include Randall or Brewer's Woods. In 2001 a vegetation survey of Randall and Brewers Wood was carried out by the KWT when KCC took ownership of the land.

Twenty-nine different NVC sub-communities were recorded at the site during the 1999 survey. Most of this variety is provided by small areas of aquatic and swamp communities associated with the ponds and wetland areas. The vast majority of Shorne Woods Country Park consists of W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, of which several sub-communities are represented.

A 2010 botanical survey (funded by HLF) carried out over a 9-month period, by the KWT, located fixed point quadrants in key habitats and regenerating areas along with a series of fixed-point photography points to record change. The survey encompassed the full site and was carried out as the 5-year programme of HLF works has finished, so the survey provides an excellent baseline survey from which to

monitor the regeneration of the rides and glades, wood pasture and areas cleared of invasive species should resources allow.

5.2.1 Woodland and scrub

It can be assumed that most of the site was once occupied by W10a *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, typical sub-community, with the wetter soils on the flat plateau probably supporting W10b *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, *Anemone nemorosa* sub-community, while W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland probably occurred on more base-rich soils.

Today, the full site remains heavily wooded with the majority being referable to the NVC community W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, which is the typical climax woodland of moderately acidic soils in lowland Britain. Although in general it is dominated by *Quercus* sp. (Oak species) with *Betula* sp. (Birch species) as an important associate, the precise nature of the community varies widely with past treatment and the nature of the underlying soil. On the rim of the former quarry in the eastern end of the site, the W10 woodland is characterized by *Castanea sativa* (Sweet Chestnut) coppice, and although not positively recorded as such, it is thought likely that this is referable to the *Anemone nemorosa* sub-community, W10b.

An area of single-stem *Carpinus betulus* (Hornbeam) woodland in the site's southern boundary is also referable to this sub- community. To the west of the quarry high-forest dominates which is referable to the NVC community W10a *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, typical sub- community. The species composition of the canopy is highly variable including species such as *Carpinus betulus* (Hornbeam), *Castanea sativa (Sweet Chestnut)*, *Fraxinus excelsior* (Ash) and *Taxus baccata* (Yew), with an area in the extreme west corner of the park being dominated by *Castanea sativa* with some *Quercus* sp. (Oak species).

More open areas of former wood pasture occupy the north-western end of the park. This is dominated by large standard trees of *Castanea sativa* and *Quercus* sp. (Oak species) over a field-layer dominated by *Pteridium aquilinum* (Bracken) and *Rubus fruticosus* agg. (Bramble). This vegetation is broadly referable to the NVC community W10a, but it also has affinities with W16 *Quercus* spp.- *Betula* spp.- *Deschampsia flexuosa* woodland. An extensive area (approximately 3 ha) of *Rhododendron ponticum* (Rhododendron) was cleared in 2007 from this area. Clearance works have heavily disturbed the field-layer.

Large parts of the former quarry area have slowly become re-colonised with open woodland, the majority being dominated by *Betula* sp. (Birch), with smaller areas dominated by *Salix cinerea* (Grey Willow) or *Alnus glutinosa* (Alder). The Birch-dominated woodland supports occasional young trees of *Carpinus betulus* (Hornbeam), *Castanea sativa* (Sweet Chestnut), *Quercus* sp. (Oak) and *Taxus baccata* (Yew) and has a field-layer that is dominated by the grass *Holcus lanatus* (Yorkshire-fog), but which also supports uncommon species such as *Calamagrostis epigejos* (Wood Small-reed), *Epipactis helleborine* (Broad-leaved Helleborine) and *Potentilla anglica* (Trailing Tormentil). This vegetation is broadly referable to the NVC community W10d *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, *Holcus lanatus* sub-community.

Two small stands of W6d *Alnus glutinosa-Urtica dioica* woodland**,** *Sambucus nigra* sub- community occur in Shorne Woods Country Park, adjacent to the boundary of the site in the south-west corner and forming a narrow strip around *Pond J*.

The wetter parts of the former quarry and the wetter areas above Randall Bottom Pond support WI *Salix cinerea-Galium palustre* woodland. On the floor of the old quarry this community is dense, shady and species poor. *Salix cinerea* (Grey Willow) is dominant in the canopy, although seedlings of *Betula pendula* (Silver Birch) and *Betula pubescens* (Downy Birch) also occur; the field-layer is very sparse. Above Randall Bottom Pond the community is a more species-rich example of this woodland type; *Salix cinerea* (Grey Willow) remains dominant in the canopy but a species-rich field-layer has developed.

Finally, the valley bottom below Randall Bottom Pond supports W8 *Fraxinus excelsior-Acer campestre-Mercurialis* woodland**.** Here the canopy is dominated by *Fraxinus excelsior* (Ash), and *Carpinus betulus* (Hornbeam) occurs in places. The shrub layer is sparse with *Sambucus nigra* (Elder) occurring where there are gaps in the canopy. The field-layer is variable ranging from dry communities on the valley side to wetter more species-rich communities alongside the water course.

W24 *Rubus fruticosus-Holcus lanatus* underscrub is found scattered around the park, on the margins of woodland. Some of the more species-rich examples of this community are referable to W24a *Rubus fruticosus-Holcus lanatus* underscrub, *Cirsium arvense-Cirsium vulgare* sub-community, while a small area of W24b *Rubus fruticosus-Holcus lanatus* underscrub, *Arrhenatherum elatius-Heracleum sphondylium* sub-community occurs within the W10d woodland.

Randall and Brewer's Woods consist of the NVC Community W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland, with W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland being limited to the base-rich soils along

the northern boundary of Randall Wood. A small amount of W6d *Alnus glutinosa-Urtica dioica* woodland, *Sambucus nigra* sub-community occurs within Randall Wood, limited to the springs and issuing streams on the middle slopes.

The canopy of the W10 woodland stands present are dominated by *Castanea sativa* (Sweet Chestnut), with *Carpinus betulus* (Hornbeam) playing an important role. Within the W10 *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland community *Castanea sativa* (Sweet Chestnut), with *Carpinus betulus* (Hornbeam) can be important local dominants in southern Britain. Other species present within the canopy include *Acer pseudoplatanus* (Sycamore), *Betula* sp. (Birch species), *Ilex aquifolium* (Holly), and *Quercus petraea* (Sessile Oak). The shrub-layer is variable, being composed of species such as *Cornus sanguinea* (Dogwood), *Corylus avellana* (Hazel), *Fraxinus excelsior* (Ash), *Lonicera periclymenum* (Honeysuckle) and *Rubus fruticosus* agg. (Bramble). The field-layer is variable with some areas being characterized by woodland herbs such as *Circea lutetiana* (Enchanter's- nightshade) and *Hyacinthoides non-scripta* (Bluebell) and others by *Pteridium aquilinum* (Bracken).

Small stands of W8 *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland are present in Randall Wood. This community is generally dominated by Ash (*Fraxinus excelsior*), with other canopy species including *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam), *Castanea sativa* (Sweet Chestnut), *Corylus avellana* (Hazel) and *Quercus* sp (Oak). The shrub-layer is variable, being composed of species such as *Cornus sanguinea* (Dogwood), *Crataegus monogyna* (Hawthorn),

Lonicera periclymenum (Honeysuckle) and *Ribes nirgum* (Redcurrant). The field-layer is equally variable supporting a broad range of woodland herbs dominated by *Mercurialis perennis* (Dog's-mercury) with mixtures of *Circea lutetiana* (Enchanter's-nightshade), *Dryopteris dilitata* (Broad Buckler- fern), *Hyacinthoides non-scripta* (Bluebell) and *Lamiastrum galeobdolon* (Yellow Archangel).

The canopy of the stand of W6d *Alnus glutinosa-Urtica dioica* woodland, *Sambucus nigra* sub-community found within Randall Wood is entirely dominated by *Alnus glutinosa* (Alder). Due to the closed canopy, the shrub-layer is particularly sparse, consisting of scattered *Lonicera periclymenum* (Honeysuckle) and *Sambucus nigra* (Elder). The field-layer is dominated by thick growths of *Rubus fruticosus* agg. (Bramble) with other species including *Cardamine pratensis* (Cuckooflower), *Dryopteris dilitata* (Broad Buckler-fern), *Lysimachia nemorum* (Yellow Pimpernel), and *Mercurialis perennis* (Dog's-mercury).

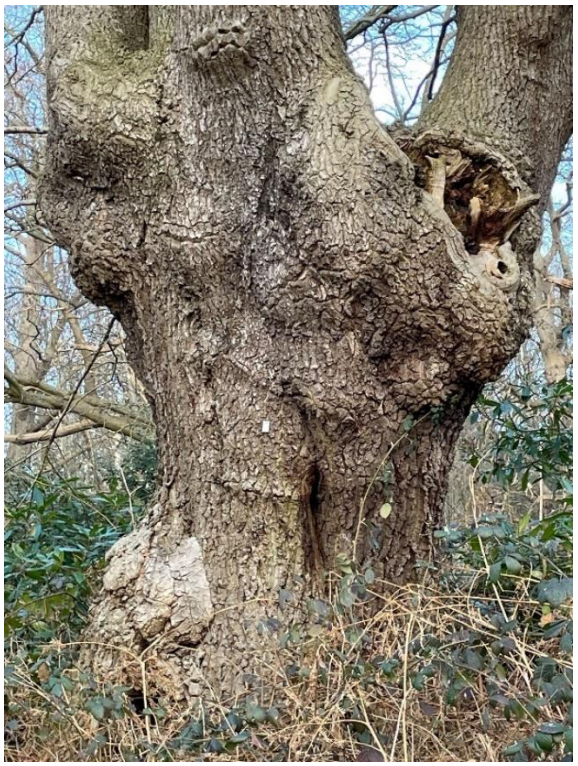
On the more base-rich areas there is coppice of *Fraxinus excelsior* (Ash) and *Corylus avellana* (Hazel) with extensive *Hyacinthoides non-scripta* (Bluebell) and *Anemone nemorosa* (Wood Anemone). There is a large pond and wet flushes in Randall Wood with Ash/alder stand types.

A network of thirteen woodland rides, five permanent glades and one large glade with Oak standards was created from 2006-2010 as part of the HLF works to link all the woodland areas and open spaces along a 4km network.

The relic plantations from the 1987 storm replanting are thinned but in all other areas an approach of allowing natural regeneration from the surrounding woodland is followed. This reduces the risk of tree diseases and ensures the seed stock is suitable to the specific geology of the site.

The 2022-2032 Biodiversity enhancement project aims to diversify the woodland understory and improve the woodlands resilience to climate change by creating a wider range of species in the understorey.

5.2.2 Veteran Trees



In 2008 a Veteran Tree survey was undertaken by Treework Environmental Practice as part of the HLF project. A deadwood survey (Ecosulis 2011) was carried out in 2011. This assessed all areas of the park looking at 20 plots. The average score per plot was 4.23.

National Highways funded a resurvey and detailed individual tree management plans in 2022 as part of the biodiversity enhancement project. These are GIS recorded and photographed and all the details stored on a digital database called My Trees so monitoring can be carried out and recorded. All records are digital and allow recording of monitoring observations and works carried out. All individual tree management plans are detailed on Mytrees and due to the size that is separate to this management plan.

The survey recorded 305 trees:

- 32 Ancient trees
- 183 non ancient veteran trees
- 74 advanced candidate veterans

- 6 premature candidate veterans
- 5 standing deadwoods (trees that were veterans in the 2008 survey but have since died)
- 5 notable but non veterans

94% of these had moderate or above vitality. The majority of works to mitigate impacts on the trees are the reduction of competition from surrounding trees through halo cutting and the protection of the roots from compaction.

5.2.4 Tree diseases and pests

Phytophera is evident in compartments 11e, 12c and 12d. Where dead stems are deemed a risk to visitors they are felled and stacked in the same areas as deadwood habitat for invertebrates and cover for small mammals.

Annually the rangers survey the woodland for Phytophera and fell any that are at risk of falling on pathways.

Chalara is widespread on site. Trees will be monitored and any dieback within proximity to paths or infrastructure will be removed, all others left as standing deadwood.

Areas affected by disease will be left to regenerate naturally using the seed stock on site.

Acute Oak decline is prevalent on an adjacent site but there have been no cases in the Country Park.

Oak processionary moth is within 3 miles of the site so ongoing surveys are carried out to check for nests, currently there have been no known sightings.

Oriental Gall Wasp is widespread and impacting on the vigour of the Sweet Chestnut trees each year.

5.3 Grassland

Large areas of amenity grassland occupy the parts of the disused quarry which have not been allowed to establish woodland. These areas had amenity grass-seed added to existing vegetation in the 1980s. NVC types recorded in the 1999 survey were MG6a *Lolium perenne-Cynosurus cristatus* (crested dogs' tail) grassland, typical sub-community, MG1 *Arrhenatherum elatius* (false oat grass) grassland, and MG7a *Lolium*

perenne (Rye grass)- Trifolium repens ley (white clover) MG6a is a common pasture/amenity grassland type and characterizes the mostly species-poor mown grassland at the eastern end of the park. Between the fishing lakes, a glade is cut on a 2-year rotation, stands of MG1 *Arrhenatherum elatius* grassland have developed, in areas grading into reed-dominated swamp or fen, dominated by an open canopy of *Phragmites australis* (Common Reed).

5.3.1 Randall Heath

Randall Heath, in the north-west of the site is characterized by large areas which have been dominated by Bracken, being referable to the NVC community U20c *Pteridium aquilinum- Galium saxatile* community, species-poor sub-community. Few associate species are present, with *Teucrium scorodonia* (Wood Sage) and *Rumex acetosella* (Sheep's-sorrel) being the only common ones. Currently regular *Pteridium aquilinum* (Bracken) management is being undertaken which will reduce the vigour and extent of this species. In 2009 and 2010 extensive tree clearance and mulching of 4h started to encourage the spread of grass and sub communities in this area.

Grazing was introduced in July 2014 using a local grazier, grazing was not carried out in 2015 and in 2016 three cattle grazed the site for 3 months. In 2017 8 cattle grazed the site for 3 months. Following discussions with the rare breeds survival trust the area was heavily grazed with 18 cattle for 3 months to make more of an impact on

the bracken. 9 Longhorn cattle grazed the site in 2023 from June until August. 10 Sussex cattle grazed from May until July in 2024.

5.4 Ponds and wetlands

The site contains 15 ponds. These ponds have been named *Pond A* to *Pond O,* along with Randall Bottom Pond and three medieval fishponds. A new pond formed in compartment 2b since 2011 on the boundary of the park with the Inn on the Lake, since the clearance of the rhododendron, this is called pond O and since 2014/15 has held water all year.

A large pond, known as Randall Bottom Pond, is situated in the centre of Shorne Woods, much of which supports dense stands of young *Alnus glutinosa* (Alder) and *Salix* sp. (Willow), however a variety of marginal plants also occur including *Carex pseudocyperus* (Cyperus Sedge), *Typha angustifolia* (Lesser Bulrush), *Scutellaria galericulata* (Skullcap) and various rushes. There are also several winter-wet ponds containing vestiges of a similar vegetation type in compartment 10, the claypit area.

The sedge dominated vegetation within the ponds is broadly referable to the NVC type S17 *Carex pseudocyperus* swamp**.** Within this community *Carex pseudocyperus* (Cyperus Sedge) can form dense stands of emergent vegetation but often has associate species including *Juncus effusus* (Soft Rush), *Sparganium erectum* (Branched Bur-reed), *Typha latifolia* (Bulrush) or *Phragmites australis* (Common Reed), swamp

and fen herbs such as *Mentha aquatica* (Water Mint), *Lycopus europaeus* (Gypsywort) and *Scutellaria galericulata* (Skullcap).

The remainder of the ponds support a variety of submerged and emergent aquatic plant communities as well as mire and swamp, most of which are referable to specific NVC communities. The following communities are represented:

- *Aquatic communities:*
  - A5b *Ceratophyllum denersum* community, *Lemna minor* sub- community
  - A9a *Potamogeton natans* community, species-poor sub-community
- *Mire communities:*
  - M23 *Juncus effusus* / *acutiflorus-Galium palustre* rush-pasture
- *Swamp communities:*
  - S4a *Phragmites australis* swamp and reed-beds, *Phragmites australis* sub-community
  - S5a *Glyceria maxima community*, *Glyceria maxima* sub-community
  - S5b *Glyceria maxima community*, *Alisma plantago-aquatica Sparganium erectum* sub-community
  - S6 *Carex riparia* swamp
  - S12a *Typha latifolia* swamp, *Typha latifolia* sub-community
  - S12b *Typha latifolia* swamp, *Mentha aquatica* sub-community
  - S12c *Typha latifolia* swamp, *Alisma plantago-aquatica* sub- community
  - S13 *Typha angustifolia* swamp
  - S14a *Sparganium erectum* swamp, *Sparganium erectum* sub- community
  - S14b *Sparganium erectum* swamp, *Alisma plantago-aquatica* sub- community
  - S14c *Sparganium erectum* swamp, *Mentha aquatica* sub-community
  - S17 *Carex pseudocyperus* swamp
  - S19a *Eleocharis palustris* swamp, *Eleocharis palustris* sub- community
  - S21a *Scirpus maritimus* swamp, sub-community dominated by *Scirpus maritimus*
  - S22a *Glyceria fluitans* water-margin vegetation, *Glyceria fluitans* sub-community

Two small areas dominated by the NVC type M23 *Juncus effusus* / *acutiflorus-Galium palustre* rush-pasture occupies two small hollows within the Birch woodland. The vegetation is dominated by dense tussocks of *Juncus effusus* (Soft Rush), with occasional *Juncus conglomeratus* (Compact Rush).

Crassula Helmsii is prevalent on site and is in ponds A, B, D, E, F, G, K, L. N, and H. It is also in the wet woodland areas between ponds L and H and the drainage ditches across the claypit area in compartment 10. Attempts were made during the HLF project to eradicate the invasive species but the EU banning of the key herbicide stopped this project after 3 years. Emergent growth was sprayed in winter, but this had no effect on the submerged growth so merely knocked it back rather than eradicated it. Environment Agency advice in 2014 was there was no means of control other than scarifying the whole pond to remove the Crassula material. This is not possible due to the number of infected ponds and the risk of waterfowl, dogs and newts crossing between ponds. The rangers monitor trials of new treatments in case any new ideas prove to be successful.

5.5 Flora

5.5.1 Vascular plants

The following list of vascular plants species are of note, these were identified during the 2010 survey by KWT:

Hyacinthoides non-scripta (Bluebell) is partially protected under *Schedule 8* of the *Wildlife and Countryside Act 1981 (as amended)* against sell only and occurs throughout the site.

- Nationally Scarce status:

- *Trifolium glomeratum* (Clustered Clover). It is unclear where this species was recorded, or what its current on-site status is. *Trifolium glomeratum* (Clustered Clover) is a winter annual typically occurring in short open communities on light, drought- prone often somewhat acidic sandy or stony soils near the coast. It is a rare casual inland.
- *Pyrola Rotundifola (*Round Wintergreen) this was found in compartment 1a and 2b in 2010 by Joyce Pitt of the KWT

- County (locally) rare species are those which occur in less than 10 tetrads in Philip's Atlas of the Kent Flora (Philip 1982).

One County (locally) rare plant was discovered:

- *Alopecurus aequalis* (Orange Foxtail) – a very uncommon species in Britain and very rare in Kent. (Kent Red Data Book (Waite 2000): endangered). Orange Foxtail is an

annual species, most frequent on drying mud but found in a variety of habitats associated with freshwater, including the margins of ponds, ditches, reservoirs, and gravel- pits.

- County (locally) scarce species are those which occur in less than 11-50 tetrads in Philip's Atlas of the Kent Flora:

Six county (locally) scarce plants were recorded:

- *Utricularia* cf. *australis* (Bladderwort) – a scarce plant in Kent.
- *Potentilla anglica* (Trailing Tormentil).
- *Isolepis setacea* (Bristle Club-rush); and
- *Carex paniculata* (Greater Tussock-sedge)
- *Euphorbia lathyrus* (Caper Spurge)

In addition to these species, the 1999 KWT survey includes the following locally scarce species in Shorne Wood:

- *Montia fontana* (Blinks)
- *Luzula sylvatica* (Great Woodrush)
- *Calamagrostis epigejos* (Wood Small reed).
- *Festuca filiformis* (Fine-leaved Sheep's-fescue).

- Four further species recorded at Shorne Wood are not county scarce but are nevertheless uncommon and local in their distribution:

- *Chara vulgaris* var. *longibracteata* (a charophyte alga).
- *Samolus valerandi* (Brookweed).
- *Hypericum androsaemum* (Tutsan); and
- *Ranunculus lingua* (Greater Spearwort).

- One species recorded in Randall Wood is not of county importance but is uncommon in the UK:

- *Epipactis purpurata* (Purple Helleborine) – occurs within 61 of the 1044 2km x 2km tetrads in Kent.

