



Coulsdon
Commons

Kenley
Common

Registered Charity

Management
Plan

2021 - 2031

This is one of
14 green spaces
managed by the
City of London at
little cost to the
general public.

Kenley Common is a unique 56 hectare (138 acre) open space owned and managed by the City of London Corporation.

The site is part of the four Coulsdon Commons, protected downland and woodland sites on the border of London and Surrey. The Coulsdon Commons is a registered charity (number 232989) which receives the major part of its funding from the City of London Corporation.

The Coulsdon Commons includes ancient woodland, rare wood pasture and remnants of chalk grassland, one of the most biodiverse habitats in Western Europe. The four commons are part of the newly-designated South London Downs National Nature Reserve; a wider landscape of open spaces which are nationally-recognised for their value to people and nature.

Situated in an increasingly urbanised landscape, we are working to carefully

Above: Heritage sign in the snow, Kenley Common (©Tim Nightingale)

manage Kenley Common as an important site with the support of local people at all levels to try and minimise the deterioration of habitats and reduce the impacts of fragmentation.

The City of London Corporation is committed to managing Kenley Common in perpetuity to ensure that it remains as a truly special place.

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Below: Spitfire and RAF Blades flying over Kenley Common (@lan Black)



Introduction

Kenley Common was acquired under the Corporation of London (Open Spaces) Act 1878. This Act enables the City of London to acquire and protect land up to 25 miles out from the boundary of the Square Mile. Enacted over 130 years ago, the City of London has a duty to protect and conserve Kenley Common for public recreation and wildlife conservation 'in perpetuity'. Kenley Common is further safeguarded by national legislation. It is a registered charity which receives a major part of its funding from the City.

Kenley Common has been influenced by centuries of interactions between people and the environment. The history of the site is complex, with pockets of ancient woodland, flower-rich meadows and nationally rare chalk downland habitats requiring delicate management techniques. These habitats are located alongside invaluable WWI and WWII heritage features, all surrounding an active airfield. Much work has gone on over the last few decades to restore both heritage assets and the natural landscape elements across the Common to improve biodiversity and sustain vital ecosystem functions.

The site is, however, much more than a nature reserve or time capsule from a bygone era, rather it is a living landscape and place for people to find beauty, quiet and space in an

increasingly busy and hectic modern society that is becoming disconnected from nature. The challenge for the City, as land managers, is to balance traditional habitat management with 21st century expertise and expectations, and to ensure that Kenley Common is prepared for the mounting social and environmental pressures as we progress through the 2020's and beyond.

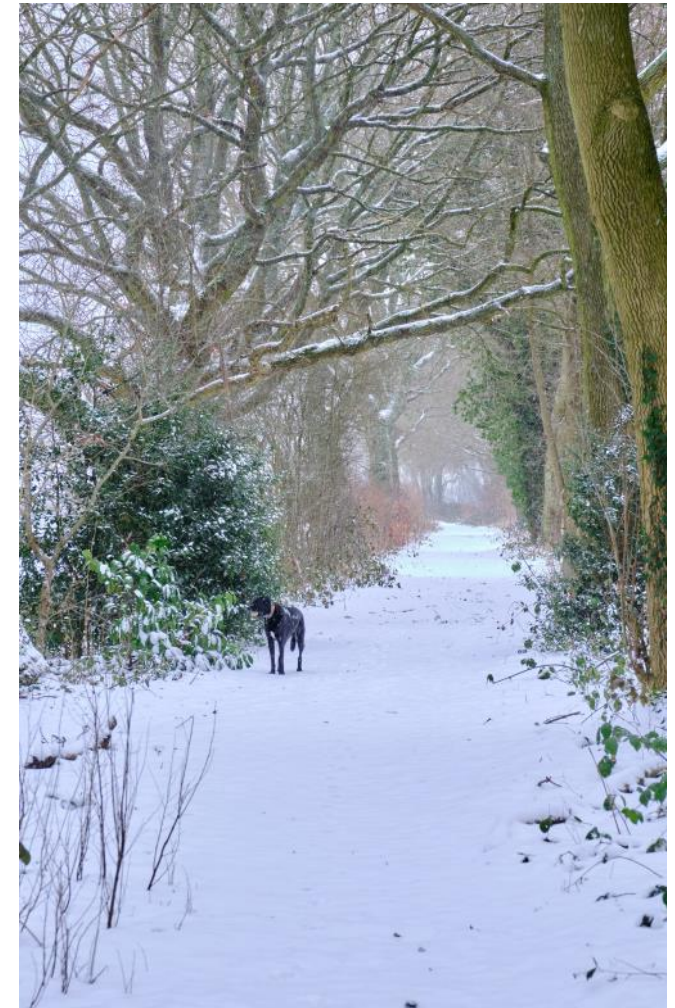
Kenley Common is managed by a small ranger team who are collectively responsible for the West Wickham & Coulsdon Commons including Riddlesdown, West Wickham Common and Farthing Downs. Since 2019, Kenley Common has also been part of the South London Downs National Nature Reserve (NNR) which links 417ha of downland and woodland sites and is a ground-breaking new partnership involving Natural England (NE), the City of London Corporation and Croydon Council.

This management plan aims to build upon the achievements of previous plans and legacies of grant schemes such as the recent Heritage Lottery Funded Kenley Revival Project and the Environmental Stewardship. The new management plan will summarise why, when and how Kenley Common will be managed over the next 10 years. It will also be a practical working document to guide tasks and projects that will take place over the next decade.

The management plan is the result of extensive consultation with a wide variety of stakeholders including government and non-government agencies, local authorities, conservation experts, local groups and site visitors.

Our thanks go out to all those who have helped to influence and produce this document and members of the public who participated in the consultation of this plan's main actions.

Below: Bridleway in the snow, Kenley Common (©Tim Nightingale)



Things we have learnt in the last 10 years

- We **recorded several new species** on Kenley Common including red kite, peregrine falcon, cave spider, southern marsh orchid and the purple emperor butterfly.
- Through speaking to the site visitors over the years we have found that a large majority only visit the airfield and perimeter track, so we have been **actively encouraging people to explore the woodland and grasslands** across the Common largely through events and activities.
- The Kenley Revival Project **reinvigorated our military aviation heritage**, from recording personal stories from the Battle of Britain to school visits of all ages to new interpretation around the airfield.
- We have learnt a great deal about the history of the airfield prior to WW2 and its evolution from an Air Acceptance Park right through to its role as a prominent Fighter Station in the Battle of Britain.
- Through **community archaeological digs, restoration and research**, we have found out more about the construction of the defensive structures on the airfield and how they were used.
- **Several archaeological features have been uncovered and investigated** including machine gun placements, spitfire and hurricane tiedowns and pilot huts.
- In the wildflower-rich meadows on Whyteleafe Bank we have had great **success using a new technique for scrub control** called 'tree popping' which uses no machinery or herbicide to permanently remove the ever-encroaching thorny scrub.
- **Public events have been growing in popularity** since our renewed focus on community engagement, with numbers well into their hundreds for some family events.

Below: Learning day, Kenley Common



Achievements 2010-2020

Kenley Revival Project

Community Archaeology

- Three annual archaeology festivals were held in collaboration with the Museum of London Archaeology, involving 250 participants. The festivals included public digs, guided tours, handling sessions, community stands and a youth volunteer programme.

Heritage feature conservation

- The Air Raid shelters and brickwork including the firing range have been conserved and the section of central spine wall at the Tribute has been restored.

Events and Tours

- Numerous public events have been held including a Heritage Day in 2017 and Sky Heroes in 2018 reaching 3,000 and 5,000 people respectively. Alongside this were women at war events, film screenings, monthly tours and talks to local groups, all together totalling 19,318 engagements across the life of the project.

Below: Volunteers excavating, community archaeology dig, Kenley Common



Website, Digitalisation & Archiving

- www.kenleyrevival.org is a continuously growing website. It contains an online memorial to 143 service people so far, a digital archive for stories and photographs which the public can upload to, as well as events information, education, Kenley airfield history, oral histories and volunteering opportunities.

Interpretation

- 23 new signs have been installed on site to create an outdoor museum and encourage visitors to explore the heritage features on the Common as well as learn about those who served at Kenley. A travelling exhibition has been created to loan out to museums, raising the profile of the airfield's heritage beyond the boundaries of the site.

Education

- Two learning festivals were delivered reaching over 3000 participants through a combination of workshops, guided tours, demonstrations, lectures and competitions. A total of 7,430 children engaged with the project over its lifespan.

Post Project Legacy

- Three 'Mini Museum' events were held at the Merlewood Estate Office engaging over 200 people and a remembrance trail around the airfield to commemorate the 80th anniversary of the Battle of Britain was delivered. The City of London has since been invited to join the Military Aviation Heritage Network, connecting to the wider community of historic airfields and museums.

Achievements 2010-2020

Community involvement, access and recreation

Kenley Common Volunteers

- Over the past 10 years we have almost doubled the number of conservation volunteer hours, reaching well in excess of 1000 volunteer hours per year. Projects have included hedge laying, charcoal making as part of our coppicing work, chalk grassland restoration and woodland management as well as assisting with public events.

Events and public participation

- There has been an increase in the family-friendly events programme including self-guided trails, bat walks, Halloween storytelling, fire and food, Christmas trails etc.

Education visits

- The Rangers regularly host primary and secondary school groups on Kenley Common, leading activities such as practical conservation work, heritage tours and nature days. Rangers have also visited schools to lead talks and nature activities. We have connections with at least 6 local schools and colleges and several scout/brownie groups.

Green Flag & Green Heritage Award

- Annual accreditation since 2007 in these prestigious national award schemes reflects the high management standards of Kenley Common.

New notice boards

- Two new notice boards were installed on site to improve communication with visitors, advertise events and inform the public about upcoming projects.

Right: Charcoal made in a portable kiln, Kenley Common (Gerard Mulryan)



Below : Horse on the bridleway, Kenley Common (©Tim Nightingale)



Achievements 2010-2020

Habitat conservation and restoration

Chalk grassland restoration

- The scrub clearance on Whyteleafe Bank and Hilltop has been completed to restore the rare chalk grassland habitat. These downs have been managed with grazing cows and sheep to increase biodiversity of this species-rich habitat.

Scrub control in the chalk downland

- A robust solution to the hawthorn scrub regrowth in the chalk downland has been found; using tree poppers we can now remove each individual plant without using chemicals or heavy machinery on the steep slopes of this very sensitive habitat.

Hedge laying

- Various hedge laying projects have been completed including Western Front, Hilltop and Hayes Lane. There are more sections to do and this will be continued until all hedges are in a laying/coppicing rotation.

Higher Level Stewardship Scheme

- We were awarded grant funding for a 10-year programme to carry out specific conservation projects and management techniques in 2011. These projects have helped to improve the Common for biodiversity and wildlife.

Conservation grazing

- Many of the wildflower meadows and downs are grazed by our Sussex cattle and Jacob's sheep. They move between permanently fenced fields and temporary electric fenced areas. There is a lot of public support for the conservation grazing animals across the four Coulsdon Commons.

Below: Bee orchid, Kenley Common



Below: Volunteers cutting stakes on a newly-laid hedge, Kenley Common



1

Site description

1.1 Location

Kenley Common is mainly located within the London Borough of Croydon with a small southern area within the Tandridge Council District of Surrey. The Common lies above the Caterham/Croydon valley, just west of the A22 (Godstone Road) and is east of Hayes Lane.

1.2 Ownership and access rights

Kenley Common is owned by the City of London which acquired it 1883. The site was purchased under the Corporation of London (Open Spaces) Act 1878, providing the public with open access to all areas subject to the byelaws. Kenley Common was bought at the same time as three other open spaces collectively making up the Coulsdon Commons, these being Farthing Downs, Riddlesdown and Coulsdon Common.

1.3 Site status

Kenley Common is not registered Common land, becoming exempt in December 1966 under Section 11 of the Commons Registration Act 1965; there are no rights registered over the site today. It lies within the Metropolitan Green Belt and has been designated part of the South London Downs National Nature Reserve (NNR) since July 2019.

Croydon Council and Historic England have

classed the whole of the airfield and its surrounding grassland and woodlands as a tier 1 Archaeological Priority Area as they contain heritage assets of national importance (Scheduled Monuments) and of very high archaeological sensitivity. The rest of Kenley Common to the North of the airfield is within a Tier 3 Archaeological Priority Area due to evidence indicating the potential for heritage assets of archaeological interest and the likelihood that currently unidentified heritage assets, particularly sites of historic and archaeological interest, will be discovered in the future. There are two Scheduled Monuments on Kenley Common consisting of eleven WWII

fighter pens (two of these fighter pens are on private land on the other side of Hayes Lane). The whole airfield and much of the surrounding grassland is also designated by both Tandridge and Croydon Councils as the Kenley Aerodrome Conservation Area due to the intact WWII heritage features remaining.

All of the Common in the London Borough of Croydon is designated as a Site of Importance for Nature Conservation (SINC), and two areas, which lie on the SE edge of the Common, are covered by Tree Preservation Orders (TPOs).

Below: Airfield perimeter, Kenley Common
(©Tim Nightingale)





Above: View over the Caterham Valley, Kenley Common (©Tim Nightingale)

1.4 Financial situation

The City of London Corporation provides funding for the management of Kenley Common largely from its private funds. For the last 10 years there have been increasing pressures to make revenue savings and these are likely to continue. The City's revenue can now meet only part of the running costs for Kenley Common; the site is increasingly reliant on grants and other sources of income.

The success of much of this management plan depends on the ability to identify and secure significant external funding to match any savings required by the City of London. Countryside Stewardship grants help pay for habitat conservation work but the long-term future of these grants is uncertain. New sources of revenue will need to be explored in coming years: the passing of a new Open Spaces Act (2018) together with increased use of technology may open up new revenue streams.

1.5 Physical features

Kenley Common's distinct physical features have played a huge role in sculpting both the habitats found on the site and the activities that gave rise to the heritage features that have endured to this day.

The majority of Kenley Common, and in particular the land surrounding the airfield, lies on a plateau at about 170m above sea level. To the north and west of the airfield there are gentle slopes down into neighbouring valleys, whilst a steep scarp slope to the east provides excellent views across the Caterham Valley.

The essentially open plateau at the top of Kenley Common has had a huge impact on the site, making it suitable for use as an airfield from 1917 to the present day. The whole area lies on the chalk strata of the North Downs, which runs from Kent through Surrey to Hampshire. The proximity of chalk to the surface gives rise to infertile, calcareous, shallow, well-drained soils. Where the chalk is overlain by a layer of clay-with-flints, the soils are of a brown earth type, ranging from loams to clay-loams, with a clay-enriched sub-soil. These soils are rather heavier and more fertile than those lying directly over chalk, in some instances they are of an acidic nature, even though the chalk is only a few feet below the surface. An unusual feature of the Common are the variety of soil types ranging from calcareous to neutral to acidic resulting in a very diverse range of native flora including some local and nationally rare species.

Kenley Common Site Map



1.6 Cultural heritage

1.6.1 Landscape

Kenley Common lies within the North Downs National Character Area which forms a chain of chalk hills extending from the Hogs Back in Surrey and ending dramatically at the White Cliffs of Dover. In a more local context, the Common is part of a very characteristic downland landscape of open chalk hills, patchwork fields and small woodlands linked by scrubby shaws and thick hedgerows. The growth of railways close to London meant that many downs in the surrounding area were developed, becoming lost beneath residential housing and roads. The City Corporation's ownership since 1883 prevented Kenley Common being developed in this way as well as nearby Riddlesdown and Farthing Downs.

1.6.2 Land use history

Kenley Common is a relic agricultural and pastoral landscape, strongly influenced by its use as marginal Common land. The celebrated downland we see today owes its appearance to a combination of underlying chalk geology and human influence that often go hand-in-hand with grazing animals.

Chalk downland is often unsuitable for intensive agriculture because of the nutrient-poor, shallow soil and steep slopes. For this reason, Kenley Common and similar downland sites such as Riddlesdown survived uncultivated when other, more easily worked land was ploughed or settled upon.



Above: Hedgerows along Main Common, Kenley Common (©Tim Nightingale)

During Medieval times, Kenley Common, alongside Riddlesdown, formed part of the waste land of the Manor of Watendone. Commoners had legal rights to gather fuel, bedding and roofing, as well as rights to graze their own cattle and sheep.

By the time the City of London acquired Kenley Common in 1883 the need for grazing and

wood products had declined and the land use was changing. As the grazing diminished, thick scrub and trees grew up, and many parts of the Common that were once open were lost. Soon after, recreation became much more important and in 1891 the area near Golf Road was turned into a nine-hole golf course until it was requisitioned for Kenley Airfield in 1917.



Above: 1940's aerial image over Kenley Aerodrome and Common with the modern boundary of the Common

The onset of WWI and WWII transformed much of the Common leaving behind a legacy that is rich in military and early aviation heritage (See 1.6.3 Archaeology).

Between 1951 to at least 1954, four fields, Main Common, Seven Acre, Twelve Acre and Western Front, were cut for hay - a traditional practice continued today across more areas of the Common. Jersey cattle are known to have

grazed Main Common in 1954 (and possibly other years), while ponies from riding stables in Old Coulsdon grazed land south of the entrance to Golf Road up until 1960. In 1965 the City bought an area of land between Welcomes Road and Kenley Lane, which was planted with trees, now appropriately named Plantation Woods.

1.6.3 Archaeology

Kenley Common has a long history of human activity and settlement; finds have been made in the surrounding area of material illustrative of human occupation dating back to the Mesolithic (8500 – 4000 BC). On the Common, a Neolithic (4000-2400 BC) burial was uncovered on the southern slope known as Hilltop. It is likely that the beginnings of agriculture by the Bronze Age (2400 – 700 BC) would have started to change the landscape with areas of native woodland being cleared – the root of the downland systems that have survived.

Most of the earth banks and remains of field systems are from the Saxon and Medieval period. The earliest features from these periods occur in woodland near Hayes Lane, namely a strip lynchet and an earthen bank which runs along the top of another possible lynchet. These are likely to represent the remains of a medieval agricultural landscape with arable ploughing nearer the top of the hill on the clay plateau and livestock on the eastern slope which is too steep to plough.



Above: Pilots and groundcrew alongside Hawker hurricanes stationed at RAF Kenley in Spring 1938

1.6.4 First and Second World Wars (1917 – 1945)

In 1917, 20.6 hectares (51 acres) of the Common were conveyed to the War Department for use as an aerodrome. The plateau of the Common including what is now the runway and the perimeter fence line had to be cleared of trees, and the open aspect that largely exists to this day was created at that time.