A list of ancient woodland indicator species found on site can be found overleaf

	Shorne	Randalls	Brewers
Acer campestre (Field Maple)		✓	✓
Adoxa moschatellina (Moschatel)		✓	
Alnus glutinosa (Alder)		✓	
Anemone nemorosa (Wood Anemone)		✓	
Betula pubescens (Downy Birch)		✓	
Bramopsis ramosa (Hairy Brome)	✓		
Calamagrostis epigejos (Wood Small reed)	✓		
Campanula trachelium (Nettle-leaved Bellflower)		✓	
Carex pendula (Pendulous sedge)		✓	
Carex remota (Remote Sedge)	✓	✓	
Carex sylvatica (Wood-sedge)	✓	✓	✓
Carpinus betulus (Hornbeam)		✓	✓
Circaea lutetiana (Enchanter's-nightshade)		✓	✓
Conopodium majus (Pignut)		✓	
Crataegus laevigata (Midland Hawthorn)		✓	
Dryopteris affinis (Scaly Male-fern)	✓		
D. carthusiana (Narrow Buckler-fern)		✓	
Epipactis helleborine (Broad-leaved Helleborine)	✓		
Epipactis purpurata (Violet Helleborine)		✓	
Euphorbia amygdaloides (Wood Spurge)	✓	✓	
Festuca gigantea (Giant Fescue)		✓	
Holcus mollis (Creeping Soft grass)		✓	
Hyacinthoides non-scripta (Bluebell)	✓	✓	✓
Hypericum androsaemum (Tutsan)	✓		
Ilex aquifolium (Holly)	✓	✓	✓
Lamiastrum galeobdolon (Yellow Archangel)	✓	✓	✓
Luzula forsteri (Southern Woodrush)	✓	✓	
Luzula pilosa (Hairy Woodrush)		✓	
Lysimachia nemorum (Yellow Pimpernel)	✓	✓	
Moerhingia trinerva (Three-veined sandwort)	✓		
Melica uniflora (Wood Melick)		✓	
Milium effusum (Wood Millet)	✓	✓	
Oxalis acetosella (Wood-sorrel)	✓	✓	
Pimpinella major (Greater Burnet-saxifrage)		✓	
Poa nemoralis (Wood Meadow-grass)		✓	✓
Populus tremula (Aspen)		✓	
Primula vulgaris (Primrose)	✓	✓	
Prunus avium (Wild Cherry)		✓	
Quercus petraea (Sessile Oak)		✓	✓
Ribes rubrum (Redcurrant)	✓		
Rosa arvensis (Field-rose)		✓	
Sorbus aucuparia (Rowan)		✓	
Veronica montana (Wood Speedwell)	✓	✓	
Viburnum opulus (Guelder-rose)		✓	
Viola cf *reichenbachiana* (Early Dog-violet)	✓		
TOTAL	**20**	**37**	**9**

A repeat of the bryophyte survey is being carried out throughout 2024.

5.5.2 Bryophytes and lichen, mosses, and liverworts

The 2000 Management Plan states that 40 species of bryophyte have been recorded from Shorne Woods Country Park. The botanical survey of Randall and Brewer's in 2001 Wood recorded 12 species of bryophyte.

In 2011 a mosses and liverworts survey of Shorne Woods was completed and in 2013 a survey of Randall Wood was undertaken. Records are held electronically.

In April 2024 a comprehensive survey was carried out and 109 species were discovered. No rare species were found but 26% of the total number of species found in West Kent were found on site. The report states that compartment 10 is the most abundant area as a wet woodland habitat. The site has a good range of bryophytes of local interest.

5.5.2 Fungi

The 2000 Management Plan states that 123 species of fungi have been recorded from Shorne Woods Country Park. A further survey was undertaken in October and November 2001 when a full fungal species list was produced for Randall and Brewer's Wood by the Kent Wildlife Trust (Kent Wildlife Trust 2002).

During this survey over 100 species were recorded for Brewer's Wood and approximately 200 species for Randall Wood. Species of note included:

Randall Wood

- *Russula integra* var. *purpurea* – 1st British record for this species.
- *Tricholoma acerbum* – provisional Red Data List, Kent Red Data Book (Waite 2000).
- *Cortinarius basililaceus* – Nationally Scarce.
- *Cortinarius bibulus* – Nationally Scarce.
- *Entoloma icterina* – Nationally Scarce.
- *Tyromyces wynnei* – Nationally Scarce.

Brewer's Wood

- *Pseudocraterellus sinuosus* – provisional Red Data List, Kent Red Data Book (Waite 2000).
- *Inocybe petiginosa* – Notable, Kent Red Data Book (Waite 2000).
- *Psathyrella cotonea* – Notable, Kent Red Data Book (Waite 2000).
- *Lepista caespitosa* – status unknown.
- *Rutstroemia americana* – status unknown.

In October and November 2007, the survey was repeated for Randall and Brewer's Wood by Joyce Pitt, David Mitchell, and Jo Weightman. During this survey 82 species were recorded for Randall Wood and 10 species for Brewer's Wood. Species of note included:

Randall Wood

- *Entoloma albotomentosum* - very uncommon in the British Isles – specimen sent to Kew Herbarium.
- *Byssocaorticium efibulatum* - rare with few records in the British Isles.
- *Cortinarius caerulescens* – found in Sweet Chestnut coppice - rare – specimen sent to Kew Herbarium.
- *Russula alnicola* – found with Alder – rare – specimen sent to Kew Herbarium.

Brewer's Wood

Psathyrella rivulosa– found on chippings. This species distribution has been increasing since its discovery in Holland in 2001. There are now several records in Kent recorded since 2005.

5.6 Fauna

5.6.1 Mammals

5.6.1.1 Dormouse (Muscardinus avellanarius)

Nut search surveys for the species were conducted in 2000 (West 2000) but failed to prove presence within Shorne Wood. Dormice were present in Brewer's wood, prior to a translocation forced by the construction of Channel Tunnel Rail Link.

An 2006 an annual Dormouse monitoring programme was established at the site. To facilitate the survey 50 dormouse nest boxes were erected in *Compartments 12a-12f* and *13a-13c.* In 2006 surveys were undertaken between May and October, although all the positive records of Dormouse were recorded during September and October when the population is highest, and Dormouse are preparing for hibernation. In total, 12 Dormouse where found, of which eight were males, two were females and two were unsexed. In addition, six Dormouse nests were recorded. In 2008 the dormouse nest boxes were resurveyed, and 13 Dormouse were recorded. From 2010 no evidence of dormice was found in the nest boxes. The dormouse boxes were repositioned and renewed in partnership with the KWT in July 2013. In October 2018 and 2019 two dormice were found in a survey carried out as part of the Lower Thames Crossing project.

5.6.1.2 Bats

The following native bat species were recorded at Shorne Woods Country Park during surveys carried out between June and October in 2006. A Bat Habitat survey was carried out at the same time.

- Brown Long-eared Bat (*Plecotus auritus*).
- Common Pipistrelle (*Pipistrellus pipistrellus*).
- Daubenton's Bat (*Myotis daubentoni*).
- Natterer's Bat (*Myotis nattereri*).

- Noctule Bat (*Nyctalus noctula*).
- Barbastrelle (*Barbastelle barbastellus*)
- Nathusius Pipistrelle (*Pipistrellus nathusii)*
- Serotine Bat (*Eptesicus serotinus*); and
- Soprano Pipistrelle (*Pipistrellus pygmaeus*).

All native bats are protected by European law. In addition to their protection by law Brown Long-eared Bat (*Plecotus auritus*), Noctule Bat (*Nyctalus noctula*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*) are listed on the UK Biodiversity Action Plan (UK BAP 2008) as 'Priority Species'. Soprano Pipistrelle (*Pipistrellus pygmaeus*) are also listed on the Kent Biodiversity Action Plan (Kent BAP 2007) along with Common Pipistrelle (*Pipistrellus pipistrellus*), which highlights their importance in a local context.

It would be expected that numerous bat species forage and use roosts within Shorne Wood. Should a tree containing a potential bat roost be selected for felling, appropriate survey and mitigation should be undertaken under license by DEFRA.

Every year since 2010 Brown long eared bats have been found nesting in the largest air raid shelter in the RAF camp. As part of the HLF work this was one of the aims of the project so this will now be monitored and recommendations from KWT to enhance the site will be followed. This includes opening flight paths into the door entrances. The Kent Bat Group surveys these shelters every year.

As part of surveys carried out by National Highways in planning the Lower Thames crossing surveys in 2020-2023, they identified the presence of additional species including Barbastelle and Nathusius Pippistrelle. Bat boxes will be installed as part of the LTC survey work.

5.6.1.3 Badgers (Meles meles)

There is an active main badger sett just outside Randall Wood to the north. Badgers (*Meles meles*) are known to use the whole of Shorne Woods Country Park for foraging. Badgers often have several outlying setts of which there are two within the park. These setts are rarely in continuous occupation and are most often used either to exploit a seasonal food source or as a refuge when visiting certain parts of the territory. Habitat management works should consider the possibility of there being a badger sett nearby, as works within 30 m of a sett are illegal unless licensed by DEFRA. The Setts are monitored by the West Kent Badger group.

5.6.1.4 Other Mammal Species

Incidental mammal records noted during other specialist surveys of Shorne Wood include:

- Bank Vole (*Clethrionomys glareolus*).
- Fox (*Vulpes vulpes*).
- Grey squirrel (*Sciurus carolinensis*).
- Mole (*Talpa europaea*).
- Rabbit (*Oryctolagus cuniculus*).
- Water shrew (*Neomys fodiens*) -
- Stoat (*Mustela erminea*)
- Weasel (*Mustela nivalis*)
- Common Shrew (*Sorex araneus*)
- Pygmy Shrew (*Sorex minutus*)
- Wood mouse (*Apodemus sylvaticus*)
- Yellow necked mouse (*Apodemus flavicollis)*

Two of the above species - Rabbit and Grey Squirrel can be damaging to regenerating coppice and newly planted trees, and control of these species may be necessary.

5.6.2 Herpetofauna

The network of ponds and woodland glades at Shorne Woods provide suitable habitat for a wide range of herpetofauna. Seven reptile and amphibian species have been recorded at Shorne Wood and are seen each year. Species recorded include:

- Common Frog (*Rana temporaria*).
- Common Lizard (*Zootoca vivipara*).
- Common Toad (*Bufo bufo*).
- Grass Snake (*Natrix natrix*).
- Slow worm (*Anguis fragilis*)
- Great Crested Newt (*Triturus cristatus*).
- Palmate Newt (*Lissotriton helveticus*); and
- Smooth Newt (*Lissotriton vulgaris*).

5.6.2.1 *Great Crested Newt (Triturus cristatus)*

Crested Newt (*Triturus cristatus*) are a European protected species and listed as part of Kent County Council's Biodiversity Action Plan. They are abundant in all areas of the site including the works compound and visitor centre.

In 2006, RSK Carter Ecological undertook a three-year study into the likely effects of herbicide treatment on Great Crested Newt for which a full report was submitted. Herbicide treatment of some of the ponds on site was required to control and in the long-term eliminate the non-native plant species *Crassula helmsii* (New Zealand Pigmyweed). The project involved undertaking population estimate surveys of Great Crested Newt in two glyphosate treated ponds and an untreated control in 2006 and 2007 before glyphosate application and in 2008 after application using a range of counting and trapping methods. The study found that the Great Crested Newt populations fell between 2006 and 2007 for unidentified reasons but rose between 2007 and 2008 following treatment. Loss of the population in the control pond in 2008 constrains interpretation of results, but it is very clear that glyphosate application in winter (when Great Crested Newts are inactive) has no acute effect on adult Great Crested Newt populations in the year immediately following. Further ad hoc surveys have been carried out by developers and KRAG and data is held on site.

There are ad hoc sightings of Great Crested Newts throughout compartment 10 and records of presence through the annual EDNA survey carried out each year as part of a nationwide survey.

As a European protected species, handling, and habitat disturbance (including terrestrial habitat) are illegal unless licensed by DEFRA.

5.6.2.2 *Reptiles*

Grass Snake (*Natrix natrix*), Slow Worm (*Anguis fragilis*) and Common Lizard (*Zootoca vivipara*) are present at Shorne Woods Country Park. These are dependent on sheltered sunny glades and rides in which they bask and regulate body temperature. Common Lizard (*Zootoca vivipara*) prey on small insects typically found in rough grassland, whereas Grass Snake (*Natrix natrix*) are more dependent upon wetlands where they predate Common Frog (*Rana temporaria*).

Adult and juvenile Grass snakes have been sighted across the whole park. Slow worms have been recorded in compartment 12b and 12e in 2014 and 11 e and f.

Annual reptile monitoring is carried out by park staff.

5.6.2.3 Birds

The complex of woodlands and ponds at Shorne Woods Country Park provides a range of wildlife habitats for migrant and breeding birds. Species have been recorded which are of High Conservation Concern namely Bullfinch, Lesser Spotted Woodpecker, Marsh Tit, Reed Bunting, Song Thrush, Spotted Flycatcher, Starling, Mistle Thrush, Lesser redpoll, Redwing and Yellowhammer.

In addition, a further eight species are of Medium Conservation Concern Namely Dunnock, Green Woodpecker, Goldcrest, Hawfinch, Nightingale, Reed Warbler, Stock Dove and Tree Pipit. In addition, Bullfinch, Reed Bunting, Song Thrush, Spotted Flycatcher and Turtle Dove are a priority species within the UK Biodiversity Action Plan (2007).

A bird survey was carried out by park staff over spring/summer 2010 and 2016, the most notable sighting was juvenile Tawny owls with parents in comp 13c, a kingfisher and the first sighting of ring-necked parakeets. Further surveys were carried out in 2018-2020 as part of the Lower Thames Crossing environmental impact assessment with 46 species of bird recorded.

5.6.2.4 Fish

Seven species have been recorded in the ponds and most of those present are the result of stocking by the angler's society. Hybrid Bream-Rudd have been recorded in addition to the following species:

- Eel (*Anguilla anguilla*).
- Crucian Carp (*Carassius carassius*).
- Carp (*Cyprinus carpio*).
- Perch (*Perca fluviatilis*).
- Roach (*Rutilus rutilus*).
- Rudd (*Scardinius erythrophthalamus*); and
- Tench (*Tinca tinca*).

In 2014 due to fish health issues related to overstocking, 200 pounds of fish were removed from each lake in liaison with the Environment Agency and Thameside

Works Angling club. The fish were relocated to another site managed by the angling club.

5.6.3 Invertebrates

The invertebrate interest of Shorne Woods Country Park is high, with 185 species recorded by Kent County Council in 2000. Shorne and Ashenbank Woods SSSI are known to be particularly rich in beetles (*Coleoptera*), true bugs (*Hemiptera*) and dragonflies (*Odonata*). Future management should maintain habitat diversity so that the microhabitats these insects depend upon remain suitable.

The deadwood survey in 2011 found 14 nationally scarce invertebrates primarily located in the knoll area of the park. Nationally scarce species were found in all areas except the claypit. This surveyed a series of transects to record the type and number of species. The survey has generated a list of 54 wood-decay invertebrates which includes 46 species of beetles. The beetles include 13 species which have Nationally Scarce status in Britain (Hyman, 1992), which is a notably high proportion and demonstrating high site quality.

Throughout 2024 an ongoing survey of invertebrates is being carried out with monthly visits from March to September to create a comprehensive list of species of invertebrates, lepidoptera and coleoptera.

5.6.3.1 Aquatic and Semi-aquatic Invertebrates

In 2006 Kent Wildlife Trust undertook an Aquatic Invertebrate Survey of the ponds within the Country Park. During this survey 11 of the 20 ponds were surveyed (*Ponds A-F, H, I K, L* and *Randall Bottom*), the remainder were not surveyed as they did not hold water and are winter-wet or seasonal ponds (*Ponds G, J, M and N* and the *Medieval Fishponds*).

Notable species recorded included the aquatic water-beetle (*Ochthebius nanus*) and the semi-aquatic species (*Bembidion quadripustulatum*) which both have Notable B[1] status. In addition, the semi-aquatic species, Ornate Brigadier Soldierfly (*Odontomyia ornata*) was also recorded. This species is listed in Bratton (1991) and Shirt (1987) as Vulnerable.

5.6.3.2 *Lepidoptera*

Of the Lepidoptera species recorded by Kent County Council in 2000, 18 species are butterflies and 63 are moths. These range from specialists that breed in the canopy or clearings in woods, to widespread grassland species that can find suitable conditions in sunny woodland rides. Any management should maintain habitat diversity and retain these microhabitats.

None of the butterfly species recorded at Shorne Woods Country Park are recorded in the Kent Red Data Book (Waite 2000). Although it notes that Kent has a relatively healthy population of the nationally vulnerable White Admiral butterfly, whose range is current expanding in the county.

Moths species recorded from Shorne Wood include:

- Six-belted Clearwinged moth (*Bembecia scopigera*) recorded in 1993. This is a Nationally Notable species but is not recorded in the Kent Red Data Book (Waite 2000).
- Satin Lutestring moth (*Tetheela fluctuosa*) (KCC 2000). This is a Nationally Scarce species but is not recorded in the Kent Red Data Book (Waite 2000).

In Spring/Summer 2010 a fixed transect pollard walk was established for permanent monitoring of species type and number between April and September. Generally, Gatekeepers, Meadow browns and Ringlets prove most abundant and White Admirals were spotted in most transect areas. In 2014 a Purple Emperor was photographed on the Randall Manor site. Records for butterflies are sent to the UK Butterfly Monitoring Scheme.

5.6.3.3 *Flies*

A dolichopodid fly (*Dolichopus latelimbatus*) was recorded on site in 1993. This is a Nationally Notable species but is not recorded in the Kent Red Data Book (Waite 2000).

5.6.3.4 *Coleoptera*

The following two Nationally Scarce beetles are recorded:

- A beetle (*Mordella holomelaena*), of Kent County importance. (KCC 2000)
- A water beetle (*Peltodytes caesus*) Notable B found in less than 100 10 km squares. (KCC 2000)

5.6.3.5 Odonata

The wetland habitat of Shorne Wood supports 15 species of dragonflies and damselflies (Kent County Council 2000). In addition to the species listed below, there are also reports of the nationally scarce dragonfly, Red-veined darter (*Sympetrum fonscolombei*), although this was not confirmed in recent surveys. Three species of note have been recorded at Shorne Woods Country Park: Downy Emerald (*Cordulia aenea*) and Ruddy Darter (*Sympetrum sanguineum*).

The Downy Emerald (*Cordulia aenea*) is a Nationally Notable B species and is afforded Kent Red Data Book Status 3 (Waite 2000) being confirmed in twenty tetrads in Kent, with breeding confirmed in two tetrads. It is also a Rare Dragonfly Projects (RDP) species. This dragonfly requires nutrient-poor, still waterbodies such as ponds, lakes, and canals in woodland areas for breeding. There are usually trees at least around part of the water margin as the dragonfly larvae live in the coarse leaf litter. The ideal waterbody usually has little or no submerged vegetation. Consequently, Shorne Woods Country Park offers a particularly good habitat for this species.

The Ruddy Darter (*Sympetrum sanguineum*) (KCC 2000) is afforded Nationally Scarce status but is not recorded within the Kent Red Data Book (Waite 2000).

Other species recorded include:

- broad bodied chaser
- Black tailed skimmer
- Four spotted chaser
- emperor
- Emerald damselfly
- Azure damselfly
- Blue tailed damselfly
- Brown Hawker
- Southern Hawker

- Common darter
- Common Blue damselfly.
- Red eye damselfy

6 Past Land-use

The 2001 walkover survey of Randall Wood by Oxford Archaeology (Oxford Archaeology 2001) provided evidence that the area of Randall Wood was at one time open and free of trees and was utilised for a radically different pattern of land use in the past. The lynchets throughout the Wood indicate that in prehistoric and later medieval periods, the area was open land used for arable cultivation. Details of the history of the site are recorded in the Historic Environment Assessment 2009 (stored digitally) and includes a WW2 camp, medieval manor, Neolithic, and bronze age finds. The 2011 LiDAR survey (a map of this can be seen in the visitor centre) supports this idea of a changed landscape, with several earthworks respecting the Randall Manor complex, suggesting a series of fields. The 1797 ordnance surveyor's drawings also show the area of the Burnett as fields. The Lidar map can be seen in the visitor centre interpretation area.

Historically, the area covered by the park was ancient woodland, significant sections of which remain. Coppicing and pollarding of trees occurred over an extended period in some areas. The estate was purchased by the Lords Cobham of Cobham Hall in 1208 and remained in their ownership until 1603, subsequently passing through several hands until being purchased by the Earl of Darnley in 1728. Coppicing records from Cobham Hall suggest that Randall Wood was first grown for coppice in the late 1500s, once the manor had been demolished.

Randall Heath was historically kept open by grazing, and later by the Earl of Darnley for use for family picnics and recreation. The area became dominated by Bracken after the cessation of grazing and was managed through mechanical cutting from 1996 to 2013 until grazing was reintroduced in 2014.

Rhododendron was introduced along two driveways through the woodland in Victorian times and has subsequently spread extensively before being largely eradicated between 2006 and 2011. Clay extraction began on part of the site in the 1920s and continued to the early 1970s.

Kent County Council purchased the site from Lord Darnley in 1982, and it was opened as a Country Park in 1987. Considerable management work has since been carried out and extensive damage occurred in the woodland during the 1987 storm.

Randall and Brewers Wood were purchased in 2001 through a Heritage Lottery grant and works to integrate the existing park with the two woodlands were carried out from 2006-2011 as part of a £1 million HLF grant that included expanding the car park and improving access and site infrastructure.

In 2013 a further 4 acres of land was purchased in Brewers Wood, as part of an HLF project, to bring the whole of the Shorne and Ashenbank SSSI into public ownership or ownership by the Woodland Trust (Ashenbank).

7 Management Objectives

The management strategy at Shorne Wood Country Park will be based on four areas:

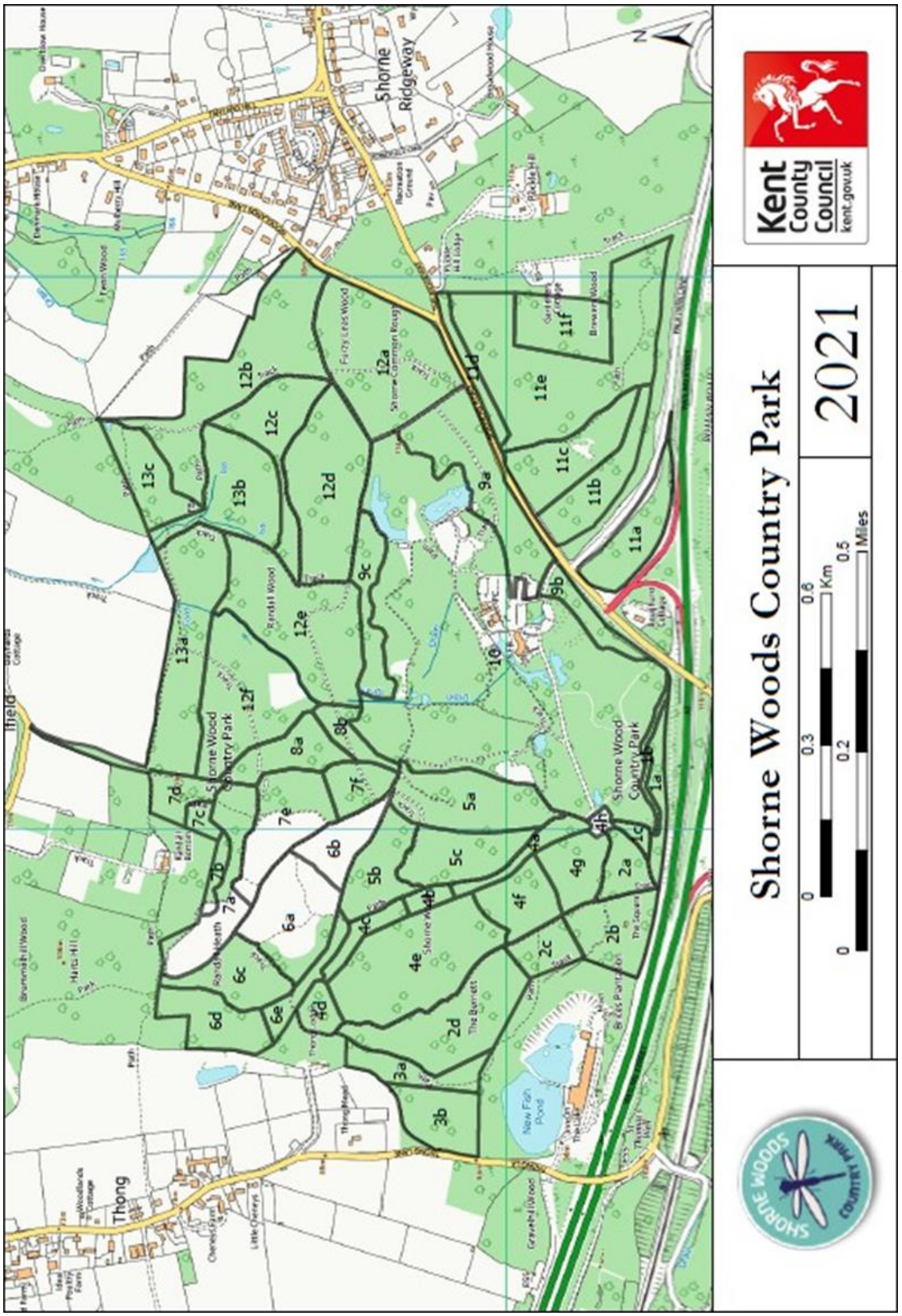
- the first is the statutory requirement to manage the site regarding its designation as a SSSI,
- the second is regards to the use of the site as a Country Park providing a recreational and education facility.
- to meet the 25-year commitment of the HLF project works, ten-year agreements of the Forestry Commission Woodland Management Plan
- to ensure the site is managed to be self-sufficient and at no cost to the council.

Presently the site is partially zoned to resolve any conflict between these objectives. Most of those activities which potentially could conflict with the wildlife interest of the site are restricted to *Compartment 10* which was formerly the main area of quarrying.

7.1 Conservation Management Prescriptions and Operations

The management plan is based on a system of management compartments devised for the purposes of previous management objectives. Shorne Woods Country Park has 13 main compartments which are divided into several sub compartments; in total 42 management compartments are recognised; these are shown overleaf.

Appendix D shows a record of completed works from throughout this plan.



7.2 Woodland management objectives and action plans

The woodland complex forms part of the larger SSSI known as Shorne and Ashenbank. In April 2011 Natural England assessed the Shorne management units to be in favourable condition.

The Ancient Woodland Inventory identifies three discrete areas of ancient semi- natural woodland, these being, most of the Randall Wood, most of the Brewer's Wood, and a small pocket in the south-west corner of Shorne Wood. Woodland and scrub are a local biodiversity habitat in Kent. Shorne Wood (except for the clay pit) is subject to a Tree Preservation Order (TPO).

The woodland supports 45 Ancient Woodland Indicator species including Bluebell. Other noteworthy species includes Dormouse, bats, Badger, birds, herpetofauna (including foraging habitat for Great Crested Newt), invertebrates and other small mammals. These species are variously designated.

The Country Park is managed for public recreation; this will have a direct influence on the management prescriptions undertaken.

Existing management agreements such as HLF, National Highways designated funds and National Highways LTC project will directly influence the management prescriptions undertaken.

Economics and market conditions will directly affect woodland management. Currently 0.5 ha of coppice material is used as woodchip for the site wood chip boiler. A further 1 ha of coppice material, a by-product of the conservation work is sold as firewood to visitors to the Country Park.

7.2.1 General woodland objectives

- The ecological integrity of the woodland will be protected, and biodiversity enhancement is a major objective.
- All woodland work is undertaken in conjunction with the Woodland Management Plan 2020-2030 in agreement with Forest England and with consent from Natural England. This is held digitally and available to view on request.
- Species which are recognised as endangered at a local or national level should be protected including dormouse, with habitat management focused on these species.
- the Rhododendron regrowth areas will require regular survey and treatment to prevent re-establishment. SEE ACTION PLAN IN SECTION 7.2.1
- Some areas of woodland that were previously managed as coppice with standards will be brought back into a coppicing cycle. Compartments where the wood is of an even age / or species composition will be gradually restructured to diversify ages and habitats by selective thinning. SEE ACTION PLAN IN SECTION 7.2.4

- Continued maintenance and upkeep of the ride system linking Shorne Wood to Randall and Brewer's Woods will be a priority. SEE ACTION PLAN IN SECTION 7.2.3
- Woodland compartments should contain a proportion of standing and fallen deadwood while having due regard to the safety of site visitors, site workers and others.
- All veteran and or notable trees will be preserved whenever possible and monitored annually.

7.2.2 Invasive species control

7.2.1.1 Rhododendron

An extensive research report was undertaken including liaison with the Chief Ecologist from Snowdonia National Park and the Inverewe Estate in Scotland to identify the best methodology and consent from Natural England gained for the works carried out 2006-2011.

The rhododendron was raked out by large diggers and burnt on site using telehandlers and forwarders to transport the waste. Areas around heritage features or badger setts were cleared by hand by park staff and volunteers. A total of 22ha of dense Rhododendron was cleared. All areas have been repeat treated since 2011 by site staff. A summary of the clearance works is shown below:

Rhodi zone	Date cleared	Date first treated	Compartment area
R18-25/R26-34	2007	Aug 2007	11
R1- R4	2008	Aug 2008	5,6
R5	2009	Aug 2009	4
R6 & R9	2010	Aug 2010	2, 3
R17, R7, R8, R10- 16	2010	Aug 2010	10

Rhododendron management action plan for 2021-2026

Works are to be carried out in April and September to ensure treated rhododendron is only first year growth for maximum uptake. All other regeneration will be hand pulled or cut.

Compartment	Year to check	Date works completed
5, 6, 7 and 10	2021	Dec 2022
2 and 10	2022	Dec 2022
4 and 10	2023	Dec 2023
11 and 10	2024	Dec 2024
12 and 10	2025	
5,6,7 and 10	2026	

7.2.1.2 Sycamore

As part of the SSSI obligations Sycamore must be controlled to prevent a closed canopy. All large Sycamore stands have been removed and stumps treated. This was carried out in two phases under HLF funding. The arisings were burnt or chipped and in compartment 4 a large dead hedge was created as a natural boundary around the external classroom.

Cleared areas must be monitored and treated in April and October each year and stump treating recorded in the herbicide records on site. Details of areas cleared to date are as follows:

- Mar 2010-2ha of mature Sycamore cut and stump treated in comp 4g and 4f 1ha of mature Sycamore cut and stump treated in comp 2c, 2d and 4f.
- Jan 2011-approx 2ha of Sycamore cut and stump treated in comp 2b, 5a, 7f, 8g Nov 2011- approx 0.5ha Sycamore cut and stump treated from comp 8b.
- Jan 2012- approx 0.3ha of Sycamore cut and stump treated in comp 3a.

- May 2012- all previously cleared areas new growth cut and stump treated.
- Oct-Jan 2013- 0.25ha cleared from comp 4d, 0.25ha from comp 2d and 0.25ha from comp 3b, stumps untreated due to the weather.
- 2020- Isolated stems cut from comp 10

Sycamore action plan 2021-26

Compartment	Year to check	Date works completed
5,7,8	2022	Dec 2022
2, 3,4,6	2023	
1,10	2024	Nov 2024
11	2025	
12,13	2026	

7.2.3 Woodland Rides

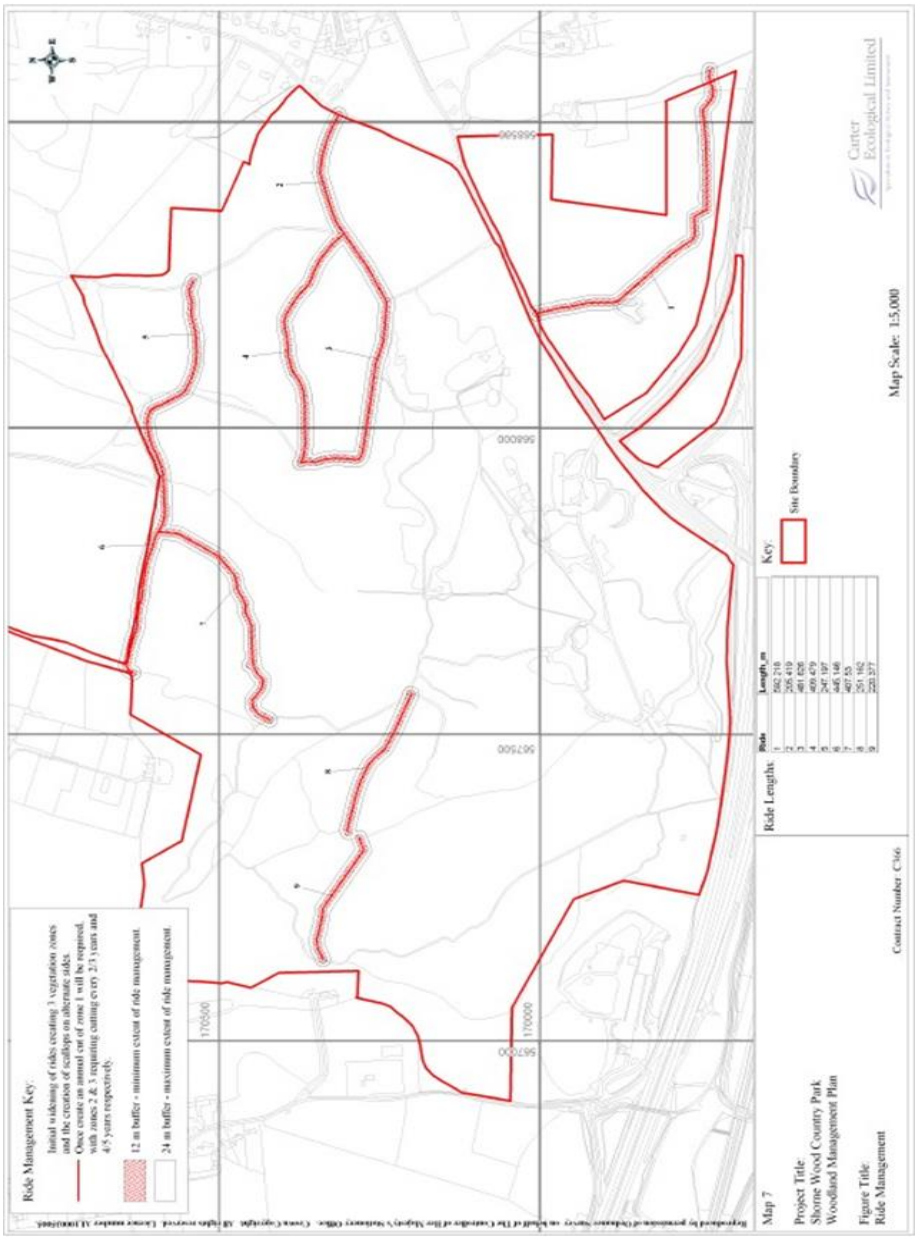
The woodland rides were cleared by a forest mulcher between 2006-2011. Any usable coppice was cut and removed first for timber sales. The mulcher then cleared a 15m corridor leaving pinch points every 100m for dormice corridors. The rides are

predominantly East-West in orientation to maximise sunlight and heat. They are up to 25m wide and consist of 3 zones of vegetation growth. A map showing the network is shown overleaf.

The 4.1km of 5m wide zone 1 must be cut annually to maintain either bare earth or low grass to always ensure a hot corridor. Zone 2, 5 m either side of zone 1 should be cut a minimum of every 3 years and should be monitored carefully as some areas may need more regular cutting. Zone 3 should be cut every 8-10 years to ensure corridors of young coppice are maintained throughout the woodlands.

Glades A-F are to be cut twice annually but monitored carefully to ensure the Glades potential for biodiversity is maximised with particular focus on minimising bracken, ragwort, and thistle dominance. All cutting should be carried out in the late summer to ensure maximum conservation benefit. Where possible half the glade should be cut each year, so a mixed height of grasses is achieved.

Map of the ride network



Ride and glade details

Ride number	*Creation date*	*Distance (m) or area (ha)*	*Compartment number*
1	*2006*	*650*	*11b/c/e*
2,3,4	*2007*	*1000*	*12a/b/d/e*
5,6,7	*2008*	*1500*	*12,13*
8,9,11	*2009*	*800*	*5, 9, 12*
10	*2010*	*200*	*12*
12,13	*2014*		*11e*
Glade A	*2010*	*0.5ha*	*12e*
Glade B	*2010*	*01ha*	*12d*
Glade C	*2010*	*0.5ha*	*12b/13b*
Glade D	*2014*	*0.5ha*	*13a*
Glade E	*2014*	*0.25ha*	*12a/b/c*
Glade F	*2014*	*0.25ha*	*9a*
Randall manor glade	*2006*	*0.15ha*	*12f*

Ride and glade management action plan

The chart overleaf shows the main plan, this is subject to change dependent on each glade and rides vegetation condition at point of survey.

Ride number	**Year of work**	**Prescription of work to be carried out**	**Date work completed**
1	2021	Cut zone 2 and 3 along NW edge	
	2022	Cut zone 2 along SE side	

	2023	Cut zone 2 along NW side	
	2024	Cut zone 2 along SE side	
	2025	Cut zone 2 along NW side	
	2026	Cut zone 2 along SE side	
2	2021	Cut zone 2 along SE side	
	2021	Cut zone 3 along SE side	
	2022	Cut zone 2 along NW side	03/22
	2023	Cut zone 3 along NW side	
	2023	Cut zone 2 along SE side	
	2024	Cut zone 2 along NW side	
	2025	Cut zone 2 along SE side	
	2026	Cut zone 2 along NW side	
3	2021	Cut zone 2 along N edge	
	2022	Cut zone 2 along S edge	01/22
	2022	Cut zone 3 along S edge	01/22
	2023	Cut zone 2 along N edge	01/23
	2024	Cut zone 2 along S edge	
	2025	Cut zone 2 along N edge	
	2026	Cut zone 3 along N edge	
	2026	Cut zone 2 along S edge	
4	2021	Cut zone 2 along S edge	12/21
	2022	Cut zone 2 along N edge	12/21
	2023	Cut zone 2 along S edge	01/23
	2024	Cut zone 2 along N edge	
	2025	Cut zone 2 along S edge	
	2026	Cut zone 3 along N edge	12/21
	2026	Cut zone 2 along N edge	

5	2021	Cut zone 2 along S edge	12/21
	2022	Cut zone 2 along N edge	01/22
	2023	Cut zone 2 along S edge	01/23
	2024	Cut zone 2 along N edge	
	2025	Cut zone 2 along S edge	
	2025	Cut zone 3 along S edge	
	2026	Cut zone 2 along N edge	
	2026	Cut zone 3 along N edge	
6	2021	Cut zone 2 along S edge with brushcutters	Not needed
	2022	Cut zone 2 along N edge with brushcutters	
	2023	Cut zone 2 along S edge with brushcutters	01/23
	2024	Cut zone 2 along N edge with brushcutters	
	2025	Cut zone 2 along S edge with brushcutters	
	2025	Cut zone 3 along S edge	
	2026	Cut zone 2 along N edge with brushcutters	
	2026	Cut zone 3 along S side with brushcutters	
7	2021	Cut zone 2 along SE edge	09/21
	2022	Cut zone 2 along NW edge	Not needed
	2023	Cut zone 2 along SE edge	01/23
	2024	Cut zone 2 along NW edge	
	2025	Cut zone 2 along SE edge	
	2025	Cut zone 3 along SE edge	
	2026	Cut zone 2 along SE edge	
	2026	Cut zone 3 scallops on NW edge	
	2022	Cut zone 2 along N edge	
	2023	Cut zone 2 along S edge	
	2024	Cut zone 2 along N edge	

	2025	Cut zone 2 along S edge	
	2026	Cut zone 3 along N edge	
	2026	Cut zone 3 along S edge	
8	2021	Cut zone 2 along E side	01/21
	2022	Cut zone 2 along E side	01/22
	2023	Cut zone 2 along E side	01/23
	2024	Cut zone 2 along E side	
	2025	Cut zone 2 along E side	
	2026	Cut zone 2 along E side	
9	2021	Cut zone 2 along SE edge	Chalara clearance instead
	2022	Cut zone 2 along NW edge	
	2023	Cut zone 2 along SE edge	01/23
	2025	Cut zone 2 along SE edge	
	2025	Cut zone 3 along SE edge	
	2026	Cut zone 2 along NW edge	
	2026	Cut zone 3 along NW edge	
10	2021	Cut zone 2 along SW edge with brushcutters	
		Cut zone 3 scallops along NE edge	
	2022	Cut zone 2 along NE edge	
	2023	Cut zone 2 along SW edge with brushcutters	01/23
	2023	Cut zone 3 along SW edge	01/23
	2024	Cut zone 2 along NE edge	
	2024	Cut zone 3 scallops along NE edge	
11	2021	Cut zone 2 along E edge	01/21
	2022	Cut zone 2 along W edge	
	2023	Cut zone 2 along E edge	01/23
	2024	Cut zone 2 along W edge	

	2025	Cut zone 2 along E edge	
	2025	Cut zone 3 along E edge	
	2026	Cut zone 2 along W edge	
12	2021	Cut zone 2 along W edge	01/21
	2022	Cut zone 2 along E edge	
	2023	Cut zone 2 along W edge	01/23
	2024	Cut zone 2 along E edge	
	2025	Cut zone 2 along W edge	
	2026	Cut zone 2 along E edge	
13	2021	Cut zone 2 along S edge	
	2022	Cut zone 2 along N edge	
	2023	Cut zone 2 along E edge	01/23
	2023	Cut zone 3 along E edge	
	2024	Cut zone 2 along W edge	
	2024	Cut zone 3 along W edge	
	2025	Cut zone 2 along E edge	
	2026	Cut zone 2 along W edge	
	2024	Cut zone 2 along NW edge	

7.2.4 Coppicing

The below works were completed as part of the reinstatement of coppice rotation since 2007. Coppice coupes are a maximum of 1ha in size and predominantly Sweet Chestnut. 1ha of coppice is dried for 3 years then chipped for the Biomass Boiler then the rest is sold to the public as 'certified ready to burn' firewood. As part of the LTC biodiversity project that started in 2022 smaller coupe sizes of 0.3ha are felled to maximise the habitat for dormice.