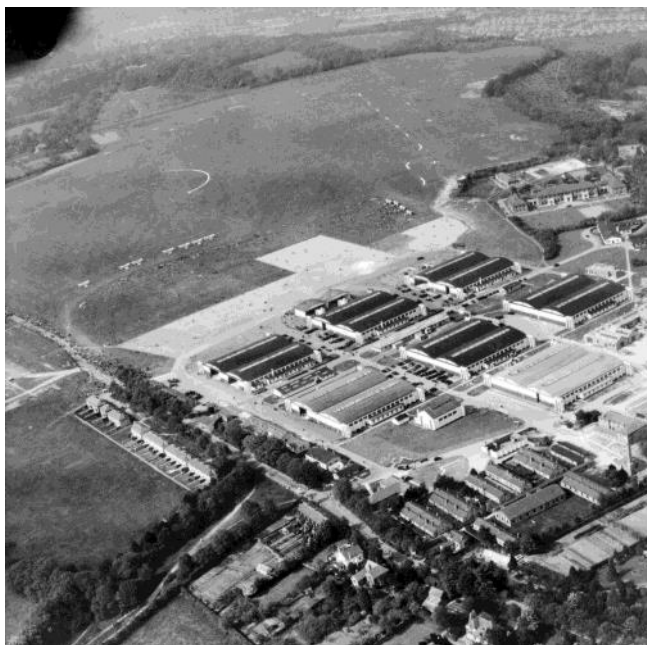
Kenley opened in 1917 as an aircraft acceptance park. The park prepared aircraft prior to them being sent to operational units. In 1919, after the signing of the peace treaty, the northern part of the Common was returned to

the City of London, but Lord Trenchard insisted that the southern part, 61 acres (20.6 ha), was retained and upgraded for the new Royal Air Force (RAF). In exchange 61 acres (24.7ha) of neighbouring farmland was conveyed to the City Corporation, and the Ministry agreed to re-convey the land taken in the event of its ceasing to be used for operational purposes.

The City of London has an option to purchase 50 acres (20.2ha) of intervening land at an agreed price if it ceases to be used as an aerodrome. In the 1930s, as concerns about a possible war grew, Kenley was one of several airfields that

were strengthened. New buildings were built to high design standards (nationally The Royal Fine Arts Commission advised on the design of many airfield buildings) and concrete runways built. Three Air Ministry boundary stones which survive on site probably mark this period of expansion and development.

Because of ongoing construction work, Kenley was not an operational airfield at the outbreak of war. The airfield became operational early in 1940. Around the edges of the airfield a series of defences had been constructed, these included anti-aircraft



Above: RAF Kenley looking towards Kenley Common, (IWM)



Right: Blast pens designed to shelter fighters on Kenley Common, (IWM)

defences on the large terrace on the eastern edge, and the Parachute and Cable defence in the north. In 1941, a number of Blister hangars were erected around the airfield; a platform was noted during the survey on the site of one of these. A length of concrete road still leads to the site of the platform. In the woods on the western edge of the Common the gun alignment range still survives.

Kenley was one of the main fighter stations in the front-line for the air defence of London. Combatting the tremendous might of the German Luftwaffe during the critical days of the

Battle of Britain, Kenley Airfield was devastated when an attack by the German Luftwaffe destroyed three hangars, destroyed or damaged thirteen aircraft, and caused extensive damage to the runways. Today, the visible evidence of this momentous battle of World War II and a crucial moment in both Kenley Airfield, and in Britain's history can be seen in the structures that survived these onslaughts.

Extensive remains of concrete footpaths and roads, relating to the airfield exist on site.

concrete blocks and areas of hard standing can also be observed. Trenches have been identified in the woods both on the east and west sides of the airfield. The trench found to the west was a portion of a zigzag trench which is shown on aerial photographs as having once extended along much of this side of the airfield. Three features can be identified in the woods to the east, two of these were rectangular trenches measuring approximately 2m x 12m with large well preserved earthen banks to their east side. The third feature appears to be the remains of a triangular machine-gun position, with a platform

for the gun and a hollow for the crew surviving. Within the woods to the west lie the remains of a small building with a plinth for a fuel tank adjacent. The building appears to be a guardhouse or some similar structure as it was too small to perform a more technical role. It was directly adjacent to Hayes Lane which would again suggest a defensive role.

Towards the end of the Second World War, Kenley was found to be too small to accommodate the new jet fighters that needed longer runways than could be constructed at this location.

The late 1940s saw the airfield used to assess and test captured German aircraft and equipment and also as the headquarters of a reserve training squadron. The airfield eventually began to be used as a glider training school and is used to train young air cadets in piloting gliders to this day alongside a private gliding club.

Right: Gliders launching from Kenley, (©Tim Nightingale)

Below: Actors manning a gun emplacement, Kenley Common



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Never in the field of human conflict, has so much been owed by so many to so few -

Winston Churchill 1942.
Inscribed on the RAF Tribute, Kenley Common

1.7 Kenley Revival Project

Kenley Revival Project was a National Lottery Heritage Fund (NHLF) project which set out to preserve and protect this significant reminder of Britain's wartime history as the most complete fighter airfield associated with the Battle of Britain, and to reveal the significant contribution made by the people who shaped Kenley's history. Their stories have emerged through this project and it is hoped that these will remind future generations of this dangerous and tumultuous time and of the personal sacrifice reflected in the quote on the RAF Kenley Tribute memorial: 'Never in the field of human conflict, has so much been owed by so many to so few' Winston Churchill 1940.

Now complete, the Kenley Revival Project leaves a legacy of knowledge about Kenley's critical role in the Battle of Britain and its physical heritage assets are conserved for future generations. The wealth of information gained from the community archaeological excavations are archived and accessible through the Kenley Revival website. Likewise, various resources produced through the project are available for future use including educational toolboxes that can be loaned out to schools, a travelling exhibition for museums, and oral history recordings from those who lived and served at Kenley.

Above right: Learning festival 2017, Kenley Common

Bottom left & right: Replica spitfire & community archaeological dig 2017, Kenley Common



1.8 Access and visitors

1.8.1 Visitor appeal

Kenley Common is a very popular site – its wide appeal as a place where historical features can be found from one of the most pivotal moments in the country's history alongside many acres of grassland and woodland means its users come from the local area and further afield.

The open aspect and hard standing perimeter track offer opportunities for recreational activities such as walking and running all-year round. The Common is also a valuable resource used by schools, hiking groups and history tourists. Locally, the airfield is a very well-known place for children to come and learn to ride their bikes; the hard standing around the fighter pens provides a safe place to practice away from cars and busy roads. Given the open aspect of the airfield, Kenley is also famous for its large skies and sunsets.

1.8.2 Access provision

Kenley Common is easily accessed by visitors, especially those living locally in the surrounding residential areas. There are marked parking areas on Hayes Lane that are well-used by visitors arriving by car especially at weekends. The nearest railway stations are at Kenley, Whyteleafe and Upper Warlingham with services from Central London. Regular bus services also stop a short walk away from the Common with links to Croydon, Caterham, Oxted and Redhill. There are multiple Public Footpaths that run across Kenley Common which are well-

maintained for walkers including a section of the London loop which is a 150-mile circular hiking route around London. Public Bridleways and permissive rides for bikes and horses form a circular route through the less-visited woodland areas. A network of informal grass footpaths are mown in the summer months around the meadows to maintain open access and discourage visitors from trampling wildflowers

and grasses. Kenley Common is the most accessible site of the four Coulsdon Commons for those with restricted mobility; a gently sloping ramp allows access from Hayes Lane onto the Common via surfaced paths and the perimeter track.

Below: Mown path across 12acre, Kenley Common (Brett Oliver)



1.8.3 Stakeholders

Kenley Common is a complex site with various aspects including wildlife conservation, visitor recreation, heritage features and gliding all taking high priority when it comes to management, visitor safety and communications. There are many stakeholders and neighbouring landowners including the Ministry of Defence, Historic England, Natural England, Surrey Hills Gliding Club, 615 and 450 Air Cadets Squadrons and the Kenley Airfield Friends Group.

A perimeter track surrounds the airfield and marks out the physical boundary between the active airfield and the Common. The track is owned by the Ministry of Defence and an informal agreement is in place for it to be used by members of the public. In recent years, a wooden rail fence with gates was installed to keep pedestrians from entering the airfield when it is being used by the Air Cadet gliders or Surrey Hills Gliding Club.

1.8.4 Visitor facilities and information provision

New heritage signs were installed in 2020 by the Kenley Revival Project to create an outdoor

museum and encourage visitors to explore the heritage features on site as well as learn about those who served at Kenley. Formed in the shape of Spitfire and Hawker Hurricane fighter wings, these signs are a visual reminder of the Common's link to the aircraft that once flew here.

There are two notice boards on site which are updated regularly with site information, upcoming events, volunteering opportunities and much more. They also display the map of the South London Downs National Nature Reserve.

Below: Surrey Hills Gliding Club on Kenley Airfield (Gary Watson)



Below: New heritage signs by the historic Rifle Range, Kenley Common (Jack Folkstone)



Byelaw boards can be found at the main entrances with the site byelaws, maps of the Common and other useful visitor information. Any fields with livestock in are sign-posted on the gateways or before any electric fencing.

Dog poo bins are located near to the main entrances onto the Common and areas of high use. We ensure that a balance is maintained between the desires of dog walkers, other visitors and wildlife that is sensitive to disturbance from dogs. This requires that all dog faeces be picked up and that no more than four dogs are walked per person.

An e-newsletter provides visitors and others on the mailing list with regular information about current news and issues on Kenley Common as well as the wider Coulsdon Commons. The City of London website includes a range of information for visitors including how we manage the site, wildlife commonly seen and volunteering opportunities.

Rangers run a programme of events throughout the year. These are popular with visitors and help to engage people with Kenley Common's rich history and nature rich habitats. Events include nature walks and talks, self-guided trails, heritage tours of the airfield and nature-based activities for families, which are promoted locally via the website, e-newsletter and on social media.

1.8.5 Education and research

School and college groups regularly visit the Common to learn about management, conservation and history.

Student and other research groups are encouraged, whilst staff and volunteers carry out long term monitoring activities.

Examples of these are butterfly transects, moth trapping and monitoring for bats, contributing to

a national picture of ecosystem health and the changes happening to protected sites across Britain.

Below: A guided heritage walk, Kenley Common





1.8.6 Other estate features

Other infrastructure across the Common includes stock-proof fences to contain grazing animals, benches and a range of gates, posts and boundary fences to prevent vehicles from gaining access to the open space.

1.9 Current use

Under the Open Spaces Act, there is a requirement for Kenley Common to be managed for informal recreation. Given the popularity of this site and its location in one of the most densely populated regions of the UK, care must be taken to ensure that recreation

activities remain low-key and do not result in damage. Legal obligations such as the NERC (Natural Environment and Rural Communities) Act and the Wildlife and Countryside Act 1981 require positive management for nature conservation; this is strengthened and supported by the NNR designation and grant funding through Countryside Stewardship.

“

Thank you and your team for all the amazing work you do on the common. We are very grateful for having such a special place on our doorstep.

Visitor comment

2

Biological features

2.1 Communities and flora

The chalk downland on the eastern slopes comes alive in the summer months with a large variety of wildflowers. As you move to the top of the slopes and cross an ancient woodland bank, the grassland becomes neutral and then moves onto acidic soils providing a larger variety of species than is normally found on a site of this size.

Neutral grassland (UK Priority habitat), covers an area of approximately 18 ha. It includes all of Seven Acre, much of Twelve Acre and Western Front and all the Airfield's perimeter. The richest neutral grassland tends to be nearest the chalk downland on the eastern side of the Common. This is clearly seen in Twelve Acre where there is a continuous transition from the chalk to neutral grassland with some chalk species like salad burnet (*Sanguisorba minor*), hairy oat grass (*Helictotrichon pubescens*) and yellow oat grass (*Trisetum flavescens*), to a more acid type of neutral grassland that has lost its chalk species and has plants like tormentil (*Potentilla erecta*), autumn hawkbit (*Scorzoneroideis autumnalis*), heath grass (*Danthonia decumbens*) and oxeye daisy (*Leucanthemum vulgare*). Relatively species-rich neutral grassland dominated by false oat grass (*Arrhenatherum elatius*) is found in Seven Acre, Western Front and a small part of the

eastern Perimeter. Common bird's foot trefoil (*Lotus corniculatus*), Common knapweed (*Centaurea nigra*), meadow vetchling (*Lathyrus pratensis*) and red clover (*Trifolium pratense*) are common. Conversely, the most species-poor grassland, dominated by false oat grass (*Arrhenatherum elatius*), lies due west of Perimeter Paddock and round the northern and western Perimeter of the Airfield.

Lowland acid grassland

Acid grassland (UK Priority habitat), covers around 3 ha and is found only on Main Common, part of the original Common. It's dominated by sheep's

fescue (*Festuca ovina*) with frequent patches of Common bent (*Agrostis capillaris*), heath bedstraw (*Galium saxatile*) and sheep's sorrel (*Rumex acetosella*). Within this area, especially round the margins, are many small patches where the grassland shifts in composition towards more neutral grassland. We know that the margins of this area were extremely disturbed by wartime activity and that bomb craters here were filled in with soil brought in for the purpose, this probably accounts for the variation seen.

Below: Oxeye daisies, Twelve Acre, Kenley Common (Brett Oliver)



Chalk grassland

Chalk grassland (UK priority habitat) covers a total area of 6 ha on Kenley Common. Along the length of the Eastern side of the Common runs the steep slope of Whyteleafe Bank and Hilltop, a nationally rare chalk downland habitat which is sometimes referred to as “Europe’s tropical rainforest”. These habitats can have up to 40 flowering plants in one square metre, meaning a well-managed chalk downland is an incredibly biodiverse habitat. This unique environment is a result of the thin layer of lime rich but low nutrient

soil on top of chalk. Ninety million years ago these meadows would have been at the bottom of the ocean. Over millions of years the bodies of microscopic plankton accumulated at the bottom of the great sea, compressed with sediment to eventually become rock. Later earth movements, related to the formation of the Alps, raised these former sea-floor deposits above sea level.

Nowadays this creates a somewhat harsh environment for common grasses and flowers, resulting in less dominant and rarer plant species. This, in turn, supports a huge amount of

uncommon invertebrates, birds and other animals.

To maximise biodiversity, we manage the chalk downlands (and many of our other meadows) with our own grazing cattle and sheep. Conservation grazing creates a varied sward height, controlled soil disturbance creates space for new seedlings to grow, localised soil enrichment without the introduction of nutrients into the system and a low yet significant impact on scrub regrowth. This dappled shady environment is favoured by a variety of invertebrates and essential for specialist species that rely on herbivore dung such as fungi and many species of beetles.

Below: A marbled white butterfly, Whyteleafe Bank Kenley Common (Bill Bessant)



Below: A marbled white butterfly, Whyteleafe Bank Kenley Common (Bill Bessant)



Woodland

Mixed broad-leaved deciduous woodland (UK priority habitat) covers around 18 ha, slightly more than one third of Kenley Common, with some areas having plants indicative of ancient woodland sites. Species including bluebell (*Hyacinthoides non-scripta*) and wood anemone (*Anemone nemorosa*) are commonly found in woodland. It covers much of the northern half, the scarps on the eastern periphery and a small area in the southwestern extremity.

The canopy is dominated by pedunculate oak (*Quercus robur*) and ash (*Fraxinus excelsior*), with additional species such as beech (*Fagus sylvatica*), silver birch (*Betula pendula*), yew (*Taxus baccata*), wild cherry (*Prunus avium*), wych elm (*Ulmus glabra*), lime (*Tilia x europaea*), sycamore (*Acer pseudoplatanus*) and field maple (*Acer campestre*). London plane (*Platanus x acerifolia*) and sweet chestnut (*Castanea sativa*) have been planted around some woodland edges. Hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), hazel (*Corylus avellane*) and elder (*Sambucus nigra*) form the understory. Whitebeam (*Sorbus aria*) occurs in the various patches of woodland on the eastern side of the Common which lie on chalk.

Semi-natural ancient woodland

Much of the woodland surrounding Main Common, Seven Acre and Twelve Acre, together with a narrow strip running above Hilltop and Whyteleafe Bank and the area of woodland just north of the Rifle Range, are thought to be ancient woodland. Most have been used by humans, managed for timber and other industries

over the centuries, but they have had continuous woodland cover for over 400 years.

The woodland canopy is predominantly pedunculate oak and ash. Hawthorn, holly, hazel and elder form much of the understory of shrubs here. Furthermore, all have a ground flora indicative of ancient woodland sites, including species such as bluebell, wood anemone and green hellebore (*Helleborus viridis*). Ground flora also includes dog's mercury (*Mercurialis perennis*), wood avens (*Geum urbanum*), greater stitchwort (*Rabiera holostea*) and broad buckler-fern (*Dryopteris dilatata*).

Secondary woodland

In amongst the semi-natural ancient woodland is secondary woodland, which is classified as a woodland occupying a site that has not been wooded continuously throughout history (in Britain since the last ice advance). It may be the product of natural succession or of planting on formerly unwooded land. These woodlands are a mixture of young oaks, birch, beech, cherry, yew, lime and other species. There is also a small area of conifer plantation planted in 1965 in the north-western corner of Kenley Common. The land was first ploughed, leaving a scattering of standard oaks and then planted with larch (*Larix decidua*), western hemlock (*Tsuga heterophylla*) and oak. Because of the wet clay conditions and the lack of aftercare most of the planting died. Today the area has become naturally colonised by young birch and goat willow (*Salix caprea*). An occasional larch and stunted western hemlock do still persist.



Above: Woodland bridleway, Kenley Common (©Tim Nightingale)



Left: Maiden oaks,
Main Common,
Kenley Common
(@Tim
Nightingale)

Veteran trees

A veteran tree is one that is biologically, aesthetically or culturally important because of its age, size or condition. In 2010 we identified 128 veteran trees scattered throughout the woodlands and grasslands. Species include ash, pedunculate oak, field maple, whitebeam, beech (*Fagus sylvatica*), lime, scots pine (*Pinus Sylvestris*), poplar (*Populus x canadensis*) and yew. The majority of these veterans are either maiden trees or coppice.

There are a few open grown maiden oaks on what was the original Common, what we now know as Main Common. Similarly, there are maiden veterans of considerable age grown as standards in the ancient coppice woodland that was added to the original Common. Here, and along the top of Hilltop and Whyteleafe Bank, there are large ash coppice stools which are wide enough at the base to suggest that they are 300+ years old. Many of these were last coppiced around 80 years ago, perhaps in

response to wartime needs for fuel or to clear the airfield for RAF requirements.