Up to 1.5 hectares are sold as logs generating an income of £25,000 per year.

- 2007/08- 1.2ha of Sweet Chestnut coppice cut along ride 2 & 3 in compartment 12a, 12b, 12d, 12e cut. 0.15ha of mixed hard woods coppice in comp 7b
- 2008/09- 1ha of Sweet Chestnut coppice cut in comp 9a and 1ha approx of coppice around veteran trees 1034/1181-1185.
- 2009/10- 1.7ha of Sweet Chestnut coppice cut in comp 12f and along ride 6 adjacent to Randall wood boundary.
- 2011/12- 1.5ha of Sweet Chestnut and Ash on ride 6 adjacent to the boundary in comp 13a
- 2013/14- 1ha of Sweet Chestnut from Glade C to ride 6 in comp 12b/12c and 1ha Brewers Wood, the new woodland, comp 11f.
- 2014/15-1ha ha Brewers Wood, comp 11f. 1ha of Sweet Chestnut adjacent to new woodland in 11e up to ride edge and 0.25ha along ride edge in Randall Wood comp 11b
- 2015/16- 1ha comp 9a adjacent to the areas coppiced in 2003 and 2009 up to the main entrance road and 0.25ha section of ride edge coppice in comp 11b.
- 2016/17-1ha of comp 12f in Randall Wood and adjacent to 2010 coupe 1ha of comp 11e in Brewers Wood
- 2017/18-1ha in comp 12f of Randall Wood. 0.5ha of comp 12a in Randall Wood and 0.25ha of ride edge coppice in comp 11b
- 2018/19-1ha in comp 12b of Randall Wood (heavily affected by Phytophera)
- 2019/20-0.25 ha in comp 7b of hazel coppice, ride edge coppicing 2020/2021-1ha in comp 12b of Randall Wood
- 2022/23- 3 x 0.3ha coupes in comp 12e, 12f and 13a
- 2024/25 - 0.33ha Brewers Wood 11b. 0.4ha 13c

Coppicing action plan

YEAR	Compartment	Area and species	Date completed
2021	11e	1ha Sweet Chestnut	Not required, ride ed ge coppicing done instead
2022	12e, 12f, 13a	1ha Sweet Chestnut	02/23
2023	11e	1ha Sweet Chestnut	12/23
2024	9a	1ha Sweet Chestnut	Jan 2024
2025	11b, 13c	1ha Sweet Chestnut	Jan 2025
2026	12f	1ha Sweet Chestnut	

7.2.5 Deadwood

In all areas many trees have been felled and left in corridors of deadwood stacks as whole trees. Due to all the small deadwood piles being turned into base camps and dens this is the only way to create deadwood stacks in the park. In comp 5A there is a continuous corridor of deadwood stacks over approximately 50m to ensure a permanent deadwood habitat in the area. In areas where Phytophthora is killing the Sweet Chestnuts these are felled and left in stacks on site to create deadwood corridors, the main area for this is comp 12b and 12c, deadwood from Ash trees killed by Chalara are also left on site as are fallen limbs from existing veterans. Assuming standing dead trees are not endangering visitors these are left as standing deadwood habitat.

7.2.6 Veteran Trees

A veteran tree survey was completed in 2009 funded by HLF. In 2023 the survey was redone to include individual management plans for each individual tree and to capture future candidate veterans and any trees missed by the 2009 survey. This was funded by National Highways LTC project.

The survey used the Natural England SSM3 methodology. Particular note was made of the Hornbeam maidens which were unusual as most sites historically manage Hornbeam as pollards, so these were of particular importance. All trees were tagged.

The data is stored on an electronic database called Mytrees that can be regularly updated. This contains the location, a photo and survey/monitoring results for all trees.

Park staff carry out visual surveys on the trees annually to monitor condition.

As there are 307 trees the individual management plans for these trees are stored separately and the details of works are recorded on the Mytrees database. Works include halo cutting, crown reduction, limb removal, retrenchment cutting, vegetation clearance around the tree.

This is an internationally important collection of veteran trees and the aim is to protect them from compaction and competition whilst still ensuring that people can enjoy exploring amongst them.

Year	Tree number where halo cut works completed
2021	
2022	
2023	All 1st phase- 1021,1022,1023,1024, 1026,1178,1179,1180,1177 1195, 1196, 1197, 1198, 1199, 1029, 1030, 1031
2024	
2025	
2026	

Additional aerial tree works completed on veteran trees in 2023:

1018	Quercus robur (English Oak)	EW00 (End-weight reduction - Specified extent)	Reduce a single large limb (growing in a south east direction and attached to the trunk at a height of approximately 5m, by 20% in length.
1022	Carpinus betulus (Hornbeam)	MOB (Management objective)	Staged retrenchment of the canopy to a more stable form,
1023	Carpinus betulus (Hornbeam)	MOB (Management objective)	Staged retrenchment of the canopy to a more stable form, (1 of 2 poles/stems initially) ,
1024	Carpinus betulus (Hornbeam)	MOB (Management objective)	Staged retrenchment of the canopy to a more stable form, (by 2m initially) ,
1026	Populus sp. (Poplar sp.)	MOB (Management objective)	Maintain cyclically, at a canopy size between the previously reduced size and a maximum extension growth of 12 m and manage the rooting environment.
1095	Castanea sativa (Sweet Chestnut)	MOB (Management objective)	a staged retrenchment of the canopy to a more stable form,

			(by 3m initially)
1122	Castanea sativa (Sweet Chestnut)	PRT (Prune from adjacent tree)	Remove single, largest limb (120cm girth) from early mature sweet chestnut 5.5m east, west.
1127	Quercus robur (English Oak)	R00 (Reduce crown by - Specified extent)	Prune 30% of extension growth back to the previously reduced points.
1150	Castanea sativa (Sweet Chestnut)	RH00 (Reduce height - Specified extent)	Prune back the extension growth to the previously reduced limbs (at approximately 6m height).
1151	Carpinus betulus (Hornbeam)	MOB (Management objective)	Reduce/stage retrenchment of the canopy to a more stable form, (by 2m initially), monitor response and manage competing vegetation.
1151	Carpinus betulus (Hornbeam)	R00 (Reduce crown by - Specified extent)	Reduce main limb by 2m.
1154	Carpinus betulus (Hornbeam)	R00 (Reduce crown by - Specified extent)	Crown reduce 50% of the extension growth.
1157	Carpinus betulus (Hornbeam)	EW00 (End-weight reduction - Specified extent)	Reduce the length of the secondary(now main) limb by 4m.
1167	Carpinus betulus	EW00 (End-weight reduction - Specified	Reduce the length of limb, attached to the trunk at

	(Hornbeam)	extent)	4.4m height by 3m.
1193	Fraxinus excelsior (Ash)	FLC (Fell - Coppice)	Reduce x1 (main stem) back to 4m height.
1195	Fraxinus excelsior (Ash)	MOB (Management objective)	Staged retrenchment of the canopy to a more stable form, (by 2m initially),
1222	Carpinus betulus (Hornbeam)	MOB (Management objective)	Retrenchment of the canopy to a more stable form, (by 2m initially) ,
1239	Quercus robur (English Oak)	PLP (Pollard - Previous pollard height)	Reduce crown back 50% of the poles only, to previously pollarded/reduced height of approximately 9m.

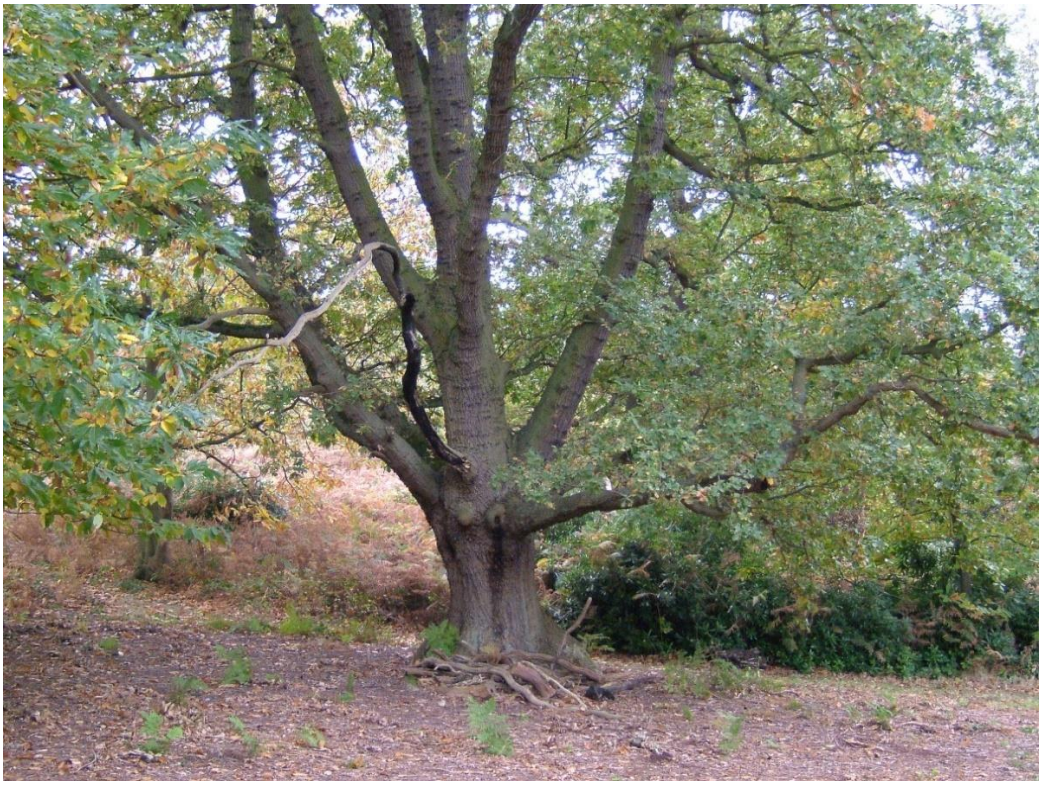
7.2.7 Health and safety trees

The site operates a 3-zone health and safety inspection regime. For full details see appendix F. The ranger teams are all qualified in basic tree inspection and carry out ongoing surveys throughout the year and zone 1 is inspected annually by a qualified arboriculturist. Over the course of this plan the following works will be undertaken.

Health and safety tree work action plan

Zone 1 = tree inspector **Zone 2 and 3 = Ranger team**

YEAR	Compartment	Zones to be inspected	Date completed
2021	All	Zone 1, 2 and 3	12/21
2022	All	Zone 1	11/22
2023	All	Zone 1	10/23
2024	All	Zone 1 and 2	11/2024
2025	All	Zone 1	
2026	all	Zone 1,2 and 3	



7.2.8 Lower Thames Crossing Biodiversity enhancement project

A full project plan for this specific work is available digitally. This involves a ten-year fully funded project to enhance the woodland understorey across the park linking the coppice woodlands of Randall Wood to the A2 and Thong Lane boundaries.

Annually areas will be thinned and cleared to create newly planted woodland understorey copses and corridors linking the existing 42ha of coppice woodland across the park from East to West. This will link into existing bramble and honeysuckle areas to expand the good quality habitat. By the end of the project 32ha of land will be linked into the 42ha of coppice creating 74ha of suitable habitat for dormice through the planting scheme. The planting will create corridors and glades of a mixed species of Hazel (50%), Oak, Broom, Yew, Hawthorn and Wayfarer (10% each) across compartments 2,3,4,5,6,7 and 8.

The veteran trees will be recorded and individual management plans created to create work plans to protect the trees for the long-term future.

In year 1, 2022-2023, 4500 trees were planted in copses and corridors across an area of 8.12ha in Nov and Dec. The planting area included 30% thinning of Oak plantations and 0.3ha of bracken clearance. On survey in April 2023 100% of the plantings were successful across all compartments. 1.2ha of coppice was cut in 0.3ha coupes and all the brash stacked in dead hedges as habitat corridors. 215 ancient or veteran trees were recorded and 80 future veterans.

50 dormice boxes will be installed to monitor dormice activity with a view to possibly relocating dormice from the LTC development area into the site.

Tree clearance action plan

Year	compartment	Works completed
2022	5a, 5b, 7f, 8a, 8b	December 2022
2023	2a, 2b, , 3a, 3b, 4e	Nov 2023
2024	1a,1c, 2d, 4f, 4g, 5c	Dec 2024
2025	Review all above areas	

Tree planting action plan

Year	Compartments	No of Trees planted	Trees planted
2022	7f, 8a, 8b, 5a, 5b	4500	Nov- Dec 2022
2023	3,4	5000	Nov-Dec 2023

2024	2,1	6000	Nov – Dec 2024
2025	Gap up existing planting		
2026	Gap up existing planting		
2027	Gap up existing planting		
2028	Gap up existing planting		
2029	Gap up existing planting		
2030	Gap up existing planting		

7.3 Ponds objectives and action plans

Most of the ponds and areas of wetland are human caused, formed in hollows and depressions created during clay extraction between the 1920's and 1970's. In Randall Wood there is the medieval fishpond network and in Brewer's Wood there is a small marshy area. The ponds and wetland areas on site show a good example of ecological succession with areas of open water through to dense emergent vegetation to wet woodland.

The ponds can be found in Compartment 4B (Randall Bottom Pond); Compartment 9A (Pond C); Compartment 10 (Ponds A-N); Compartment 12F (Medieval Fishponds), comp 2b (Pond o), comp 11e/f (pond p).

The Country Park is managed for public recreation, with several facilities provided which relate to the ponds and wetlands, including fishing in *Ponds A* and *B* where fish swims have been established*;* pond-dipping platforms; and a pond of low-ecological value set-aside, with permission from Natural England, for dogs (*Pond K*); this will have a direct influence on the management prescriptions undertaken.

Ponds found in *Compartments 9* and *10* are subject to vegetation clearance on a rotational basis. Vegetation clearance has occurred since 1996. This will continue with emergent vegetation maintained at between 10% in newly cleared ponds and 80% in ponds to be cleared.

Historically Randall Bottom Pond has been maintained as a heavily vegetated pond with emergent vegetation between 40% and 70%. Its edges were surrounded by dense Rhododendron which created heavy shade. Following recent Rhododendron clearance most of the woody vegetation has been removed which has resulted in the pond being more open.

Other water features throughout the site such as ditches, pipes, and the drainage chute (*Pond* K) will need to be maintained.

Three / four surviving fishponds and several water management features are found in Randall Wood, which are associated with a medieval manor. These have some ecological value as winter-wet ponds.

7.3.1 General Pond objectives

- The ecological integrity of the ponds and wetlands found in Shorne Woods Country Park will be protected and biodiversity enhancement is a major objective.
- Species which are recognised as endangered at a local or national level should be protected, with habitat management focused on these species.
- The spread of non-native aquatic plant species *e.g.,* Crassula Helmsii should be in the short-term controlled where possible.
- Randall Bottom Pond will be managed for wildlife. No loss of habitats or typical species should occur; in addition, management should aim to maintain populations of rare and scarce Kent plant species.

- *Ponds C* to *P* will be maintained on a rotational basis so that the cover of emergent vegetation varies between 10% in newly created ponds and 80% in ponds to be cleared.
- Every three years (approximately) clear emergent vegetation from Randall Bottom Pond so that only 40% of the pond area remains vegetated. Material should be cleared by hand and arisings should be stacked around the pond. Clearance should ideally be undertaken during late summer or early autumn when the pond level is at its lowest.
- Ponds E, F, L, K, H and N should be hand pulled of reeds on a rotation and a 1-3m margin of reeds left around the banks with 80% open water at the end of the clearance. Pond N was done in 2017, half of pond L in 2018 and Pond E in 2019 and Pond N again as it was very overgrown.
- Tree and gorse regeneration should be cut back to allow marginal plants to grow and reduce leaf litter in the ponds. Pond E and F were done in 2019.
- Maintain drainage system throughout site including ditch network, pipes, and drainage chute.

Crassula Hemsii control

A trial project was carried out to eradicate Crassula Helmsii, this began after extensive newt surveys were carried out to ensure no harm to wildlife occurred. Over two years techniques were trialled, but the pellets used were banned by the EU in 2010 so the treatment was not sustainable. When the ponds dried up in the summer of 2011 it was decided to spot spray the emergent Crassula Helmsii and monitor the results.

The spraying had mixed results with good eradication in ponds E and F but not in pond K where it was much more abundant before treatment. In liaison with the EA and Natural England the effect was deemed negligible as an eradication technique not successful and unsustainable, so this action was not continued.

In June 2013 it was apparent that the Crassula had spread back into all ponds and drainage channels as no treatment was possible in 2012 due to the wet summer keeping the ponds filled to capacity. Environment Agency advice is that there is no treatment available for Crassula control currently however rangers will monitor new techniques as they develop.

Pond reed management action plan

YEAR	POND	WORKS COMPLETED
2021	**E**	**04/21**
2022	**L- WEST SIDE**	**10/22**
2023	**E AND N**	10/23
2024	**Arboretum**	10/2024
2025	**E AND N and Randall Bottom Pond**	
2026	**L-WEST SIDE**	

7.4 Restoration of Randall Heath

Lowland Wood-pasture and Heathland are local biodiversity habitats in Kent. BAP targets include reinstatement of positive management of key areas of wood- pasture and parkland to ensure the survival of old trees and their associated habitat.

The heath was cleared of Rhododendron in 2006. There was then a phased clearance of the trees on site. In 2009 compartment 6a was cleared and then forest mulched to get the stumps to ground level.

In 2010 compartments 6c, 7a, and 7ei had the same works carried out.

Any deadwood was stacked into piles in amongst the veteran trees.

An agreement was made with the neighbouring landowner to run a water supply from his house up onto the heath. In 2010 a 200m pipe was laid and trough purchased to enable stock to graze the site in future.

Currently the area is managed through one mechanical cuts of the bracken per year by park staff. The cut is carried out just as the fronds of the bracken open for maximum impact in early-mid June. A final cut is done in the Autumn. Regenerating Sycamore and Silver Birch were cut and treated in Jan 2020 and 2023.

Cattle were introduced for the first time in July 2014 for restoration grazing, using a local grazier and Hereford Cattle. The grazing agreement is that the grazier is responsible for repairing any fence and gate issues and monitoring the stock in exchange they get free grazing land. The site benefits as a Kent HAP habitat gets managed for free. In 2018 18 cattle grazed the knoll from May to July as opposed to the low stocking rate from 2014-17. This was because of consultation with the rare breeds survival trust during some training for staff.

A new grazing partnership with Kent Wildlife Trust began in June 2023 and nine Longhorn cattle grazed the site from June to August. 10 Sussex cattle grazed the site from May to July in 2024.

Future potential veterans are identified and fenced to protect them from damage.

7.4.1 General acid grassland objectives

- Lack of grazing management in the past has led to the degradation of both the wood pasture and acid grassland. Today this area is characterised by an open landscape dominated by Bracken. It is believed to have been open heathland in the past, although it is unclear whether heather was dominant; it is more likely that the site supported acid grassland. Therefore, restoration of the Knoll focuses on the reinstatement of acid grassland habitat.
- Restoration of the Wood-pasture focuses on the re-creation of a wood-pasture landscape with scattered mature trees and an acid-grassland dominated field- layer. During the winter of 2004, approximately 1 ha of secondary woodland was cleared.
- Three hectares of Rhododendron were cleared from Randall Heath in February 2007. Any regrowth is hand pulled as no herbicide can be used in the grazing area.
- In 2009 1.5 ha of regenerating sycamore and birch was cleared from comp 6b and the area flailed with a forest mulcher as part of the HLF funded works.

- In January 2011 a further 1.5ha of trees was cleared in comp 6 and 7 and the accessible areas mulched to remove the stumps.
- To establish an ongoing grazing regime on Randall Heath the long-term aims of grazing will be to reduce the vigour of the Bracken and to encourage species diversification of the resulting acid grassland / heath.
- Continue current flailing of Bracken two-three times per year to reduce its dominance and vigour. However, it is believed that the presence of Bracken from Randall Heath will never be eliminated entirely as it is characteristic of this vegetation type. There should be no further spread of Bracken into adjacent areas. The long-term aim is the increase in number of associate species ideally with the community developing to a grassier sward such as U20a *Pteridiumaquilinum-Galium saxatile* community, *Anthoxanthum odoratum* sub-community.
- Record the presence of acid grassland species such as the grasses *Anthoxanthum odoratum* (Sweet Vernal-grass), *Agrostis capillaris* (Common Bent), *Festuca ovina* (Sheep's-fescue) and *Holcus lanatus* (Yorkshire-fog) and the herbs *Galium saxatile* (Heath Bedstraw), *Luzula campestris* (Field Woodrush), *Potentilla erecta* (Tormentil), *Rumex acetosella* (Sheep's Sorrel) and *Teucrium scorodonia* (Wood Sage).