Veteran characteristics include:

- Shattered branch stumps
- Rot holes
- Decaying wood
- Fallen deadwood
- Water collecting depressions
- Sap runs
- Fractured bark
- Bracket fungi

These features provide many unique micro-habitats on a single tree, allowing it to support a wide range of wildlife. Cavities provide homes for birds and bats to nest and roost in, while deadwood supports a variety of specialised fungi, lichens and invertebrates. Many species supported by veteran trees and their associated deadwood are very rare and cannot survive anywhere else such as the stag beetle.

Below: Male stag beetle (PTES)



Hazel coppicing

There is a lot of hazel on Kenley Common, much of which is scattered within the understory of the woodlands, however there are many pockets where hazel is the dominant tree species. Across the whole site we have begun a 20-year coppice rotation. This ensures that the woodland, as a whole, always contains areas of trees at different stages of maturity. In areas of freshly cut coppice, more sunlight can reach the woodland floor allowing ground flora to thrive.

Variation in tree height, tree age and light level provides a more complex habitat structure. In turn, this allows the woodland to support a greater variety of plant and animal species. We collect the timber by-products from the hazel coppice and use them for charcoal making, hedge laying and pea sticks for the volunteers.

Hedgerows

Kenley Common has many species rich hedgerows (Priority habitat) located across the site including species such as hawthorn, blackthorn (*Prunus spinosa*), crab apple (*Malus sylvestris*), yew, cherry and spindle (*Euonymus europaeus*). Some mark boundaries and others are managed specifically for their wildlife conservation value. They are a vital resource for wildlife and often act as corridors linking habitats.

Hedges which border Public Rights of Way need to be managed regularly to ensure they do not prevent a hazard to access. The rest of our hedges are managed for their conservation value using the following techniques:

Coppicing & hedge-laying create new growth and maintain the hedgerow.

Trimming hedges is done on a three-year rotation, with different sections of hedge trimmed each year. This ensures that production of flowers, nuts and berries is not drastically reduced across the site at any one time.

Planting with native species will be done if a hedgerow is “gappy” or when a new hedgerow

is being planted. This ensures hedges are in-keeping with the landscape character. Veteran hedgerow trees are retained and managed individually as necessary. Long grass margins are left adjacent to the hedgerows and are cut on rotation.

Below: A newly laid hedge, Hilltop, Kenley Common



Below: Brown hairstreak, Kenley Common (Bill Bessant)



Successional areas and scrub

Across the grassland habitats and some woodland edges, you will find pockets of scrub which can enhance a habitat making it more biodiverse. They provide shelter for invertebrates and song posts and nesting sites for birds. In winter, the berries of scrub species provide a vital food source for many animals. However, this scrub must be controlled to ensure it doesn't spread and encroach onto the grassland habitat. This is done in three ways; by cutting back any large encroaching scrub plants and treating it with herbicide to prevent it from growing back, by coppicing and allowing to regrow at a controlled rate, or through a technique called tree popping where the root of the plant is pulled out of the ground to remove the whole plant without herbicides. Grazing animals will eat some young regrowth but cannot completely control scrub alone.

Brown Hairstreak

The Brown Hairstreak was once very widespread in England and Wales but has declined severely due to the loss of woodlands and hedgerows and increasingly intensive hedgerow management. The adults feed on aphid honeydew. Eggs are laid on young blackthorn and remain dormant throughout the winter, hatching into caterpillars in May.

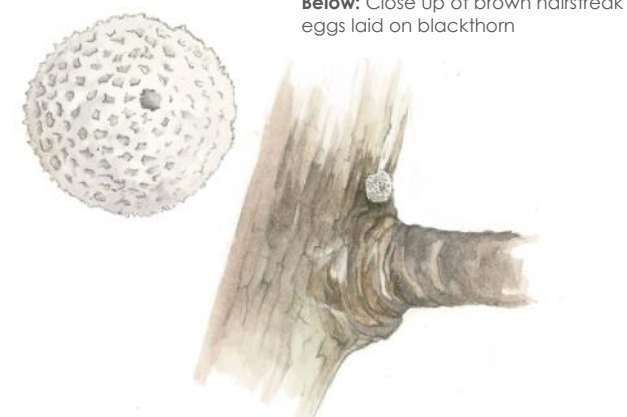
Blackthorn on Kenley Common is managed in a four year rotation to enhance the habitat for this UK Priority Species.

Blast pens

The dry barren environment in the concrete hard standing around the blast pens provides a niche

for uncompetitive shallow rooted plants such as several species of sedum and Common whitlow-grass.

The blast pens themselves create a unique habitat for some interesting species. They are covered with grasses and small scrubby plants which are cut back once a year to protect the concrete and brickwork from the roots. This creates a fantastic overwintering habitat for numerous invertebrates, small mammals, reptile and amphibians. We know that they are used as hibernacula and basking spots for slow worms and Common lizards. Roman snails have been found on the brickwork and Kestrels are often seen hovering overhead searching for movements from small mammals and insects. Within the air raid shelters located inside the blast pens there are also overwintering butterflies and numerous cave spiders.



Below: Close up of brown hairstreak eggs laid on blackthorn

2.2 Species of Interest

Vascular plants

Kenley Common is known for its incredible display of wildflowers on the chalk downlands, as well as the ancient woodlands and meadows across the rest of the Common. A total of 294 species of vascular plant were recorded during 2016-17 NVC survey, including chalk grassland specialists, woodland flora, neutral and acid grassland species.

Wildflowers, grasses and herbs are such an important part of any habitat, providing nectar and food sources to insects, nesting opportunities for invertebrates, birds, reptiles, amphibians and small mammals, as well as overwintering habitats.

More variation in vascular plants means more diverse invertebrates will be attracted. These in turn will bring a wider variety of predators to the food chain increasing the biodiversity of the habitat.

Some nationally scarce and locally rare species are present on Kenley Common including greater yellow-rattle (*Rhinanthus angustifolius*), man orchid (*Orchis anthropophora*) and stinking hellebore (*Helleborus foetidus*). A further ten species are listed as vulnerable, near threatened or endangered in the English Red Data list (see table).

Scientific Name	Common Name	UK Red Data List	England Red List	Surrey SCC	KEY
<i>Anacamptis pyramidalis</i>	Pyramidal orchid	LC	LC		Orchids and chalk grassland indicator species
<i>Briza media</i>	Quaking grass	LC	NT	•	
<i>Dactylorhiza fuchsii</i>	Common spotted orchid	LC	LC		* UK Bap and London Bap priority species
<i>Dactylorhiza praetermissa</i>	Southern marsh orchid	LC	LC		
<i>Euphrasia nemorosa</i>	Common eyebright	LC	NT	•	** London BAP priority species
<i>Galium verum</i>	Lady's bedstraw	LC	LC		
<i>Helianthemum nummularium</i>	Common rockrose	LC	NT	•	Key
<i>Knautia arvensis</i>	Field scabious	LC	NT	•	
<i>Leontodon hispidus</i>	Rough hawkbit	LC	LC		LC – least concern
<i>Linum catharticum</i>	Fairy flax	LC	LC		
<i>Lotus corniculatus</i>	Common Bird's-foot trefoil	LC	LC		VU – vulnerable
<i>Neottia ovata</i>	Common twayblade	LC	LC		
<i>Orchis anthropophora</i>	Man orchid*	EN	EN	•	EN – endangered
<i>Ophrys apifera</i>	Bee orchid	LC	LC		
<i>Plantago media</i>	Hoary plantain	LC	NT	•	NT – near threatened
<i>Primula veris</i>	Cowslip	LC	LC		
<i>Rhinanthus angustifolius</i>	Greater yellow rattle**	LC	LC	•	SCC – species of conservation concern

BAP – biodiversity action plan/UK Priority species

Below: Bee orchid, Kenley Common



Right: Small scabious, Kenley Common (Bill Bessant)



Fungi

Kenley Common is a fantastic place for fungi and can be found in all habitats across the site including the grasslands, woodlands, leaf litter and footpaths.

Through the dedication of a very knowledgeable volunteer mycologist we have found 143 species to date, 8 of which are on the UK Red List.

Below: Parasol mushrooms,
Kenley Common (@Tim Nightingale)



Scientific Name	Common Name
<i>Boletus chrysenteron</i>	Red-cracking Bolete
<i>Boletus edulis</i>	Penny Bun
<i>Boletus pruinatus</i>	Matt Bolete
<i>Hygrocybe calyptiformis</i>	Pink Waxcap*
<i>Lycoperdon perlatum</i>	Common Puffball
<i>Lycoperdon pratense</i>	Meadow Puffball
<i>Lycoperdon pyriforme</i>	Stump Puffball
<i>Piptoporus betulinus</i>	Birch Polypore

Roman snail

The slow-breeding Roman snail occurs on the site. This conspicuous mollusc is vulnerable to people collecting them for the restaurant trade and is becoming rare. The round-mouthed snail, which is more closely related to sea-living periwinkles than to other terrestrial snails, is found on the chalky soils and the blast pens. The species is protected under the Wildlife & Countryside Act.

Below: Roman snail,
Kenley Common



Butterflies and Moths

Since 1990 butterfly transects have identified 33 species on Kenley Common. Of particular note are the following species which are rare in Surrey and London; sightings of purple emperor (*Apatura iris*) to the north of the site feeding on goat willow in Plantation woodland, green hairstreak (*Callophrys rubi*) and dingy skipper (*Erynnis tages*) on the chalk downlands and brown hairstreak eggs (*Thecla betulae*) found on the coppiced blackthorn.

There are also good numbers of small heath and small copper. Additionally, two notable moth species have been found, the dusky thorn (*Ennomos fuscantaria*) which is a woodland specialist and the grass rivulet (*Perizoma albulata*) which thrives in chalk grasslands.



Above: Dingy Skipper, Kenley Common (Bill Bessant)

Left: Purple emperor, Kenley Common



Left: Chalkhill blue , Kenley Common (Zuza Featherstone)

Scientific Name	Common Name	UK Red List	UK Priority	London Priority	Surrey Species of Conservation Concern	Chalk grassland indicator
<i>Thecla betulae</i>	Brown hairstreak	VU	•	•	•	
<i>Polyommatus icarus</i>	Common blue	LC	•			•
<i>Erynnis tages</i>	Dingy skipper	VU	•	•	•	•
<i>Callophrys rubi</i>	Green hairstreak	LC			•	
<i>Pyrgus malvae</i>	Grizzled skipper	VU	•	•	•	•
<i>Melanargia galathea</i>	Marbled white	LC			•	•
<i>Apatura iris</i>	Purple emperor	NT			•	
<i>Favonius quercus</i>	Purple hairstreak	LC			•	
<i>Argynnis paphia</i>	Silver-washed Fritillary	LC			•	
<i>Coenonympha pamphilus</i>	Small heath	NT	•	•	•	•
<i>Ennomos fuscantaria</i>	Dusky thorn	EN	•	•	•	
<i>Perizoma albulata</i>	Grass rivulet	EN		•	•	•
<i>Zygaena filipendulae</i>	Six-spot Burnet moth					•

KEY
 LC – least concern
 VU – vulnerable
 EN – endangered
 NT – near threatened

Birds

A total of 59 species of bird have been recorded on Kenley Common, of which 12 are on the IUCN's Red List of Threatened Species and 12 are on the Amber List; 39 of these species are known to breed. The site is of local importance for downland birds, including breeding skylark, linnet and bullfinch but is also host to various warblers, finches and buntings. Each year a good number of starlings are also seen on the Common. There are regular sightings of at least 5 raptors hunting; kestrel, sparrow hawk, buzzard, red kite and peregrine falcon and the woodlands are home to breeding tawny owls. A large number of ring-necked parakeets are also regularly seen and heard in increasing numbers.

Below: Red Kite, Kenley Common
(©Tim Nightingale)



Scientific Name	Common Name	IUCN Category	UK Priority	London Priority	Surrey SCC
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	AMBER			•
<i>Pyrrhula pyrrhula</i>	Bullfinch	AMBER	•	•	•
<i>Larus canus</i>	Common gull	AMBER			•
<i>Prunella modularis</i>	Dunnock	AMBER	•	•	•
<i>Turdus pilaris</i>	Fieldfare	RED			•
<i>Larus argentatus</i>	Herring gull	RED	•	•	•
<i>Delichon urbica</i>	House martin	AMBER			•
<i>Passer domesticus</i>	House sparrow	RED	•	•	•
<i>Falco tinnunculus</i>	Kestrel	AMBER			•
<i>Larus fuscus</i>	Lesser black-backed gull	AMBER			•
<i>Linaria cannabina</i>	Linnet	RED	•	•	•
<i>Anthus pratensis</i>	Meadow pipit	AMBER			•
<i>Turdus viscivorus</i>	Mistle thrush	RED			•
<i>Falco peregrinus</i>	Peregrine falcon			•	•
<i>Milvus milvus</i>	Red kite				•
<i>Turdus iliacus</i>	Redwing	RED			•
<i>Alauda arvensis</i>	Skylark	RED	•	•	•
<i>Turdus philomelos</i>	Song thrush	RED	•	•	•
<i>Sturnus vulgaris</i>	Starling	RED	•	•	•
<i>Columba oenas</i>	Stock dove	AMBER			•
<i>Apus apus</i>	Swift	AMBER			•
<i>Strix aluco</i>	Tawny owl	AMBER			•
<i>Phylloscopus trochilus</i>	Willow warbler	AMBER			•
<i>Scelopax rusticola</i>	Woodcock	RED			•

Below: Goldcrest, Kenley Common
(©Tim Nightingale)



Below: Kestrel, Kenley Common
(©Tim Nightingale)



Mammals

The resident mammals are mainly Common species that are an integral part of the ecosystem and food chains. There are regular sightings of roe deer (*Capreolus capreolus*) and fox (*Vulpes vulpes*) and some well-established and active badger (*Meles meles*) setts. There have been anecdotal sightings of hedgehogs (*Erinaceus europaeus*). Dormice (*Muscardinus avellanarius*) surveys are being undertaken, although there is no evidence of dormice yet, we feel the habitat is suitable so we will continue with these surveys over the next few years.

Bats

As biological indicators of ecosystem health, the presence of various bat species suggests that there is a plentiful supply of nocturnal insects. Five species have been found, including noctule (*Nyctalus noctule*) (BAP), long-eared (*Plecotus auratus*) (BAP), pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and daubenton (*Myotis daubentonii*). All bat species and their roosts are protected by law so it is important to ensure that careful survey work is carried out before any tree work takes place.

Reptiles and amphibians

Although there is no permanent water source on site there are populations of 3 UK Priority Species; common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*) and common toad (*Bufo bufo*) as well as common frog (*Rana temporaria*).



Above: Roe deer, Kenley Common
(©Tim Nightingale)



Left: Badger
(Tim Hunt)

3 The need for management

3.1 The legacy of the Coulsdon Commons and the South London Downs NNR

The four Coulsdon Commons are more than just your average suburban parks; because of their size, age and centuries of management, many of the habitats within the Coulsdon Commons are now rare within the South East of England.

Over the many years since their purchase by the City of London Corporation in 1883, the rural landscape surrounding the Coulsdon Commons has significantly changed; initially, new railway lines were spreading rapidly across South London, driving up land values and creating a surge of new housing developments from the heart of London into the surrounding countryside. Today, the four Commons are some of the last significant swathes of open space in South London; they are green oases in an increasingly urban landscape. The protection afforded in perpetuity to these open spaces, under their own Act of Parliament, helped secure and safeguard them for the benefit of all Londoners.

In 2019, Kenley Common (along with the other Coulsdon Commons) became part of Greater

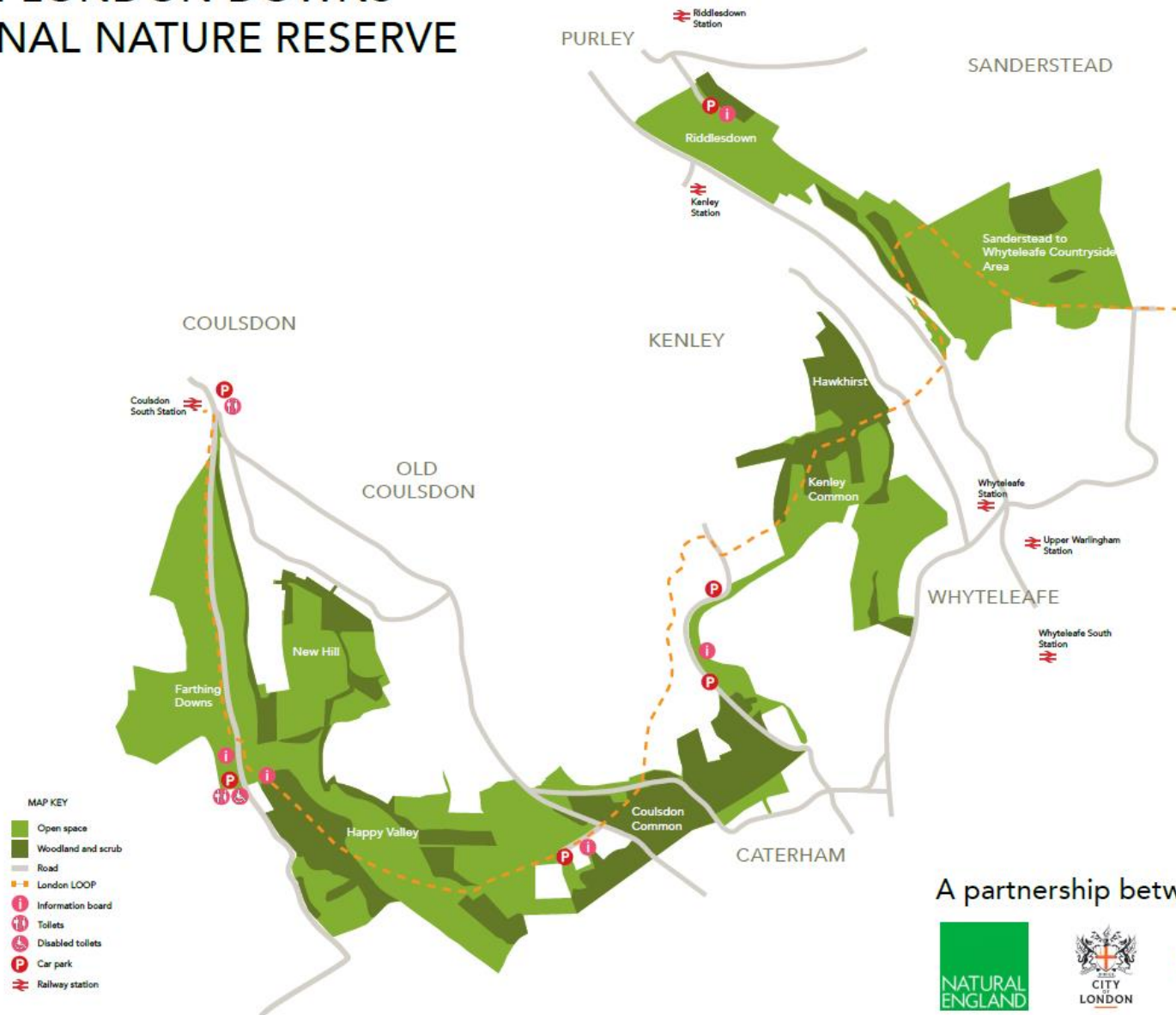
London's newest National Nature Reserve known as the South London Downs National Nature Reserve. This designation brought together 1,030 acres of land managed by the City of London Corporation and London Borough of Croydon to create a linked downland landscape both rich in nature and opportunities for people to engage with the natural world. A steering group regularly meets, with project partners including Natural England collaborating on joint initiatives such as increasing habitat connectivity across the NNR.