Acid grassland action plan

Year	Grazing dates	Number of stock	Number of cuts	Invasive species control
2021	None		3	
2022	None		3	
2023	10/6/23 to 10/8/23	9 Longhorn	1	Sycamore and Rhododendron removed and stump treated Mar 23
2024	2/5/24 to 8/7/24	10 Sussex	1	Cleared silver birch
2025				
2026				

7.5 Claypit grassland areas

There are glades and amenity grassland areas spread throughout compartment 10.

The amenity grassland around the play areas and picnic areas are cut as and when required dependent on the weather as in dry years they may need no cutting and in wet years they may need frequent cuts. All the margins are left for wildflowers, grasses and herbs to thrive. These margins of the amenity area are cut in September once the seed has spread to ensure they remain grassland and that the extent of grassland is maintained.

The rest of the claypit area is left to natural regeneration so there are grassy glades dotted throughout. Path edges are cut once the orchid season is over as there are abundant common spotted orchids and fragrant orchids along a lot of the path edges.

This area is monitored to see what is naturally seeding and the areas are only cut if they become bracken dominant.

The area is particularly good for fungi in the Autumn due to the acidity of the soil.

8 HERITAGE MANAGEMENT

8.1 General Introduction

The Kent County Council Community Archaeologist coordinates the management of heritage features primarily through facilitating volunteer teams.

The site has a wealth of history and archaeology within its boundaries, spanning a period from the Stone Age (Mesolithic flint tools recorded on Randall Heath), through to the remains of the 20th Century clay working industry (which shaped much of the current park landscape). Amongst other features, the site also contains a World War II RAF billet camp which lies hidden in the trees, a World War II Army camp, an ancient hollow way/medieval boundary, a medieval windmill mound and a grand medieval manor house – Randall Manor - with numerous outbuildings which once stood with views down to the Thames.

The significance of Randall Manor was first highlighted during excavations in the 1960's by local teacher George Dockrell. In 2001 Oxford Archaeology undertook a walkover survey of Randall Wood (Oxford Archaeology 2001). This survey recorded twenty-one previously unrecorded earthwork features.

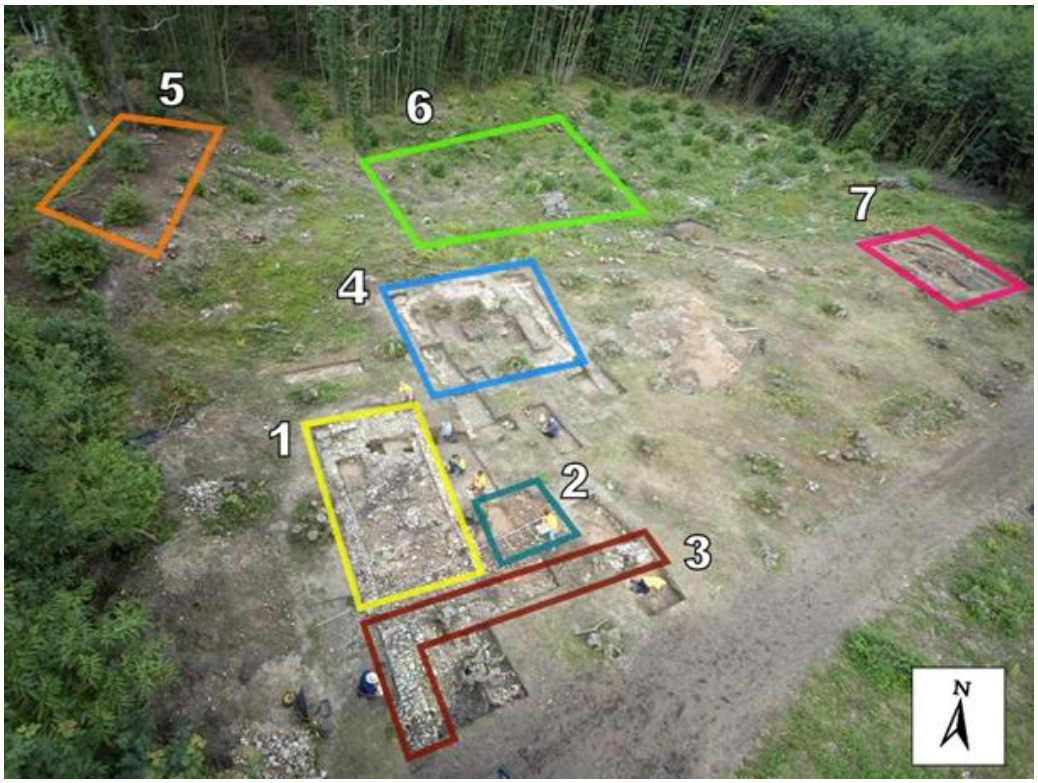
The 2005-2011 HLF funded project aimed to identify, investigate, conserve, and interpret the many different archaeological sites within the park, working with community groups.

8.2 Archaeological Details

Shorne Woods Country Park contains many sites that are listed on the Kent County Council Heritage Environment Record, including:

- The site of Randall Manor and associated Medieval ponds.
- The site of Second World War RAF and Army camps
- The findspot of many Mesolithic worked flints.

Photo of the Randall Manor Site



1. *Later 14th century addition.*
2. *Fallen roof tile.*
3. *Northern end wall of main house.*
4. *'Detached' 2-phase kitchen with central hearth.*
5. *Human-caused dam to create the first in a series of ponds.*

6. *Second pond in the series.*
7. *Brewhouse*

Other sites of interest include a medieval windmill mound, later a prospect mound on the knoll, several lynchets, banks and ditches (some of which are of probable medieval date) and

a sunken hollow way. Two possible plantation ridges of post medieval date were identified during the 2001 survey. There is also evidence of small scale, hand-dug quarrying of probable post-medieval date and industrial archaeology associated with the modern clay extraction pit (open from the 1920's to the early 1970's). The 2001 walkover survey noted evidence of coppicing throughout Randall wood. Historical research suggests that coppicing began in Randall Wood in the early post medieval period (late 16th/early 17th century). The location of a post-medieval hedgerow at a road boundary has also been identified.

Four surviving ponds and several water management features found in Randall Wood are associated with the medieval manor. The fishponds have become heavily silted (particularly the uppermost pond) but have well preserved clay banks, the fourth pond in the series still retains water for much of the year. The water management features are comprised of several dams, feeder channels and breaks (where there may have once been wooden sluices), all of which are in an excellent state of preservation.

Full details of these features are available in the Shorne Woods Historic Environment record stored on site.

The manor site is now buried to protect the feature and the location managed as part of the glade network.

8.3 Community Archaeology

At Shorne Woods Country Park volunteers are involved with archaeology through involvement in ongoing community archaeology projects. Volunteers can get involved in several ways: fieldwalking, tree surveys, LiDAR groundtruthing, geophysics, researching historic documents, artefact processing/research and small-scale excavations.

From 2006-2015 a community dig was held at the park, at Randall Manor. During the excavation, the main buildings of the Manor were uncovered and recorded. The vast aisled hall and stone cross wing building, the detached kitchen, Brewhouse, and various other outbuildings were all exposed.

Heritage volunteers have annually contributed over 6000 hours per year in the years 2011-2023. The groups established have continued to be based out of the park and have weekly meetings, help on open days and work across the whole local area

helping record the archaeology. Many have been trained to carry out expert work and become specialists in pottery, knapped flints, ground truthing, excavating and finds recording.

The Community Archaeologist has also been gathering information from locals and their relatives or friends, who either lived or worked in the area where the Country Park now lies. These memories contribute much to the story of the wider area. This was recorded as oral history.

The continuing support of a band of enthusiastic, passionate, and hardworking volunteers has ensured the success of every community archaeology project undertaken to date.

8.4 Management Actions for Heritage Features

8.4.1 Randall Manor

The vegetation will be managed as a woodland glade and rotationally cut to allow taller grasses and herbs to grow. Early purple orchid areas will be protected. The grassland is managed as part of the woodland glade system.

The felled coppice stools need retreating in some places as regrowth has occurred, in particular on the linear bank to the north of the second pond.

The extensive system of medieval ponds both to the north of the Manor and continuing north-east into the woods need ongoing conservation management to prevent reversion to woodland.

Randall Manor 2015 from above

8.4.2 The windmill mound on Randall Heath (the Knoll)

Excavation has demonstrated that this is not a prehistoric mound as once thought. Gravel was heaped up to anchor a medieval windmill. Later a small prehistoric folly was built on top of the mound, to take in the views of the area. This feature may be associated with Randall Hall, the former post medieval mansion in the valley below, on the western edge of the park.

Cattle will be allowed access to the mound within the grazing programme as they should not damage the feature. However, their grazing may mean that the mound and immediate surrounds eventually become purely grass (presently bracken and scrub), in which case action may be needed if rabbits move in.

8.4.3 The Carriage Drive/Rhododendron Walk

This was cleared of Rhododendron, originally planted in the early 19th century, in 2006/2007. In some places the feature has a shallow bank on its western flank, and a slope to the east. It is necessary, however, to delineate the entire line of this feature to mimic its original look and to ensure that visitors remain on its original route. Replanting with Rhododendron is not allowed due to the site being a SSSI so annual cutting to the line of the oaks will be undertaken to retain the carriage ride width. The carriage drive maintains a historic link between the Cobham Hall grounds and Thong Lodge.

8.4.4 World War II RAF Billet Camp and Army Camps

The two air raid shelters have been converted into bat roosts by removing all debris, blocking air vents to increase humidity, putting up bat boxes and installing bat grilles at the entrances. The site needs regular checks. 2 nesting Brown long eared bats were found here in January 2016 by the KWT, and Brown Long eared bats have been found every year.

The foundations of several other buildings have been partly excavated and backfilled. The site remains covered in artefacts relating to both the World War Two use of the

area and post-war housing of families in the redundant camp buildings. A World War Two camp map does give a general indication of the Camp layout.

In the north east corner of the park the extensive remains of a temporary World War Two army camp survive. Excavations have uncovered the fuel bund base and canteen block base. The surrounding woodland is full of slit trenches.

The camp was used as a squatter camp until the early 1950s.

8.4.5 Clay Works

The only immediately visible feature is the wash pan which needs careful monitoring in the future. At present it has young trees growing in the base and sides – these prevent bikers from using the slopes but will eventually cause great damage to the concrete as they mature. One larger tree has cracked the concrete on the northern side edge and needs to be removed. The feature could become dangerous if the concrete is allowed to crack further.

The banks lining either side of the concrete road leading past the wash pan and mill have become much eroded due to cyclists. Their original profile could only be preserved if action were taken to prevent this; however, this would only be achieved through fencing, which is impracticable.

To the east of the wash pan, an air raid shelter presumed to be associated with the clay works has been excavated and backfilled.

Other building bases relating to the clay works survive in the undergrowth around the wash pan.

8.4.6 The Holloway/Medieval Boundary

As the oldest visible proven heritage feature within the park, (referred to in a document of 1614 as ‘the ancient waie’), the hollow way is an important aspect of the Park’s past. The profile of the banks needs to be protected, from walkers, cyclists, contractors, and Park vehicles. Deliberate breaching has already occurred in two places and accidental erosion has occurred in several places over time.

If crossing the banks in large vehicles is inevitable (as at the start of the extraction track near the Yew Trees) then measures should be put in place to protect them. These might include creating a temporary ramp or ensuring that deep ruts are not created in wet weather.

The banks all the way along the route should be regularly monitored. If a particular area is being eroded by cyclists or walkers then measures should be put in place to stop the breach.

The Holloway to Shorne Ifield Road in comp 13a

8.4.7 Mesolithic flint scatters

The gravel geology of both Randall Heath and the Burnett was favoured by our Mesolithic ancestors. Both sites have produced extensive worked flint assemblages, suggesting repeat visits to the area through the Mesolithic and into the Neolithic and early Bronze Age.

Though these are not in situ knapping scatters (the flints have migrated down into the gravels by sometimes as much as 1m), the identification of Mesolithic and later worked flint is an important addition to our understanding of Prehistoric Kent. The

nearby Mesolithic site on the Plantlife reserve at Ranscombe forms an important comparative site to Shorne.

Path improvement works and/or clearance works on these sites that impact the ground should be monitored and any worked flint recovered.

9 VISITOR MANAGEMENT

9.1 General

Shorne Woods Country Park is managed both as a nature conservation site and a recreational resource; the provision of recreational facilities being a major factor in site management. The area known as 'The claypit' (compartment 10) provides the focus and supports extensive recreational facilities. These include an arboretum, easy access path, a picnic area, adventure playgrounds, fitness equipment, trim trail, fishing lakes, volunteer garden and the visitor centre and amenity block with a Changing Places Toilet. The site provides free access for the public the only charge is for parking.

Since 2008 Shorne Woods has been awarded the Green Flag award every year and since 2010 the park has achieved a Gold Award in the South and South East in Bloom awards.

9.1.1 General aims and objectives

- To maintain and improve the site as a recreational facility, enabling members of the public to enjoy the countryside both within and outside its boundaries. To provide a site on which a variety of activities can be enjoyed within a countryside environment without damaging the ecological interest of the site. In addition, the site management objectives will be to provide a resource for

environmental education with reference to school groups but also for the public. The site aims to provide facilities for education and information for visitors, to encourage greater knowledge and appreciation of the countryside.

- To maintain, improve and extend the path network throughout the site via a programme of regular maintenance and upgrade works.
- The Country Park must meet all legal and other obligations. Liaise with the Thames Work Angling and Preservation Society at least twice a year to discuss site issues such as maintenance of fishing swims and bank-side structures on *Ponds A* and *B* and reed control.
- Work with Skanska to ensure all buildings and facilities are clean and well-maintained.
- Ensure the café and visitor centre are open 363 days a year.
- Maintain and plan open space network in *Compartment 10.*
- Ensure path network is managed to maintain year-round access.
- Ensure all site staff and contractors are fully in accordance with KCC Health and Safety policy. Undertake training where necessary.
- Ensure all volunteers' and local groups comply with KCC Health and Safety
- Framework, provide suitable training and supervision.
- Ensure all site staff implement Risk Assessment actions.
- Undertake daily, weekly, monthly, and annual site checks as set out in *Section 7*
- Undertake annual tree inspections, see *Section 15.4.2*
- Undertake monthly inspections of site furniture.

9.2 Buildings

In 2006 a new visitor centre was opened. KCC's brief to Lee Evans Partnership was to design a sustainable, eco-friendly visitor centre which was contemporary, but firmly rooted in Kentish tradition. The centre provides a stimulating environment enabling visitors to interpret the use of wood in its various stages and to interact with the adjacent ancient woodland, meadows, and wetland. The interpretation in the visitor centre was renewed in 2023 funded by National Highways designated funds.

The centre demonstrates best practice and renewable technologies in the north Kent region to help inspire visitors to make a difference to the environment in their own lives.

Due to the site's location the idea for the building design was to use Sweet Chestnut in the building where possible or at least sustainably sourced timber. It was used throughout the building process, in the centre's structural, curved, glue-laminated frames (this design set a new British standard for structural chestnut), and in the external cladding and internal floor finishes. Due to the large quantities of timber required the Sweet Chestnut came from both the Country Park and elsewhere in south-east England. In addition, Oak used for the doors, windows frames, skirting and external balcony banisters and stairs was sourced from Kent County Councils Parkwood site.

The Visitor Centre includes a café, outdoor kitchen with log-fired pizza oven (a second was added in 2020 due to demand), toilets, interpretation centre and meeting venue called the Chestnut Room. This flexible meeting space has a self- contained kitchen and toilet facilities, with access to a balcony for tree-top views.

The Visitor Centre includes many eco-friendly features. The photo-voltaic panels produce 2.2 kWh of electricity. Solar panels are used to produce hot water for hand washing in the summertime when the biomass boiler is not running. The building uses a rainwater harvester to collect rainwater to flush the toilets, along with a Bio-digester which digests sewage and other waste to produce clean water returned to the water table through a bore hole. The building is also fitted with PIR Light Sensors and waterless urinals. Both Klargester's must be serviced twice yearly, and the waste monitored by park staff to monitor water quality to adhere to the site Environmental Management Plan as per Environment Agency regulations.

The building won the SEEDA 2006 South-East Renewable energy awards and the 2007 LABC National Built in Quality awards for Structural Innovation. It was shortlisted for the 2007 David Alsop Sustainability Award in the IStructE Structural awards.

The building's maintenance is carried out under a KCC wide facilities services contract with Skanska. Issues are logged and then resolved subject to a service level agreement prioritizing works. Any issues with the contract are flagged to the KCC property team who ensure all works and inspections are carried out accordingly. The visitor services team log all building issues.

The main visitor centre

The visitor centre at Shorne is heated by a biomass boiler. The boiler burns woodchip (produced by the park) which heats the hot water and the under-floor heating in the visitor centre and office. This can generate up to 60KW of energy at peak output. This work is carried out by park staff and the timber never travels more than 1 mile from where it is cut.

Approx. 1 hectare per annum of Chestnut is cut for the boiler needs (100m3 approximately). Wood that is 100 to 150 mm is cut in to 3 metre lengths and stacked in a fenced compound in the woods. This is stacked with the butt ends facing the direction of the prevailing wind to aid the drying process. The wood is stored for 9 to 15 months, depending on drying conditions. Only Sweet Chestnut is used as it provides the best quality and most efficient chip.

The wood is chipped into a tractor trailer and stored in the work compound. The woodchip has a moisture content of around 30 – 35% at this stage. During the chipping process great care is taken by only processing clean timber in good condition. When the chip has reached the desired moisture content between 20% and 25% it is ready for the biomass boiler. The hopper takes the chip in to the boiler via an auger feed. The chip is burnt at the end of the auger feed and the ash from this process is collected in a tray and emptied daily. This ash is spread on the volunteer garden area the following spring.

In addition, to the Visitor Centre the old visitor centre has been converted into a workshop compound used for storage and equipment. There are 3 loose log stores, 3 bay woodchip barn, 3 bay wood products storage unit and an office base for the Heritage team volunteers.

An additional amenity block was opened in 2012 in response to customer feedback that more toilets were needed. This has doubled the toilet provision and enabled there to be a small ice cream/milkshake and waffle parlour nearer the children's play areas.

In 2021 a European funded project called 'Experience' funded the installation of a 'Changing Place Toilet' enabling groups that have specific needs to visit the site knowing that there is suitable equipment in place to meet their needs. The project also funded a rain shelter adjacent to the changing place and path improvements to improve access from the car park to the easy access trails and for wider walks into the woodlands on surfaced paths. The Changing Place Toilet is under a 5-year maintenance contract with RISE who manufactured the unit.

9.3 Car Park

There is a surfaced pay-and-display car park (for approximately 304 cars) with associated litter bins, road signage and way-marking. The tarmac area was resurfaced in February 2011 and the overflow car park in 2018 and sections re-topped in 2021. This car park has solar powered pay and display machines. ANPR cameras are used to monitor the car park and the system is managed by Euro Car Parks and monitored by the KCC Operations manager. 3 different car park apps are now available for use for anyone not wishing to pay cash or credit card.

There are two petrol interceptors within the car park to protect the groundwater system from contamination, these must be serviced each year to meet waste permit requirements.

There is no resource to plant up the sleeper gaps in the overflow car park, this is allowed to grow naturally and nettles are controlled by park staff.

9.4 Site Furniture and Signage

This is monitored annually and maintained by site staff, weekly inspections of site furniture are carried out by the park wardens. All wooden items are from sustainable supply chains.

Type of infrastructure	Number
Small noticeboards	13
Large noticeboards	3
Orientation fingerposts	8
Waymarker posts	156
Orienteering posts	25
Run 123 posts	15
Fishing swims	27
Timber box steps	354
Stock fencing	6180m
Post and rail fence	1730m
Kissing gates	37
Field gates	11
Horse barriers	11

Where possible wood from sustainable sources is used in keeping with the Country Park setting.

The play area was extended and some older existing equipment replaced in 2022 to create a play zone with equipment for all ages and accessible equipment. The provider uses UK-based supply chains and materials and the environmental credentials of each company were part of the tender evaluation process.

9.5 Footpaths and Internal Path Network

One statutory public footpath (NS 167) which is also a permissive bridleway (in sections) follows the northern boundary of the site. Other paths are permissive and open for use during the opening hours of the park, these include six waymarked trails:

- The Explorer Trail (green arrow) 6 km.
- Permissive Bridlepath / cycle path (blue arrow) 3 km.
- Heritage Trail (brown arrow) 3.5 km.
- Red Trail (red arrow) 3.1 km.
- Purple Trail (purple arrow) 1.4 km.
- Easy access and easy access extension (orange and orange checked arrow) 2.5 km.

Most paths are unsurfaced except for the easy access (orange and checked orange arrow) routes which is a granite type 1 base and granite blend (6mm-dust 20/80%). The wettest areas of the permissive horse/cycle path and other footpaths have a layer of granite type 1 upon a geotextile membrane.

In addition, the Country Park is also the starting point for several self-guided walks leading into the countryside surrounding the site; these include the 10 km Darnley Trail (black arrow) and a circular walk to Luddesdown.

There is a voluntary dog code. This code encourages dog owners to use the woodland and heathland areas through signage from the car park area, allowing non-dog owners to use the clay pit and picnic areas without encountering dog mess. In the latter areas, dogs should be on leads, and the mess must be cleared up, there is signage at all entrance points. Dogs must be on leads for 30 acres of the site but can be under close control for the other 262 acres.

Run 321 routes were created in 2012. These are part of a nationwide sports England project to encourage beginners to get out running. A waymarked 3, 2 and 1km route has been installed alongside the trim trail and easy access routes in the park. These are promoted through Sport England's website and literature on site.

9.6 Marketing and events

The site is promoted by roadside brown tourism signing and is marked on the Ordnance Survey map as a Country Park. In addition, Shorne Woods Country Park is mentioned in the County Council Countryside Sites promotional literature and the website: https://www.kent.gov.uk/leisure-and-community/kent-country-parks . Additional website marketing is done through Explore Kent https://explorekent.org/ and the KDAONB web page https://kentdowns.org.uk/

An event proforma is used by site staff to ensure all events are managed effectively with a marketing schedule part of the form. This can be seen in appendix E.

KCC currently employs a full-time marketing officer to coordinate marketing and publicity for the Country Parks. This member of staff is responsible for press releases, adverts, posters and online marketing like Facebook and Instagram. The website was updated in 2020. Nominated site staff manage Facebook pages for each of the main sites and the sites have Instagram accounts also. The archaeology project has their own social media sites that promote volunteering and events: http://shornewoodsarchaeology.co.uk/

A Country Parks event list is published on the web each year and posters advertise events on parish notice boards and in local shops as well as on Facebook.

The conference and education facilities at the park have specific brochures and leaflets offering a range of services and activities that can be booked through the web

An Accessibility guide for Shorne Woods was created by Access Able in June 2023 and is available in hard copy and through the web pages here: https://www.kent.gov.uk/leisure-and-community/kent-country-parks/find-a-kent-country-park/shorne-woods-country-park/getting-around-the-park/accessibility-at-shorne-woods-country-park

The site has an external visitor welcome area with a site map and noticeboard, a wider area Darnley Trail board and an accessibility board.

In 2023/2024 the park hosted 46 events and activities. Events and trail visitor numbers were as follows:

Year	Number of attendees
2021	Numbers not collated
2022	3531
2023	6171
2023/24	7704
2024/25	

9.7 Visitors

The Visitor Services team manage the visitor centre, events and function room. They cover 7 days a week and ensure the front desk is staffed 7 days a week from 10 until 5pm. This ensures a point of contact is always readily available to the public.

Visitor surveys (2004, 2007, 2009, 2014 and 2018) are conducted to ensure constant feedback is received about the park, copies of this are stored digitally. Green Flag judges and South and South East in bloom judges provide detailed feedback reports annually, which provide invaluable annual feedback on park management.

The country parks strategy underwent both corporate and public consultation before being accepted by the council. There were 376 respondees to the consultation in 2022 and a report into the findings was produced. A full copy of the report is available on request.

An Equalities Impact Assessment is completed for all new projects and decisions, this includes increasing parking charges, installing new play equipment, provision of new services. These can be found on the KCC website.

Mosaic data is used to analyse the demographic, ethnic diversity and population living within a 30-minute drive of the park. This was last done in 2022.

Four 'Tramper' mobility vehicles are available, free of charge, to allow greater, off-road access to the Country Park for disabled visitors. As of January 2023, the site had over 1000 registered users.

A customer feedback policy provides guidance on compliments and complaints handling and in conjunction with regular customer care training Kent County Council achieved a Customer Care charter mark for its customer care in 2008. A copy of this policy can be found in *Appendix F, Section 12.4.5.* KCC aims to

acknowledge all queries within five days and respond in full within 20 days. Comments cards are available in the visitor centre. Trip advisor feedback and Facebook comments are monitored and responded to where appropriate.

Comments cards are provided after all events and education visits and the responses collated and fed back at monthly team meetings.

In 2014 new orientation signs were installed on the site boundaries in response to customer feedback.

9.8 Visitor area management action plan

These actions are annual and need to be undertaken all year round:

- Undertake regular monitoring of amenity grassland as required during the growing season (along the site entrance, meadow, arboretum, and grass banks). Ensure no orchid areas are cut until July.
- Maintain hedges on site ensuring that no nesting birds are disturbed during nesting season from March to August. Keep hedges below 1.5m high.
- Consult with neighbouring landowners.
- Consult with the KCC Tree Officer at Gravesend Borough Council if tree works are required.
- Consult with Natural England. As the site is part of a SSSI, Natural England should be consulted regarding any significant changes in management and or operations of site.
- Communicate with the public, to provide information and to educate site users of the site's history, necessity of management works. Ensure contact information for staff is available.
- Provide warden service that ensures 7 day a week litter picking, bin emptying and site patrol is carried out.
- Be represented at the wider area meetings regarding the creation of the Partnership Nature Reserve as part of the Environmental group South group set up by the AONB as part of the National Highways LTC designated funds projects.
- Undertake annual inspection of site drainage system for blockages of silt and vegetation.
- Monitor visitor numbers in the park.
- Maintain a record of the numbers of individuals attending events.
- Monitor and inspect all site infrastructure and paths as per the weekly, monthly and annual inspections checklists. See appendix.

10 Environmental management

This section summarises all the environmental management references made throughout other sections.

Kent County Council has internal teams focused on climate change and monitoring KCCs climate change performance. Each team has an Environmental Sustainability lead and then there are green champions within those teams. On the public webpages there is lots of info on how to help save the planet:

KCC and the environment (sharepoint.com)

https://www.kent.gov.uk/environment-waste-and-planning/climate-change/climate-emergency-statement/our-climate-emergency-performance

There is also a carbon net zero action plan with an aim of being carbon neutral by 2030, that can be found here:

https://www.kent.gov.uk/__data/assets/pdf_file/0017/122291/KCC-Net-Zero-action-Plan.pdf

A low emissions plan can be found here: Kent and Medway Energy and Low Emissions Strategy - Kent County Council

KCC has an action plan for engaging communities Kent Green Action - Kent County Council

The parks are part of the Kent Nature partnership https://kentnature.org.uk/

The council has an Environmental policy (2020) that can be found here:

https://www.kent.gov.uk/__data/assets/pdf_file/0004/10669/KCC-Environmental-Policy.pdf

General park management

- No peat is used on site and glysophate is used only to spot treat invasive species like Rhododendron and Japanese knotweed. A herbicide record is kept on site.
- All woodland brash and arisings from park maintenance are left on site as habitat piles or corridors.
- All woodland materials must be from sustainable sources.
- All plants and trees must be sourced from 'plant healthy certified' nurseries.
- Where possible electric hand tools have been introduced to reduce the use of fossil fuels
- There are recycling bins around the centre. The waste is separated on site using the on-site bins and also by the collection company at their depot.
- The park has an electric van which is used to travel between other sites.
- The park hosts glass, can and electrical equipment recycling skips for the public provided by Gravesham Council

- All aspects of the parks response to climate change are monitored to see if the impacts are in detriment to the habitats or particular species.
- All works are carried out by on site staff minimizing the carbon footprint of the works, for example the timber is dried in the open air and at point of sale hasn't travelled more than a mile from where it grew. Its coppice so it will also regenerate.

Visitor centre and buildings

Photovoltaic cells

- windows above the cafe hold the PV cells and are a forty square metre array.
- they can produce 5000kWh per year (save up to 19,350kg CO_2 being released into the atmosphere).

Woodchip boiler (or biomass boiler)

- provides carbon neutral heating and hot water during the winter months.
- fed by a hopper which can hold six cubic metres of woodchips.
- uses approx of one hectare of chipped sweet chestnut per year and has an output of 60kW.
- 100% self-sufficient heating using a by-product of the Park's conservation work with timber travelling no more than a mile from where park staff cuts it.

Rainwater harvesting

- the toilets are flushed with rainwater collected from the cedar shingle roof.
- the rainwater is stored in a 10m3 underground tank and used as needed.

Other 'green' features

- the large concrete base retains heat in winter and remains cool in the summer.
- recycled glass, or cullet, under all the paving slabs
- passive infra-red (PIR) lights in the toilets and first floor kitchen area.
- Natural ventilation through wind catcher ventilation on the roof ridge
- The building is made of finger-jointed, laminate beams made of small lengths of sweet chestnut. This timber was also used for the flooring. The chestnut is all from the South East of England, some was from the park itself.
- all the doors, window frames, skirting boards, banisters, stairs and external balcony rails are made from oak sourced from Kent County Council Country Parks

- The building is constructed with Sweet Chestnut that would measure 61km if it were all laid in a straight line. This was used to re-invigorate the North Kent coppicing industry which had long been in decline. Chestnut is not widely used in construction and this building shows that small pieces can be made into larger structural pieces.
- Larch – interior roof cladding and structural standing tree trunks are from S.E. England.
- The Klargester biodigests the waste so no waste goes into the mains drains.

The workshop, woodchip barns and amenity block all capture rainwater and feed a tank that is then used to flush the loos in the amenity block.

A separate Klargester biodigests the waste from the other buildings on site.

11 HEALTH AND SAFETY

11.1 Health, Safety and Security

Kent County Council has a central Health and Safety Advisory Team, whose role is to ensure that all departments follow corporate policies and legislation regarding the safety of both staff in the workplace and visitors to our sites. The advice that the Kent Country Parks team receives includes:

- Creative solutions to health and safety management challenges
- Advice on legislation and policy
- Advice and assistance on risk assessment
- Training and instruction for health and safety management
- Full back up and support following health and safety incidents
- Pressure management and change management staff support tools
- Audit services to check compliance and support developments

An internal KNET holds all the information staff and managers require including forms and guidance. The main health and safety and welfare at work policy was reviewed in 2022, there is also a ‘blue book’ on KNET that gives staff all details about their working terms and conditions.

The Kent Country Parks team has a designated member of staff to take the lead on consulting with the corporate team, ensuring all park staff are updated on changes in law and that all staff undertake the relevant training to their position. All Kent Country Parks staff therefore undertake core training in health and safety when they begin in a new post, and then will be given further training according to the needs of their role. Health and safety areas that are particularly relevant to the parks setting, and for which staff adopt specified practices, include:

- Accident/incident reporting
- COSHH (Control of Substances Hazardous to Health)
- Driving at work
- Fire (and fire safety in the workplace)
- First aid
- Food hygiene
- Lone working
- Management of contractors
- Manual handling
- Occupational health
- Personal Protective Equipment (PPE)
- Risk assessment
- Violent behaviour
- Working at height
- Safeguarding for children and young people
- CDM regs 2015

In addition, emergency plans have been developed for all sites (last updated October 2022) and are stored in all offices and at head office.

Site contractors either complete a permit to work and submit a risk assessment for all works carried out on site that is authorised by the Officer who commissioned the work or for larger contracts an NEC3 Engineering and Construction short contract is completed. Any contract over £50,000 goes through a competitive tender process. All non-specialist contractors must be from the KCC approved contractor list. KCC aims to use local contractors and materials in all contracts where possible.

Risk assessments are reviewed annually and updated, when necessary, these are stored electronically.

All archaeology projects undertaken are individually risk assessed.

Health and safety is an agenda item at the monthly team meeting.

A training matrix is maintained for all staff with all ranger staff required to be certified before they use any power tools, machinery and vehicles and catering staff to be food hygiene certified. Education rangers are Level 3 Forest School practitioners.

11.2 Standard practices

Shorne Woods Country Park has its own on-site health and safety plans in addition to the central plans. There are daily, monthly, annual, and seasonal inspections carried out by the Countryside Wardens. If any issues arise these are reported back to the Ranger team who also ensure that the checks are carried out. They sign a weekly inspection sheet to advise the ranger team that all checks have been carried out.

The policy regarding H and S around water is that where access to a pond is encouraged, at the Fishing Lakes and the dog pond, life buoys will be available where ponds are a part of the landscape with no access encouraged then this is the visitors responsibility to act safely around water.

Standard instructions are maintained, see Appendix *F,* for annual inspections including tree inspections, first aid kits, trailers, machinery, PPE are issued centrally. Some of these are carried out by authorised staff, others are contracted out to specialist services, and these include Tree inspections, PAT tests and fire extinguisher tests.

Site contractors either complete a permit to work and submit a risk assessment for all works carried out on site that is authorised by the Officer who commissioned the

work or for larger contracts an NEC3 Engineering and Construction short contract is completed. Any contracts over £10,000 go through a competitive tender process. KCC aims to use local contractors and materials in all contracts where possible. The documentation is reviewed by the central Health and Safety team on an annual basis.

11.3 Risk Assessments and Staff Training

For all tasks and where machinery or tools are used a Risk Assessment is produced and is available to all staff and or volunteers, where necessary training is given on all machinery before it can be used. Explanation such as tool talks and health and safety checks are carried out before all activities. An electronic version of all risk assessments is available, an example can be found in appendix F. These are reviewed annually by the wider Country Parks team with the last review occurring in October 2024.

Kent County Council is also an Investor in People and as such all-site staff have a personal development plan which lists all training undertaken during their employment with the council. All staff undertake core training that includes:

- Lone working
- Dealing with difficult customers
- Manual handling
- Risk Assessments
- Basic Fire Awareness
- First Aid appointed persons

Wardens have access to a warden's handbook for the site which summarises all important information that they need to know. This was reviewed in January 2025. There is also a volunteer Health & Safety manual summarising the most relevant risk assessments for the volunteer team. A risk assessment and policies folder are held at each site for staff who do not have access to the electronic versions.

All staff complete an annual occupational road risk assessment before they can drive any Kent County Council vehicle. No vehicles can be driven off-road driving unless a basic off-road driving course has been undertaken.

11.4 Fire Plan

A fire plan has been undertaken for the site which identifies rendezvous points, locations of fire hydrants and safety equipment, vehicle access points, available water supplies and other hazards on site. The plan is for the building and the wider site. A copy is held in the site office and at the head office in Maidstone. The FM provider, Skanska, also carry out a building fire risk assessment.

11.5 Tree Inspections

Tree inspections are completed throughout the site. The Country Park is divided into three zones for tree inspections. The annual inspection of zone 1 is carried out by qualified arboroculturalists, continuous visual inspections of zones 2 and 3 are carried out by park staff who have basic training in identifying tree health. This policy was audited by insurers in Aug 2021 to ensure it was fit for purpose. The zoning details can be seen in Appendix F.

12 SITE MAINTENANCE

12.1 Maintenance of Equipment and site furniture

12.1.1 The Daily Checks

A daily site patrol and litter pick is undertaken by site wardens on rotation through the week, the wardens work 7 days on and 7 days off shifts. Consideration is given specifically to the car park area, picnic area, adventure playgrounds, Dog Pond, Easy Access route, Trim Trail and Pooh Lane. In addition, the four pay and display parking machines are emptied, buildings are checked to ensure they are alarmed and secure and the bins and dog bins are emptied if required. Any issues are flagged to the rangers so they can

resolve it the following day if required. Graffiti is removed immediately by the wardens and any vandalism is dealt with immediately by park staff.

12.1.2 Weekly Checks

Weekly checks are undertaken by the Site Wardens on a Friday and over the weekend when they are on site for a longer period. These include:

- check rubbish bins.
- check play areas (routine inspection)
- check Trim Trail (full inspection).
- check ponds and lakes.
- check life belts & ropes (full inspection).
- check mown areas (broken glass *etc.*).
- charge all six 2-way radios on Saturday evening.
- check dog bins.
- check notice boards for posters being up to date; and
- patrol and litter pick following areas all waymarked trails and minor paths.

12.1.3 Monthly Checks

Monthly site checks by Site Wardens include:

- check stability of banks adjacent to paths.
- check Extinguishers and buckets are all in correct locations.
- check gates and kissing gates.
- check path conditions.
- check boundary fence.
- check internal fences in grazing area and on purple Trail viewpoint.
- check orienteering posts are all in place; and
- check all picnic benches are still in place.

12.1.4 Annual Checks

The following annual checks and reviews are undertaken:

- testing of all tools and equipment *i.e.,* winches, chainsaws, trailers, electrical tools and appliances, motorized vehicles, safety hats and tools and hand tools.
- COSHH assessments.
- Risk Assessments and Occupation Road Risk Assessments.
- fire extinguishers.
- testing and checks of all buildings for general wear and tear, asbestos, and PAT electrical testing.
- annual tree inspection by an external contractor for all trees in Zone 1 areas *i.e.,* those where the public have day-to-day access.
- annual tree inspections by site staff for all trees in Zone 1 and 2 areas; and
- An annual check by RoSPA (The Royal Society for the Prevention of Accidents) of the children's play area.
- The two car park petrol interceptors

12.1.5 Other Checks (Depending on Season)

- Winter ice checks around ponds to prevent access and ensure the water-edge is safe.
- spread grit / salt on icy surfaces around the car park and around the visitor centre.
- check trees after gales; and
- check for flooding and subsidence on paths after heavy rain.

A record of inspection is kept for when weekly, monthly, and annual safety checks are made and by whom. The site inspection forms are held digitally.

12.1.6 Other Checks including litter and vandalism

The pay and display machines are maintained by Euro Car parks through a centrally managed contract with a contractual obligation to attend with 24 hours of fault reporting.

General waste and recyclable waste are removed weekly from the site as part of the FM contract.

The site is a local glass recycling point for the public and this is managed by Gravesham borough council.

12.1.7 Buildings Maintenance

Skanska have been awarded a 5-year (2022-2027) contract to manage all Kent County Council buildings in North and West Kent as part of a Facilities Management agreement. This includes all works to the interior and exterior of the buildings. Issues are reported to a helpdesk then actioned. An SLA exists to monitor performance and financial penalties are issued if they do not meet their agreed targets. Site staff raise a task and then Skanska investigate and resolve the issue according to their priority protocol. KCC property team monitor and manage the Total Facilities Management contracts for performance.

Skanska cover all aspects of the health and safety and pre-planned maintenance of the building including things like fire alarm testing, fire risk assessment, Legionella testing, PAT testing, fixed wire testing, drainage, waste, heating systems, plumbing, fire extinguisher checks, CCTV, intruder alarms, door fixings, light fixtures and general repairs and maintenance as requested by park staff.

The daily cleaner empties all the visitor centre bins and cleans the toilets, café and visitor centre daily and is on site for 3 hours a day, 7 days a week.

12.1.8 Brand guidelines

When signage needs to be replaced a brand guideline exists which includes ladder boards, main site noticeboards, waymarker posts, benches, and finger posts. All parks when replacing old furniture use these guidelines to ensure a corporate style is maintained throughout the parks service.

12.1.9 Site equipment and furniture

An inventory of site equipment is carried out annually and an electronic version is stored on site so that it can be easily updated. A map showing the location of site furniture including benches, bridges and waymarkers is also stored centrally.

13 EDUCATION

Environmental Education sessions are available all year round. Students can experience the park's biodiversity, see the renewable energy technologies in action and explore the park's heritage. There is an experienced part time Education Ranger at the park to help teachers plan and design a visit to their specific needs, in addition to this education rangers from other sites and a group of casual staff are employed to assist with delivery.

The numbers of pupils led by the Education Rangers annually during this management plan are as follows:

Year	Schools visits	Training
2021/2022	1203	27
2022/2023	1503	25
2023/2024	1804	40
2024/2025		
2024/2026		

The visitor centre provides the base for Environmental Education sessions and has classroom facilities. The classroom can accommodate up to 70 children or two classes. The room is available throughout the day for the exclusive use of the school. As well as the classroom, the visitor centre offers a shop, café, and toilet facilities. All activities are risk assessed and these assessments are available upon request.

Activities led by the Education Rangers include:

- Pond Dipping.
- Mini beast Hunting.
- Woodland Studies.
- Centre Tours and Sustainability.

- Natural Arts and Crafts.
- Sensory Activities.

The Forest School programme offers regular opportunities to all ages and abilities to gain confidence and raise self-worth through a series of hands-on tasks. Students learn basic forest skills including the use of hand tools to build a shelter, make whistles and pencils or other woodland products such as stakes or mallets. All students can benefit from Forest School including Early Years, students with behavioral and emotional difficulties and students with learning disabilities. All staff are trained to level 3.

A site-specific education pack is available to all schools to provide activities based on the national curriculum objectives. Other educational information is available through the park's website.

14 COMMUNITY INVOLVEMENT

Community involvement at Shorne Woods Country Park is undertaken through working and liaising with Community Groups and by working with Educational Groups. Volunteers are provided with uniform. These are summarised below.

- Conservation Volunteer Group – meets every Tuesday and Thursday and is organised by the ranger team. The conservation volunteers contributed 2422 volunteer hours in 2022/23
- Archaeology volunteers – regular activities, including excavation, survey and LiDAR work, research: on Wednesdays and Thursdays in the park and across the local area working with local partners as part of the Cobham landscape Detectives project. These volunteers contributed 4014 hours in 22/23.
- The access improvements, for example, extensions of the easy access trail, site signage and waymarker style, were all designed in consultation with a disabled access forum as part of the Countryside Agencies 'By all means project'. A multitude of groups with differing disabilities took part in a series of activities over a 3-year period, encouraging them to come up with ideas to improve the site.