National Nature Reserves (NNRs) were established to protect some of our most important habitats, species and geology, and to provide 'outdoor laboratories' for research. Most NNRs offer great opportunities to schools, specialist interest groups and the public to experience wildlife at first hand and to learn more about nature conservation.

Below: Kenley Common looking towards Riddlesdown
(Brett Oliver)



SOUTH LONDON DOWNS NATIONAL NATURE RESERVE



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3.2 The importance of chalk grassland restoration and management

Chalk grasslands were once widespread across the landscape, wherever suitable substrate occurred. Historically, agricultural techniques gradually advanced to the point where around the 18th century, meadows were being ploughed for more intensive farming. This trend continued and accelerated with the introduction of fertilisers and heavy machinery. It is estimated that **since WWII we have lost roughly 80% of our chalk grasslands in the UK.** The remaining sites tend to be on valley sides and slopes too steep to be ploughed or re-seeded.

The general topography of the remaining chalk grassland sites being very steep left another big challenge for the chalk grassland habitats - ecological succession. Succession is the process by which ecosystems change and develop over time. In terms of chalk grassland habitats, without management they will become colonised by tussocky grasses over time, which shade and dominate the rare wildflowers, scrub then populates the downland and trees begin to grow eventually becoming woodland. These steep slopes make the downs difficult to work on, both on foot and with machinery.

On Kenley Common it has taken years of restoration work to get to where we are today. Back in the 1960's the whole bank running the length of the Eastern side of the Common, which we now know as Whyteleafe Bank and Hilltop, was covered in dense scrub and ash trees.

Before the war this was all openly grazed chalk grassland with very little scrub cover, as seen in this aerial photograph below, taken in 1944. Sections of the slope were gradually cleared of the dense scrub and trees to revert the downs to an open grassland habitat. The final part of the restoration work was completed in 2019 with the clearance of ash trees and scrub from the most northerly area of Hilltop adjacent to the Stumps Lane Bridleway.

Our focus now is on fine tuning the management of the restored open downland through grazing of cows and sheep so that returning rare and specialist plants and

invertebrates can become established and thrive.

Below: Species rich chalk grassland, Kenley Common



Below: Kenley Common and airfield, 1940s



3.3 The importance of grazing

Grazing helps to maintain a more varied vegetative structure than mowing and is also much less damaging to invertebrates living in the grassland.

Conservation grazing creates a diversity in sward height, a limited and beneficial amount of soil disturbance, localised soil enrichment without the introduction of nutrients into the system overall and can produce tunnels and cavities within scrub blocks. Hoof prints create hot microclimate conditions which specialised invertebrates such as the adonis blue (*Polyommatus bellargus*) butterfly require for egg laying; a butterfly we are hoping to encourage to inhabit Kenley Common.

Conversely, the resulting dappled shady environment created by grazing is favoured by a variety of invertebrates and essential for specialist species that rely on dung such as fungi and many species of beetles.

The presence of numerous ant hills in the chalk grasslands indicates centuries of grazing by animals as the anthills are retained rather than being flattened by mechanical mowing. Each mound is created by a single colony of meadow ants which can number several thousand individuals and extend up to a metre underground. Many anthills are believed to be several hundred years old, highly intricate and benefit not just the ants stored within, but add to the biodiversity of these meadow systems by creating small scale micro-habitats each with

valuable differences in soil nutrients, temperature, humidity, drainage and sunlight. This drives the diversity of plant species found in the chalk grasslands, favouring rare wildflowers and herbs.



Above: Adonis blue butterflies, Kenley Common (Zuza Featherstone)

Below: Chalk grassland wildflowers, Kenley Common (Zuza Featherstone)



3.3.1 Managing livestock

Our approach to grazing is intended to be as sustainable and holistic as possible. Jacob sheep and Sussex Cattle are bred on the Coulsdon Commons to ensure that the calves and lambs spend their first grazing season learning from their mothers about what plant species to forage and to become accustomed to the various site-users, both human and canine, they will encounter on what are busy suburban open spaces. Sussex Cattle are a very docile rare

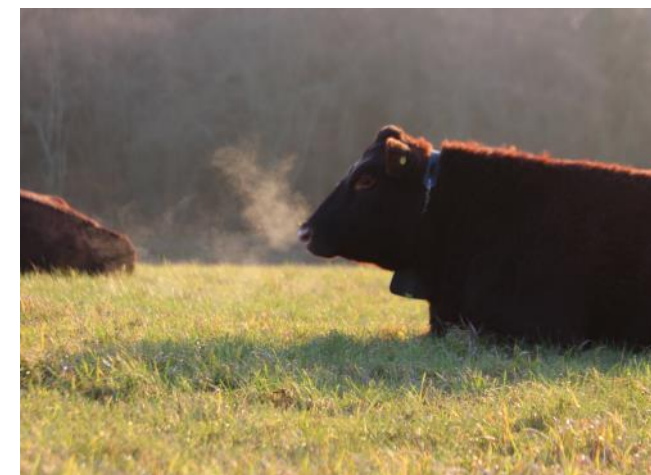
breed that would historically have roamed the downs of Surrey and Sussex. They cope well with the steep downland terrain and low quality grazing, a trait that benefits the flower rich grasslands present on the Commons. Jacob Sheep, which are also now a rare breed, similarly fare extremely well on the exposed downland slopes.

We graze with both cows and sheep due to their different grazing techniques and preferences. The cows use their strong curling tongue to wrap around the grass and pull it up, tearing it off in clumps. Jacob sheep are a hardy and attractive breed used to 'nibble' at the shorter grass cutting it low down to the ground. Through the combined use of sheep and cattle, a mosaic of different microhabitats is created, creating multiple niches for species over a small area.



Left: Jacob sheep on Hilltop, Kenley Common

Below: Sussex cattle



3.4 Climate change

Climate change is causing higher temperatures and more extreme and unpredictable weather events. Managing Kenley Common in the face of these uncertainties is a challenge; projections suggest that oak trees may decline in health as a result and other species such as hazel, may fare better in warmer conditions. Generally, this might result in a more scrubby and open woodland with lower tree canopies.

One way to reduce the risks associated with climate change is to make the Common more

resilient. Generally, ecosystems with a higher diversity of species are more resilient to negative drivers such as climate change or disease, for example. Actions to boost resilience include increasing structural diversity within habitats to create more ecological niches for wildlife to fill promoting species diversity. Other actions include managing and monitoring ancient oaks and other tree species to reduce the risk of structural failure in high winds. Likewise, surveying and monitoring plants and animals will play an important role in understanding the impact of climate change, species response and efficacy of our work.



3.5 Biodiversity in crisis

The UK is one of the most nature depleted countries in the world*. Biodiversity has plummeted due to the loss of wildlife and wildlife habitats.

- In 1966 there were **40 million more birds** in the UK than there are today.
- Numbers of the most endangered species in the UK have halved since the 1970s.
- **One in 10 species** in the UK is now threatened with extinction.
- A quarter of Britain's native mammals are at risk of extinction.
- Moths have **declined by 88%** and butterflies by **76%** since 1970.
- Approximately one plant species is lost per county per year, and the rate of loss is accelerating.
- Despite government policies and actions, 150 out of 250 'priority species' for nature conservation are still declining in number.

**UK State of Nature reports (2013 and 2016).*

Left: Stonechat,
Kenley Common (©Tim Nightingale)

3.6 Fragmentation, pests and diseases

The Common is increasingly under threat from pests and diseases that benefit from general warming and continue to be introduced on plant stock from abroad.

Ash dieback (*Hymenoscyphus fraxineus*) is one such disease that has inflicted Kenley Common's population of ash trees over the last few years. It has been spreading rapidly since it was first identified in the UK in 2012 and can affect up to 95% of ash trees on a site. On Kenley Common, and across the wider Coulsdon Commons, we are finding that some of the older trees are showing some resilience to the disease. Through ongoing tree safety checks, severely afflicted ash trees, especially those in high-use areas and on our urban boundaries, have been cleared. The loss of large stands of ash trees across the site is resulting in a very visible change to the landscape of Kenley Common.