- An annual open day event enables members of the public direct access to site staff to ask questions and have an input into how the site is managed as opposed to just ringing up or writing letters.
- Currently comment cards are available from the visitor centre and after events and activities
- A Ranger attends the annual parish meeting in Shorne village and presents to the meeting a summary of the activities at Shorne over the year. An article based on that presentation goes in the annual parish report that goes out to all households in the parish.
- The site has over 10,000 Facebook followers and address any comments and queries directly online.

14.1 Events

The site staff organise several events throughout the year to promote the site and to increase public awareness of countryside issues and the environment through fun activities. Events are advertised locally in the press and through the Explore Kent leaflets which are available at Kent County Council owned sites as well as on the Explore Kent webpage. In 22/23 over 6000 people attended events at Shorne Woods Country Park.

A weekly Park Run occurs every Saturday between 9 and 10am. This is a worldwide 5k event organised by volunteers and the site hosts one of their events that any registered park runner can attend. On average 100 runners a week attend and on New Year's Day 2018 a Kent record 400 runners attended the event.

15 FINANCIAL OVERVIEW

The park's main income streams are:

- Rent income from Thameside Angling club.
- car park pay and display income.
- café income from the KCC managed Cafe.

- income from certified ready to burn woodland products (logs and kindling)
- shop income.
- corporate events and functions,
- CPD training, INSET training.
- Birthday parties,
- education groups,
- public events.

An annual revenue budget is provided by Kent County Council to fund the day-to-day operations of the park. Due to pressures in the wider organisation this is not enough to fund all site services, so staff are focused on generating income to offset the site's running costs.

Additional money is available through a modernisation of assets budget which is allocated by the head of country parks based on information submitted by site staff.

The country parks service costs 28p per person per year to the people of Kent (April 2021) and has moved from 46% self-financing to 81% from 2009-2023.

Shorne Woods is cost neutral so costs zero money to the council to run due to alternative income streams. Any profit made is ring fenced within the parks team so helps offset the running costs of some smaller sites.

The Countryside budgets are managed by the Ranger Services Manager and the visitor centre and café budgets by the Visitor Services and Events manager and Café manager. The Operations manager oversees all budgets. KCC have a policy of paying all invoices within 28 days of receipt.

Skanska manages the budget for the building's maintenance under Facilities Management contracts set up in November 2022.

Opportunities for additional income streams have been investigated by KCC special projects team and private consultants and upon investigation proved to be uneconomic for the site or the site has proved not suitable to the providers. These include:

- Green Weddings
- Green accommodation
- Becoming a camping and caravan site
- Music festivals
- Disc Golf
- Golf football
- Go Ape

- Mountain bike circuits
- Free running/parkour
- Selling Christmas trees
- Having a temporary ice-skating rink installed
- Private fun fairs using the site.
- Having private retail units on site
- Renting land to private events
- Hosting fun fairs
- Launching hot air balloons
- Hosting farmers markets
- Hosting car boot fair

16 POTENTIAL THREATS AND OPPORTUNITIES

National Nature Reserve

There is the potential for a National Reserve in the local area, working in partnership with local land owners and national governing bodies. This will give the potential to collaborate on landscape scale projects and allow access to possible future funding.

Lower Thames crossing

In 2017 the proposed second Thames Crossing route known as option C was selected as the favoured route. As of November 2023, the latest red development line shows a small area of the park will be affected by the widening of the existing A2, but no other areas of the park will be lost to the development. Further impact assessments are to be carried out to analyze the effects of the project on the local area. The road will be immediately adjacent to the west side of the park so will have noise and air quality implications for the rest of the park. Environmental consultants are carrying out surveys on site and the park is part of the Environmental Impact report.

There is potential for mitigation woodland areas to be integrated into the park, improving the woodland habitat, and providing opportunity to improve access to neighbouring villages and Gravesend. National Highways have been involved with extensive discussions with the park about the location and future management of these.

Climate change

Monitoring and observing change over time is an integral part of the park management with regards to tree diseases and the change in weather patterns. All aspects of management are affected by increasingly wet and warm, winters and prolonged hot spells in the spring and summer leading to almost arid conditions. The policy of letting natural regeneration take place as opposed to planting trees is key to this as the park evolves to the new climate, tree species that used to thrive will be

replaced by new species that are more drought tolerant or survive the various tree diseases currently affecting our native species. Many paths that historically were unsurfaced are now topped to allow year-round access and timber extraction as they were impassable due to standing water caused by the increase in rainfall in some months, like October and November 2019.

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18 APPENDICES

Appendix A – SSSI Citation for Shorne and Ashenbank Woods

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of

The Wildlife and Countryside Act 1981

Local Planning Authority: GRAVESHAM BOROUGH COUNCIL National Grid Reference: TQ 682700 Area: 184.6 (ha.) 456.1 (ac.) Ordnance Survey Sheet 1:50,000: 178 1:10,000: TQ 66 NE, 67 SE Date Notified (Under 1949 Act): 1968 Date of Last Revision: 1981 Date Notified (Under 1981 Act): 1988 Date of Last Revision: Ð

Other Information:

Part of the site is owned and managed by the County Council as Shorne Woods Country Park. Part is owned by the Woodland Trust. There are extensions and deletions to this site.

Reasons for Notification:

Shorne and Ashenbank Woods form a complex of ancient and plantation woodland and include a variety of stand-types associated with Tertiary gravels, clays, and sands. The site supports an important and diverse invertebrate fauna, especially its Coleoptera (beetles), Hemiptera (true bugs), and Odonata (dragonflies).

The woodland varies from pure sweet chestnut *Castanea sativa* coppice, in places heavily invaded by sycamore *Acer pseudoplatanus*, to a more mixed broadleaved community, consisting of mature oak *Quercus* spp., sweet chestnut, and hornbeam *Carpinus betulus*. Although holly *Ilex aquifolium*, and yew *Taxus baccata* are frequent in the understory, dense aggregations of rhododendron *ponticum* sometimes suppress the development of a shrub and field layer. Elsewhere bramble *Rubus fruticosus*, bluebell *Hyacinthoides nonscriptus*, dogs mercury *Mercurialis perennis*, and bracken *Pteridium aquilinum* dominate the ground flora, together with typical indicator species of ancient woodland such as wood spurge *Euphorbia amygdaloides*, wood sedge *Carex sylvatica*, and wood anemone *nemorosa*. The locally scarce caper spurge *Euphorbia lathyrus* also occurs, often in abundance in recently cut compartments.

At Randall Heath an open area of former heathland is now dominated by bracken with occasional ancient oak and sweet chestnut pollards. Within Shorne Country Park an old series of clay-workings has been landscaped to provide wildlife habitats including a network of shallow ponds, which are developing an increasingly interesting flora and fauna. These include the plants blinks *Montia fontana* and wood small-

reed *Calamagrostis epigejos*, both rare in Kent, and several nationally scarce insects including the ruddy darter dragonfly *Sympetrum sanguineum*, and the satin lutestring moth *Tetheela fluctuosa*.

The site has been well-recorded for its insect fauna in the past, with both Coleoptera (beetles) and Hemiptera (true bugs) being well-represented. Rare species include the beetles *Mordella holomelaena* and *Peltodytes caesus*.

The woodland breeding bird community includes hawfinch, marsh tit and all three British woodpeckers.

Appendix B - Natural England's Views of Site Management

A statement of English Nature's views about the management of Shorne and Ashenbank Woods Site of Special Scientific Interest (SSSI).

This statement represents English Nature's views about the management of the SSSI for nature conservation. This statement sets out, in principle, our views on how the site's special conservation interest can be conserved and enhanced. English Nature has a duty to notify the owners and occupiers of SSSI of its views about the management of the land.

Not all the management principles will be equally appropriate to all parts of the SSSI. Also, there may be other management activities, in addition to our current views, which can be beneficial to the conservation and enhancement of the features of interest.

The management views set out below do not constitute consent for any operation. English Nature's written consent is still required before carrying out any operation likely to damage the features of special interest (see your SSSI notification papers for a list of these operations). English Nature welcomes consultation with owners, occupiers, and users of the SSSI to ensure that the management of this site conserves and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

Management Principles

There may be several different ways in which the wood can be managed to best conserve its value for wildlife - by promoting an appropriate woodland structure, by ensuring regeneration and by looking after the things that make this wood special. The attached notes give broad views on a range of regimes that may be appropriate on your site.

A diverse woodland structure with some open space, some areas of dense understory, and an overstorey of more mature trees (which may be the standard trees under a coppice-with-standards regime) is important. A range of ages and species within and between stands is desirable.

Some dead and decaying wood such as fallen logs, old hollow trees or old coppice stools is essential for providing habitats for fungi and dead wood invertebrates. Work may, however, be needed to make safe dangerous trees where they occur in areas of high public access.

Open spaces, either temporary gaps created by felling or coppicing or more permanent areas such as rides and glades, benefit other groups of invertebrates such as butterflies. They should be of sufficient size to ensure that sunny conditions prevail for most of the day. Rides and glades may require cutting to keep them open.

Felling, thinning, or coppicing may be used to create or maintain variations in the structure of the wood, and non-native trees and shrubs can be removed at this time. To avoid disturbance to breeding birds the work is normally best done between the beginning of August and the end of February. Work should be avoided when the ground is soft, to prevent disturbing the soil and ground flora. Wet woodland by streams and other waterbodies is often best left undisturbed.

Normally, successive felling, thinning or coppicing operations should be spread through the wood to avoid too much disturbance in one area. However, where there is open space interest (e.g., rich butterfly populations) adjacent plots may be worked to encourage the spread of species that are only weakly mobile.

Natural regeneration from seed or stump regrowth (as in coppice) is preferred to planting because it helps maintain the local patterns of species and the inherent genetic character of the site.

Deer management and protection from rabbits or livestock are often necessary. Whilst light or intermittent grazing may increase woodland diversity, heavy browsing can damage the ground flora and prevent successful regeneration.

Parts of the wood should be left unmanaged to benefit species that do best under low disturbance. In addition, lack of management allows for the operation of natural processes such as wind blow. Within these areas some trees will eventually die naturally, and dead wood accumulate.

Where they are a threat to the interest of the wood, invasive introductions such as *Rhododendron ponticum* or Himalayan balsam should, where practical, be controlled.

Appendix C Incidental sight species records

Incidental sighting records from Ranger notes, for pre-2020 data see 2015- 2020 management plan:

Ad Hoc biodiversity records 2023- Shorne Woods

Reptile:

Common Lizard- comp 11e, 12d (on ride behind fishing lake)

Adult Grass snake- comp 10 by step lake, adult and juvenile

Mammals:

Badger- evidence of bee digging in comp 11d

Brown long eared bats- comp 2b in air raid shelter

Amphibians:

Great Crested Newt, comp 10 by largest

Butterflies:

Orange Tip

Brimstone

Comma

Red Admiral

Tortoise Shell

Marbled white

Speckled wood

Holly Blue

Common blue

White admiral, comp 10 by pole climb

Silver-washed Fritillary, comp 10 by pole climb

Gatekeeper

Small copper

Peacock

Moths:

Lime Hawk Moth- comp 10 by Klargester

Cinnabar

Speckled Yellow- comp 10 in log yard

Birds:

Song Thrush

Buzzard- comp 5a, comp 11c, comp 10

Red Kite

Blackcap- comp 10 by pond F

Wren

Blue Tit

Great Tit

Jay

Ring necked parakeet

Kestrel- comp 7f on the knoll

Pied Wagtail

Grey Wagtail

Crow

Heron

Coleoptera:

Stag Beetle (multiple)- Comp 10 in log yard, comp 4g (outdoor education area)

Hister Beetle- comp 10 on track next to pond I

Cardinal beetle

2 banded Long Horn Beetle

Odonata:

Black tailed skimmer

Broad bodied chaser

328 common spotted orchids in claypit and arboretum

Cormorant

Swallow

Swift

Emperor

Common darter

Southern Hawker

Common blue damselfly

Spiders:

Woodlouse Spider- outside office

Flowers:

Early Purple Orchids- comp 5a at Randall Manor, comp 12b along boundary

2022

May 22- Lesser spotted woodpecker in comp 2d

May 22- Grass snake in comp 2d, 10,

May 22- Slow worm in comp 11

June 22- 2 x Bullfinches in outdoor education space

June 22- White admiral in comp 4c, 10

July 22- Kestrel nest in comp 7

2021

Feb 21- Buzzard in comp 12a

April 21- Slow worm in comp 9a

Grass snake in comp 9a

Grass snake in comp 10 by pond L

Grass snake in comp 10 by pond E

Appendix D Past Management Post 2020

For records from 2005-2020 see the Shorne Woods management plans 2005-2010, 2010-15 and 2015-20, daily records are kept in a workbook kept on site.

YEAR	WHO	Comp	Works carried out
Jan 2021	Rangers	12a	Cut zones 2 and 3 of ride 11

	Rangers	12a	Cut dead Phytophthora stems, stacked up as habitat piles
Feb 2021	Rangers	12b,12c	Cut dead Phytophthora stems, stacked up as habitat piles
	Rangers	12a	Cut zones 2 and 3 of ride 2 from glade E to concrete Road
	Rangers	10	Cut vegetation from around pond E and F
		10	Installed overflow sluice on pond L
		10	Carried out fence repairs in car park
Mar 2021	Rangers	8a	Cut phytophthora dead stems
April 2021	Rangers	10	Repaired slide base
	Rangers and volunteers	10	Path edging from the sword pond to the red trail steps
	Contractor	10	Car park sleeper edges replaced
	Rangers		Processed 100m3 of woodchip for the boiler
May 21	Rangers	13	Resurfaced shared user route along Randall Wood boundary
	Contractor	10	Replaced all footbridges on easy access trail
	Rangers and volunteers	10	Fence repairs all over claypit area
	Rangers and volunteers	1	Rhodi hand pulled adjacent to A2 gate entrance
	Rangers	12	Repaired bridge and culvert at the foot of the scammels
	Rangers	10	Replaced fishermans gate out of car park
	Rangers	12d	Resurfaced extraction track from back of fishing lake to shared user route
	Rangers and volunteers	9	Repaired boundary fence from horse crossing to first kissing gate
June 21	Rangers	10	All amenity grass areas flailed
	Rangers	10	Replaced damaged trim trail bases
	Rangers	all	Replaced rotting waymarker posts
	Rangers	10	Unblocked culverts from claypit to Randall Wood boundary
	Rangers	12f	Cleared vegetation off Randall Manor site
	Rangers and	all	Strimmed path network, front entrance and visitor areas

	volunteers		
	Rangers and volunteers	10	Weeded car park edge and area
	Rangers and volunteers	10	Replaced post and rail fence along car park edge and attached netting to stop rubbish
	Contractors		Entire easy access and easy access extension path network resurfaced as part of covid relief works. Tarmac entrance into overflow car park resurfaced. Paths from car park into Country Park tarmacked Changing place installed as part of experience project
July 21	Rangers and volunteers		Strimmed all path network, front entrance and visitor areas
	Rangers	6 and 7	6.5ha of acid grassland on The Knoll flailed
	Rangers		Extracted felled timber from coppice areas and ride network
Aug 21	Rangers	10	ROSPA repairs carried out in play areas
	Rangers and volunteers		Strimmed all path network, front entrance and visitor areas
	Rangers		Started to process logs for winter selling
			Achieved ready to burn certification
		11f	Installed gate in Brewers Wood onto Mr Peters land by lime tree as per legal agreement.
			Finished woodchip processing for boiler
	Rangers and volunteers	10	Prepared base for suds surfacing under rope climb, type 1 and edging.
Sep 21	Contractor	10	SUDS surfacing installed
	rangers	10	New bridge and gate installed in play area
	Rangers and volunteers	10	Replaced steps next to embankment slde
	Rangers and volunteers	10	Cut all hedges on site
	Rangers		Cut ride network zone 1 areas
		6 and 7	Cut 6.5ha of acid grassland on the knoll
		Pond L	Education pond reeds pulled

Oct 21	Rangers and volunteers	9	Replaced boundary fence sections along Brewers Rd
	Rangers		Replaced oak ladder signposts
		6	Knoll and ride zone 1 and glades flailed
			H and S tree work started
			8 benches installed
		6a	Cardiac Hill path strimmed
Nov 21			Boiler lit
		10	14 benches installed on easy access network
	Rangers and volunteers		Prepared dragon swing and saturn orbiter for wetpour, dug out bark and laid type 1
	Rangers and volunteers	13	Brushcut sunken lane
Dec 21	Rangers and volunteers	12	Rides 3,4,5 zones 2 and 3 cut
2022			
Jan 2022	Rangers	12	Ride widening work completed on 3,4,5
		12d	Ride widening in oak glade commenced
			Sleeper edges in overflow car park replaced and white corner marker posts replaced
		10	Regenerating trees around pond I cut back
		11	Brewers Wood timber extraction
			Waymarkers surveyed and replaced where required
			Old car park sleepers removed and replaced
Feb 22	Rangers	10	Hedges around café garden cut back
		10	Hedge at play area cut back
			Rotated woodchip for boiler
			Halo thinning on 23 veteran trees completed
		10	Wetpour at bottom of old slide removed in preparation for new surfacing and equipment

		11c and 11e	Ride widening in Brewers Wood carried out
			Storm damaged trees made safe after storm Eunice and Franklin
			Yard fence repaired
Mar 22	Rangers	11	Rhododendron hand pulled in Brewers Wood
		11c and 11e	Ride widening in Brewers Wd on ride 1
		10	Culvert cleared under trim trail
			H and S trees removed from behind play area and on blue route and Brewers Wd boundary
			Café fence repaired
		10	Removed old slide rubber base and prepped with type 1 for new surfacing
		9a	Started to replace perimeter fencing along Brewers Rd
		10	Mowed café garden
		10	Old bridge into oldest play area and replaced gate with self closing gate
Apr 22		9a	Perimeter fence from Pegasus crossing to concrete road replaced
		10	New 'amazing' bench and leaf benches installed next to play area
			H and S trees felled
		7a	Repaired damaged knoll fence
			Began timber extraction
May 22			Perimeter fence along woodlands lane replacement started
			Replaced bannister on amenity block steps
			Graffiti removed from noticeboard and gate on knoll
			Edging on pull up bars replaced
			Replaced sleepers at disabled parking bay on long lake
			Blue route cut back to 3m
			Waymarkers on blue route replaced
		10	Spanish bluebells removed from poo lane
		10	Picnic area benches checked and repaired
			Volunteer room lock replaced
			Cleared arboretum paths replaced edging and cleared

			ditches of debris
			Strimmed café garden
			Red route waymarkers checked
			Poo lane strimmed
			Replaced large bridge in arboretum
			Area around visitor centre weeded
			Cleaned interpretation boards
		10	Fenced around older children play area to protect SSSI
			Replaced geocaching disks
		10	Strimmed trim trail
		10	Flailed meadow
		11	Strimmed Brewers Wood paths
June 22			Car park strimmed
			Blue route to right of entrance strimmed
			Red route strimmed
		4g	Education area strimmed
			Leaf benches installed at knoll and by dragon
	Playdale		New play area opened funded by covid relief
			Strimmed sunken lane path to shorne-ifield road
			Purple route viewpoint fence replaced
			Giant insect benches installed near play area
July 22			Edged new access path to play area from easy access path
			Klargester, front gate area strimmed
		10	Play area path topped
			Waymarkers on green route checked, route strimmed
			Dead trees removed across park
			Woodchip for boiler
			11 log loads into log barn, 300 bags of kindling made
Aug 22		7d	Red route steps repaired
			Whole park strimmed
			Dead trees removed across site
		5a	Fence on purple trail completed
		10	New bench installed in arboretum
		12f	Randall Manor strimmed
		13	Scammels steps repaired on green route
			Yard hedge cut
		10	Cleared Regen trees around pond E
		10	Cut hedge around arboretum
			Culvert and ditch by volunteer garden cleared

			Replaced steps in volunteer garden
			Hedge around play area cut
			Hedge along step lake cut
			18 loads of logs into log barns
Sep 22			12 log loads into log barn
			Hedges around yard and arboretum recut
			Fenced SSSI behind fishing lakes to stop bike damage to SSSI
Oct 22			8 loads of logs done
			Scammel steps completed
			Refloored log bays
			Strimmed front of park and entrance banks
		6a and b , 7a and 7e	Knoll second flailing
			Pond N in arboretum 80% cleared of weeds
			Pond L reed clearance leaving 3m edge along banks
			Cut back Gorse on West bank of pond F
Nov 22		7c, 7d, 8a, 8b, 5a, 5b, 5c	Clearance works for LTC biodiversity enhancement project in bracken bowl in comp 7c, 7d and thinning of plantations in comp 8a, 8b, 5a, 5b and 5c
		7c and 7d	Started tree planting Nov 28th in comp 7c and d. Mixed species of 50% hazel and then Oak, Broom, Hawthorn, Yew planted. Forming corridors and copses linking existing good habitat from the coppice coupes of 12 and 13 across to comp 5
			Replaced 4 field gates stolen from the boundary
Dec 22		8a, 8b, 5a, 5b, 5c	Continued tree planting
			Finished filling log store – 58 loads for 2022
			Snow clearance
Jan 23			Finished tree planting in comps 5a, b, c
		13a, 12e, 12f	Started 0.3ha coppice coupes
		6a, 6b 7a, 7e	Removed invasive species on knoll
	Bayliss	6a, 6b, 7a, 7e	LTC funded stock fence replacement on the Knoll
	Contractors		Roof replaced in Shorne Visitor centre
Mar 23		13a, 12e, 12f	Coppice coupes completed
		11,12,13	Ride 2- cut zone 3 on NW side- small coppice, lots of dead small stems from concrete rd to glade e Ride 3- cut zone 2 on N edge- young regen, brushcutting or forest mulcher Ride 4- cut zone 2 on S edge- Brushcutters Ride 5- cut zone 2 on S edge- sporadic small stems for cutting, brushcutter or forest mulcher

			for rest Ride 7- cut zone 2 along SE edge- 5yr old coppice and brushcutter Ride 9- cut zone 2 along SE edge- 8yr old coppice then bruchcutters or forest mulcher Ride 11- cut zone 2 along E edge- do from end of ride 9 to main track, brushcutters or forest mulcher (wider than existing flailed area) Ride 12- cut zone 2 along W edge- pull out dead logs stack at 15m from ride centre in existing dead hedge area, then brushcut or forest mulcher Ride 13- cut zone 2 along E edge- from ride 12 end- small birch regen to cut then brushcut bramble/bracken zone. Leave mature coppice as dormouse corridor and cut far end 2yr growth to make ride.
Apr 23		6, 7	Rhododendron hand pulled across the knoll
			Playground fence repaired
		6d	Rhododendron hand pulled in comp 6d
		4g	Felled Sycamore next to the education space
			1077 bags of kindling made from Silver Birch
		5c	Rhododendron hand pulled on bank above red trail parallel
		5a,5b,5c 7c,7d, 8a, 8b	Surveyed 4000 newly planted LTC project trees all alive
		10	Bridge over pond E (education pond) replaced
			Brewers Wood boundary fence replacement along woodlands
			Tramper friendly routes waymarked
		10	Culverts unblocked
May 23		10	Visitor and car park areas strimmed
			Log extraction from coppice coupes
		7	Bracken crushed around new trees in bracken bowl
June 23		10	Amenity grass areas flailed
		all	Path network strimmed
		7c and 7d	Ragwort pulled
		9b, 1b	Rhododendron regen hand pulled
		10	358 common spotted and 10 pyramidal orchids in the arboretum and claypit area
			22nd June- 9 Longhorn cattle started grazing the knoll
		10	Replacement of fishing swims on N side of long lake started
		5a,5b,5c 7c,7d, 8a, 8b	Surveyed new tree planting areas, all alive
			Woodchip for biomass boiler completed (32 loads)

July 23		10	18 fishing swims relaced (12 on long lake, 6 on step lake)
		10	Pole climb edging replaced
		7b	Repaired fencing with Brummelhill Wood
		10	Repaired sleeper edging around fishing lakes
			Path strimming of all paths and visitor areas
		12b	Repaired fenceline with Scammels
		12a, 12b	Continued replacement of boundary fence along woodlands lane
		12f	Cut and raked off Randall Manor glade
		5a,5b,5c 7c,7d, 8a, 8b	Strimmed around LTC funded tree plantations
Aug 23		7a	Repaired steps on cardiac hill
			Log processing to fill firewood bays (63 loads)
			Replaced damaged waymarker posts
		10	Hand pulled rhodi regen along Darnley trail to the right of the front gate if you were exiting.
			Drains and culverts cleared across the park
		4g, 2a	Hand pulled rhodi regen along pathway towards outdoor education space
		10	Replaced sleepers and corner posts in main overflow car park
			Stringing of tree guards in preparation of winter planting
		4b, 5c	Hand pulled rhodi regen
		5a,5b,5c 7c,7d, 8a, 8b	Strimmed around LTC funded tree plantations
			23rd August cattle removed from the knoll
Sep 23		4g	Fire pit and seating replaced in the outdoor education space
			Two new benches installed in the play area
		7d	Edging replaced on red trail steps
		9,11,12,13	Zone 1 of ride network flailed
		10	Trim trail beds weeded and topped with safety bark
		10	Hedges near play areas, fishing lakes and arboretum cut
			Health and safety trees cut as per report
		4e	Clearance for next phase of LTC funded tree planting started, Sycamore and Silver Birch cut, bracken cut.
		10	Added stone surface along the front edge of the dragon sculpture
Oct 23		2d,3a, 4e	Clearance for next phase of LTC funded tree planting continued, Sycamore and Silver Birch cut, bracken cut
			H and S tree work carried out
		2a, 10	Sycamore regen cut between old woodland car park and education space
		10	Pond E reeds hand pulled to create open water

		1c, 2a	Thinning Hornbeam plantation, removing invasives in preparation for LTC funded planting
Nov 23		11e	Coppicing of 0.9ha of Sweet Chestnut
			Completed LTC biodiversity enhancement project works in preparation for tree planting
			Aerial veteran tree works carried out on trees, 1018, 1022, 1023, 1024, 1026, 1095, 1122, 1127, 1150,1151, 1154, 1157, 1167, 1193, 1195, 1222, 1239
Jan 2024	Rangers + Vols		Planting for biodiversity enhancement project
	Rangers		Cleared windblown trees
	Rangers		Extraction from coppice coupe
Feb	Rangers	12e/12f/13a	Coppicing
	Rangers		Veteran tree works
	Rangers + Vols	2,3,4	Ride widening
	Rangers		Built floor for wood shed and events shed
March	Rangers + Vols		Ride widening
	Rangers + Vols		Boundary fence repair
	Rangers		Resurfaced car park
	Rangers		Build base for pony statue
April	Rangers		Cleared dead trees from vol garden
	Rangers + Vols		Fence along woodlands Road
May	Rangers + Vols		Boundary fence replacement
	Rangers		Fixed gate/weld
	Rangers		Escaped horses on site
	Rangers		Replaced amenity block steps
	Rangers + Vols		Vegetation cut backs
	Rangers		Chipping for biomass boiler
	Rangers		Felled dead trees
June	Rangers		Log and kindling processing
	Rangers + Vols		Vegetation cut backs
July	Rangers + Vols		Rebuilt fishing swims
	Rangers + Vols		Logs and kindling processing
August	Rangers		Logs and kindling processing
	Rangers + vols		Vegetation cut backs
	Rnagers + Vols		Cut back arboretum
September	Rangers		Extraction from coppice coupe
	Rangers		H&S Trees
	Rangers + Vols		Cleared areas around ponds L, F and I
	Rangers	2D	Cut backs for LTC project
	Rangers		Cleared birch from Knoll

	Ranges + Vols		Cut hedges around car park
	Rangers	Sword pond	Cleared sycamore behind sword pond
	Rangers		Cleared reeds from arboretum pond
	Rangers	11a	Coppicing in Brewers Wood

Appendix E, Marketing Checklist

KCC COUNTRY PARKS					
EVENT COSTINGS PROFORMA **(Please note all information provided on this section of the pro forma will be transposed directly to booking bug for ticket sales and to marketing materials)**					
Park					
Lead Officer					
Date Proforma Completed					
Event Name					
Event Date					
Additional Event Date (s) (multiple date events only)					
Event Time	**Start (enter time below)**	**End (enter time below)**			
Time slots	**Please provide required times slots**				
	Start (enter time below)	**End (enter time below)**			
Space for more detail on time slots					
Event Objective	Income Generation				
Event Short Description **(Max 255 characters, this should be a short, snappy, exciting description of the event that will appear on the first page of booking bug to encourage people to look further or make a booking. This will also be used on marketing materials)**					

Event Long Description (Max 1000 characters, this should be used to provide further detail on the specifics of the event e.g. what the event is about, what the customer will experience, what is included in the ticket price, age restrictions, parking arrangements, indoor or outdoor, are dogs allowed, any other information the customer might need before booking)						
Maximum Number of Tickets Per Session/Date						
What date are tickets to be made available for sale						
Minimum time before event bookings can be made						
Age Restrictions						
Are children to be accompanied by an adult						
Is this event suitable for babies/toddlers						
Are dogs allowed						
Is this event suitable for people with :	**Physical disabilities**		**If no why**			
	Partially sighted		**If no why**			
	Hearing impaired		**If no why**			
Has a KCC risk assessment been undertaken? When and by whom?	Yes					
Is booking in advance required?	no	**Who will take**				

		the bookings?				
Are additional staff resources required?	no	**Who?**				
Is there any third party involvement?	no	**Who?**				
Volunteers - will you be using volunteers	no	**How many?**				
Booking questions needed e.g., name of attendee, age of attendee, meal choices if catering included (please be specific about the information you need from the customers and the relevant booking questions will be built for you)	n/a					
Booking questions per booking or per attendee?						
Resources needing to be booked on Booking Bug (e.g. function room, outdoor space)						
What hard copy marketing materials are required (e.g. site posters, external venue posters, flyers)						
What digital marketing materials are required (e.g. social media posts, webpage updates, events listings, Yammer)						
Expected Event Income and Revenue						
The following are subject to VAT		Ticket Price	Quantity	Price including VAT		
Ticket Sales	One Adult			£0.00		
	One Child	£0.00	0	£0.00		
	Family (2+1)	£0.00	0	£0.00		
	Family (2+2)	£0.00	0	£0.00		
	Family (2+3)	£0.00	0	£0.00		
	Concessions (please specify)	£0.00	0	£0.00		
Catering	Food	£0.00	0	£0.00		
	Drink	£0.00	0	£0.00		

Anticipated Parking Income (If outside normal opening hours)	Parking (outside of normal opening hours)	£0.00		£0.00		
Other Revenue (Please specify)		£0.00	0	£0.00		
The following are not subject to VAT						
Room Hire Income (if charged separately to tickets)	Room hire / Outdoor Venue Hire	£0.00	0	£0.00		
Programmes	Programmes	£0.00	0	£0.00		
Other Revenue (Please specify)		£0.00	0	£0.00		
Total				**£0.00**		
Expected Event Costs		Expected Cost	Quantity	Total expected cost		
Staffing (Please specify job title, hourly rate and number of hours as per example)	*e.g. - Casual Events Guru*	*£9.99*	*4*	*£39.96*		
				£0.00		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
Catering				£0.00		
		£0.00	0	£0.00		
Hire of Equipment (please specify)		£0.00	0	£0.00		
3rd Party Costs e.g. event specialists (please specify)		£0.00	0	£0.00		
Events Materials (please specify)		£5.00	1	£5.00		
		£0.00	0	£0.00		
Marketing (please specify)		£0.00	0	£0.00		
Any Other Cost (Please specify)		£0.00	0	£0.00		
Total			0	**£0.00**		
Expected Profit / Loss on Event	**£0.00**	**Event To Go Ahead?**				
Marketing Activity	Responsible person	Date Required	Date Completed and By Whom			

Tickets loaded on to booking bug	BS					
Tickets available for sale	BS					
Hard Copy Marketing Materials Designed and Provided to Lead Officer	BS					
Digital Marketing Materials Designed and Scheduled for Posting	BS					
EVENT EVALUATION **(Please note event evaluations must be completed within 7 days of the final date of the event by the named lead officer)**						
Actual Event Income and Revenue						
The following are subject to VAT		Price	Quantity Sold	Price excluding VAT		
Ticket Sales	One Adult	£0.00	0	£0.00		
	One Child	£0.00	0	£0.00		
	Family (2+1)	£0.00	0	£0.00		
	Family (2+2)	£0.00	0	£0.00		
	Family (2+3)	£0.00	0	£0.00		
	Concessions (please specify)	£0.00	0	£0.00		
Catering	Food	£0.00	0	£0.00		
	Drink	£0.00	0	£0.00		
Anticipated Parking Income (If outside normal opening hours)	Parking	£0.00	0	£0.00		
Other Revenue (Please specify)		£0.00	0	£0.00		
The following are not subject to VAT						
Room Hire Income (if charged separately to tickets)	Room hire / Outdoor Venue Hire	£0.00	0	£0.00		
Programmes	Programmes	£0.00	0	£0.00		
Other Revenue (Please specify)		£0.00	0	£0.00		
Total			0	£0.00		
Actual Event Costs		Actual Cost	Quantity	Total Actual Cost		

Staffing (Please specify job title, hourly rate and number of hours as per example)	*e.g. - Casual Events Guru*	*£9.99*	*4*	*£39.96*		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
		£0.00	0	£0.00		
Catering	Food	£0.00	0	£0.00		
	Drink	£0.00	0	£0.00		
Hire of Equipment (please specify)		£0.00	0	£0.00		
3rd Party Costs e.g. event specialists (please specify)		£0.00	0	£0.00		
Events Materials (please specify)		£0.00	0	£0.00		
Marketing (please specify)		£0.00	0	£0.00		
Any Other Cost (Please specify)		£0.00	0	£0.00		
Total			0	£0.00		
Actual Profit / Loss on Event	#REF!					
Was the event objective met?						
If not, why not?						
Was this event suitable for disabled people?						
If not, why not?						
Did you use Volunteers?						
If yes, how many volunteer hours were provided?						
What would you have done differently?						
Were there any external factors affecting the event?						
What was the weather like on the day?						
What percentage of bookings were made via online systems?						
Were there any comments regarding making bookings via online systems?						
How successful was the marketing for this event?						

Any other comments?				
Are you planning to go ahead with this event next year 2021?				
Completed forms are to be emailed to kentcountryparksbusinesssupport@kent.gov.uk				

Appendix F Health and Safety

KCC Standard Instructions

Kent County Council

Environment & Economy - Country Parks

Health & Safety - Standing Instructions

ANNUAL CHECKS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BUILDING INSPECTIONS	I	X										
COSHH ASSESSMENTS		I	X									
RISK ASSESSMENTS		I	X									
VEHICLES - paperwork to be brought to monthly meetings			I	X								
OCCUPATIONAL ROAD RISK ASSESSMENT (at appraisal)				IX								
TOOLS AND EQUIPMENT INVENTORIES				I	X							
FIRE EXTINGUISHERS					I	X						
ELECTRICAL SAFETY TESTS - FIXED EQUIPMENT - PORTABLE BUILDINGS					I				X			
ELECTRICAL SAFETY TESTS - FIXED EQUIPMENT - PERMANENT BUILDINGS (Every 5 years- 2001/2005/2009)					I				X			
ELECTRICAL SAFETY TESTS - PORTABLE EQUIPMENT (Every 2 years - 2002/2004/2006/2008)					I				X			
PLAY EQUIPMENT							I			X		
CHAINSAW INSPECTIONS									I		X	
WINCHES INSPECTIONS									I		X	
SAFETY HATS									I		X	
TREE INSPECTIONS - P1 every year										I	X	X
P2 every 2 years (2004 / 2006 / 2008)		X								I		
P3 every 3 years (2004 / 2007 / 2010)		X								I		
TRAILER INSPECTIONS										I	X	

Key: I Instruction to be Given X Confirmation of completion due

Tree Zones

KCC country parks – Tree inspection policy

Each Country Park will be zoned for tree inspections and the East Kent Head Ranger and North and West Kent Ranger Services Manager will be responsible for producing a zoning map which will be reviewed annually.

The sites that this policy covers are the 9 Country Parks and the 3 Countryside sites that the parks manage on behalf of the KCC estates team. The total land area is approximately 1200 acres.

These sites are:

North Kent area-	Shorne Woods Country Park –	292 acres/116 ha
	Manor Park Country Park-	52 acres/ 21 ha
West Kent area-	Lullingstone Country Park-	494 acres/200 ha
	Trosley Country Park-	170 acres/68 ha
	Teston Bridge Country Park-	32 acres/12 ha
East Kent area-	Brockhill Country Park	
	Pegwell Bay	
	Grove Ferry	
	White Horse Wood	
Countryside sites:	Preston Hill (WK)-	232 acres/94 ha
	Dryhill picnic site (WK)-	22 acres/9 ha Parkwood (EK)

The zone 1 inspections will be initiated annually by Country Parks management and be competitively tendered to arboricultural experts. The inspection will be carried out in early Autumn. Trees will be individually numbered, and a full report submitted with work specifications and priority response times. Areas likely to have a footfall of more than 15 people per day. Zone 1 includes:

Well used assembly points, pedestrian routes, roads, footpaths, buildings, car park, woodland boundary abutting properties and the highway.

The Zone 2 inspections will be ‘standing instructions’ that are initiated by the country parks Business support team. The inspections will be carried out by park staff trained to LANTRA basic tree inspection course level or above.

This will be a zoned survey utilising the compartment and sub compartments that the Country Parks have. Each compartment will be inspected and any areas with a likely footfall of between 5 and 15 per day will be checked.

A form will be completed for each tree or group of trees that have works carried out on them. A separate form will be kept for trees requiring ongoing monitoring.

The Zone 3 inspections will be 'standing instructions' that are initiated by the country parks Business support officer. The inspections will be carried out by park staff trained to LANTRA basic tree inspection course level or above.

A form will be completed for each tree or group of trees that have works carried out on them. A separate form will be kept for trees requiring ongoing monitoring.

Priority (time scale to do works)

1 – 24 hours

2 – 3 months

3 – 6 months

Zone	**Criteria**	**Inspection frequency**	**By whom**
Zone 1 (red) (High Risk)	All areas bounded by roads, car parks, buildings, play areas and paths with a footfall greater than 15 persons per day	Annual inspection	Country Parks tree inspector
Zone 2 (Amber) Medium risk	All paths/bridle ways/land with a footfall greater than 5 persons but less than 15 persons per day	Ground based Inspection every 3 years	By Rangers
Zone 3 (green) Low risk	All paths/land with a footfall of less than 5 persons per day	Ground based Inspection every 5 years	By Rangers
All zones (no Colour)	All	AFTER SEVERE STORMS	By Rangers

Appendix I Example Risk Assessment Form

Activity / Operation/ Event: Hand cutting tools - bowsaws, loppers, slashers, billhooks, axes, hand cycles, secateurs.					**Assessment Date: 17/01/21**		
Establishment: Kent Country Parks.					**Review Date: 17/06/23**		
Step 1 **Step 2** **Step 3** **Risk Rating** **Step 4** **Step 5** **Action & Review**							**Date completed**
Identify the hazards	**Who might be harmed & how?**	**What are you already doing?**	Trivial/ low / medium / high / stop	**Is anything further needed?**	**Action required**	**Responsible person**	
Bowsaw The saw blade	User of tools, visitors, other works. Crush, blows to head and limbs, cuts, and lacerations.	Providing training on how to use the tool, safe use of tools, using appropriate PPE (gloves (*when needed and correct*), steel toe cap boots, yellow vest, hard hat while in felling areas)	Medium	Supervision of students/ volunteers Work with another person to help when needed. Give direction and support	Supervision of students, volunteer	Rangers	

loppers	User of tools, visitors, other works. Crush, blows to head and limbs, cuts, and lacerations.	Providing training on how to use the tool, safe use of tools. using appropriate PPE (gloves (*when needed and correct*), steel toe cap boots, yellow vest, hard hat while in felling areas)	Medium	Be aware of anyone under the branch or stem being cut.			
Slashers, bill hooks, hand cycles, axes, shears	User of tools, visitors, other works. Crush, blows to head and limbs, cuts, and lacerations.	Providing training on how to use the tool, safe use of tools. using appropriate PPE (gloves (*when needed and correct*), steel toe cap boots, yellow vest, hard hat while in felling areas)		Stay at least 2 clear tool lengths from others while using the tool. **Use tool correctly do not muck about – Keep tool sharp**			
Secateurs	User of tools, visitors, other works. Crush, cuts & lacerations.	Providing training on how to use the tool, safe use of tools. using appropriate PPE	Low	Be aware of anyone under the branch or stem being cut.			

Assessor Name(s): Kevin Jennings	**Job Title: Ranger**
Signature: KJ	**Review Date:17/06/23**

Step 1 What are the hazards?	Step 2 Who might be harmed and how?	Step 3 What are you already doing?	Risk rating	Step 4 Is anything further needed?	Step 5 Action & Review

Spot hazards by: ▪ walking around your workplace ▪ asking those doing the task what they think ▪ checking manufacturers' instructions ▪ considering health hazards	Identify groups of people, consider: ▪ employees ▪ temporary / agency staff ▪ contractors ▪ volunteers ▪ members of the public ▪ children (including work experience) ▪ lone workers ▪ pupils ▪ service users	List what is already in place to reduce the likelihood of harm or make any harm less serious, examples include: ▪ guarding ▪ training ▪ procedures, safe systems of work ▪ personal protective equipment (PPE)	Trivial, low, medium, high or stop (please see matrix below)	You need to make sure that you have reduced risks 'so far as is reasonably practicable'. An easy way of doing this is to compare what you are already doing with good practice. If there is a difference, list what needs to be done.	Remember to prioritise. Deal with those hazards that are high-risk and have serious consequences first. List: ▪ actions required. ▪ who needs to do them? ▪ by when ▪ Check actions completed