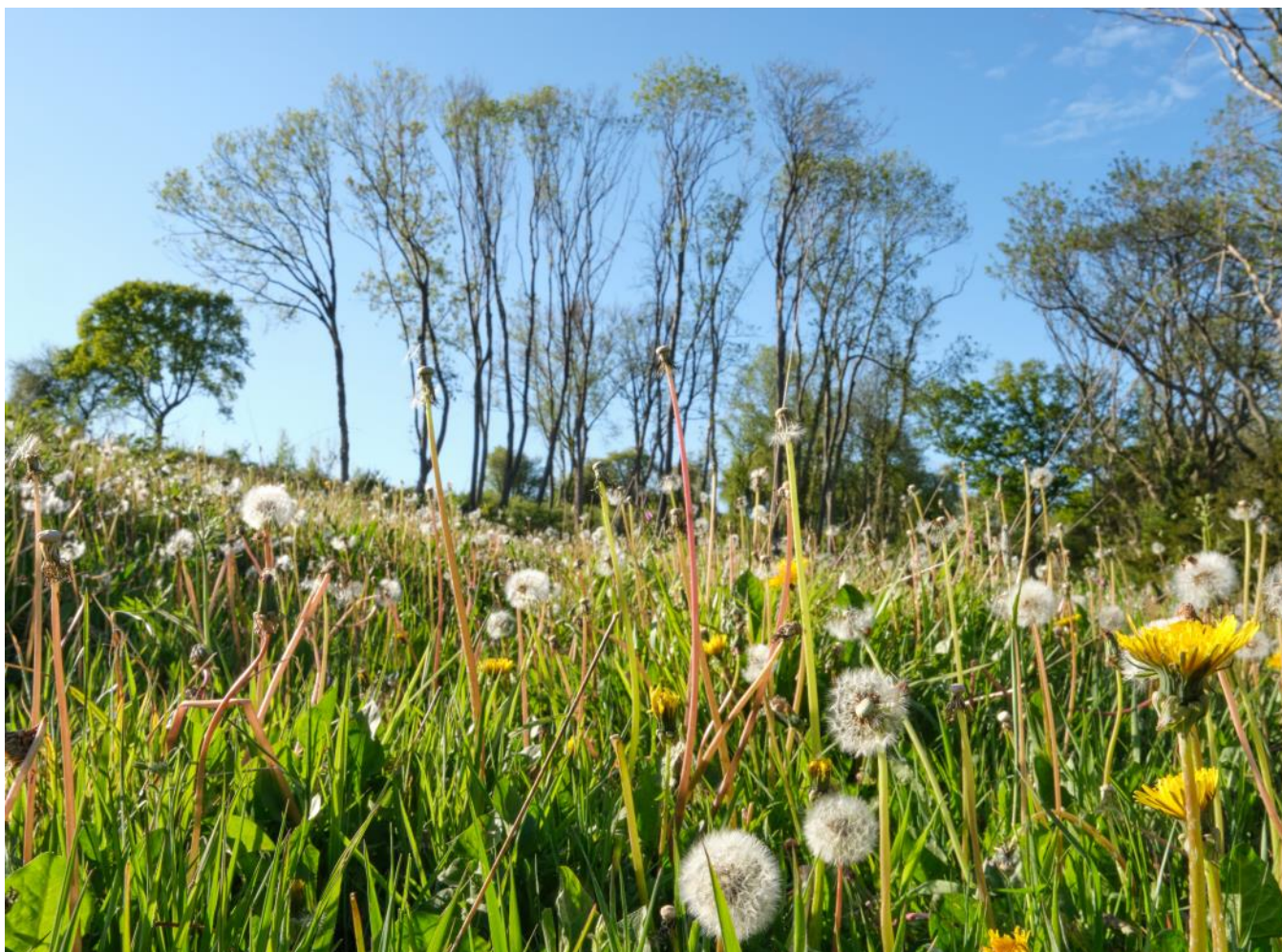
Although it is not currently present on Kenley Common, we are aware that the oak processionary moth (*Thaumetopoea processionea*) is within the local environment. The caterpillars of oak processionary moth (OPM) are found on oak trees and are a hazard to human and animal health. We are continuously monitoring the site for any signs of OPM and adhering to the most up-to-date advice from the Forestry Commission on its management.

Habitat fragmentation is a very real threat to all habitats across the world, with wildlife being cut

off from other habitats isolating individuals within one habitat, unable to move between habitats to mate and expand territories due to roads, buildings and railways. Through the linking of habitats using wildlife corridors such as

hedgerows and controlled successional scrub blocks, we are aiming to create a mosaic of interlinked habitats across Kenley Common.

Below: Ash dieback disease noticeable in the lack of leaves on ash trees, Bunker Bank, Kenley Common (©Tim Nightingale)



3.7 Protecting heritage

Kenley Common's unique military heritage is still visible today, creating a tangible link to Britain's aviation past.

We are dedicated to continuing to preserve, promote and protect the heritage of Kenley Common by safeguarding heritage features and historic landscapes. Maintaining public engagement regarding the historic importance of the airfield and the stories of the lives of the personnel that served here will become a lasting legacy that keeps the heritage alive. A ten year Management and Maintenance Plan is in place to guide the ongoing preservation of the heritage features over the next decade.

Additionally, we are continuing to support valued Kenley Revival volunteers who still wish to be involved in promoting this unique heritage. These volunteers are carrying out vital work to maintain and add to the wealth of knowledge built during the delivery of the project, including maintaining the website through contributing to new articles, the online memorial and online archive, leading tours and education visits, installing the travelling exhibition at museums and maintaining a relationship with the Military Aviation Heritage Network.

Above right: The RAF Tribute and restored E blast pen, Kenley Common (Simon Isaacs)

Right: Concrete remains of RAF Kenley's fuel dump and blast pen, Kenley Common (Simon Isaacs)

A guided school visit to explore the military features



3.8 Nature deficit, visitor access and community engagement

With more and more green spaces being lost across the country and the fast pace of life within our society, it is now more important than ever for people to have access to open spaces. We know there are numerous benefits to having access to the outdoors including improving mental health, keeping physically active and learning about the natural environment and its necessity to sustain life on earth. Nature deficit can cause numerous problems amongst children and adults and we are committed to encouraging anyone and everyone to get outdoors and use Kenley Common. We endeavour to make the Kenley Common as accessible as possible to everyone whilst ensuring site security, visitor safety and livestock welfare.

We have found through visitor surveys and speaking to site users that the majority of people using Kenley Common do not actually venture much further than the perimeter track, meaning they are missing out on the outstanding wildflower meadows and downland, ancient woodlands and grazing animals beyond. We will continue to encourage more people to explore the whole of the site, diversifying the way they visit and changing their perception of Kenley Common, all the while encouraging pro-environmental behaviour such as picking up dog waste and taking litter home. Through public events, interpretation and regular visitor/ ranger communication we will promote the wilder side of Kenley Common so that Kenley's

visitors are aware of how special and important the site is for nature conservation. We aim to actively encourage all members of our community to get involved in the management and conservation work on Kenley Common. We have a large, very active and incredibly valuable volunteering group. However, we are aware that wider members of our community are not as actively involved, therefore we are hoping to create more connections and opportunities for work experience students, Duke of Edinburgh activities, apprenticeships, youth

volunteering and more.

One of the most significant outcomes from the ongoing coronavirus pandemic has been the importance of the site not just for physical exercise but the restorative effect it has on people's mental health and wellbeing. We will take the opportunity to build on some of the lessons learnt from the pandemic.

Below: Sunrise over Kenley Common
(©Tim Nightingale)



4

Vision

Vision statement:

Kenley Common will be enjoyed and cherished in ways that contribute to people's health and wellbeing. City of London Rangers will work together with volunteers, communities and stakeholders to deliver management actions that protect and promote its wildlife, heritage and landscape. The biodiverse chalk downlands, flower-rich grasslands, ancient woodland and traditionally-managed coppices alongside the open aspect of the former fighter airfield will be treasured by local people and all those who come to visit:

- Kenley Common's mosaic of wildlife habitats are enhanced, extended and integrated into the wider downland landscape of the National Nature Reserve.
- People are integral to the site. They understand and are inspired by Kenley Common's special wildlife and heritage and are actively involved in its conservation.
- Kenley's heritage assets and scheduled monuments remain properly protected whilst events and interpretation will build upon the Kenley Revival Project's legacy.
- Conservation grazing and traditional skills will be used to maintain a tranquil landscape where wildlife will be abundant and can easily move between habitats and is resilient and adapted to a changing climate.

The vision for the next ten years will specifically focus on key projects to:

- Expand and explore **new grazing regimes** through invisible fencing technology and different hay cutting approaches to maximise plant and animal diversity within the grassland habitats and edges.
- Ensure the woodlands across the Common are **sustainably managed**, creating places rich in biodiversity whilst recycling by-products locally where possible such as producing charcoal.
- Explore options for **new habitat features** such as ponds and refugia for rare and threatened species associated with the downland ecosystem.
- Establish a rotational system of **managing hedges and scrub of varied age**, species and structure to support the widest range of wildlife.

- **Monitor wildlife** and changes to the environment through species surveys to build a bigger picture of our management actions.
- Explore opportunities and initiatives to uncover more of the **uncatalogued archaeological features** present on the Common.
- **Improve access** by upgrading key tracks, maintaining rights of way and replacing trail posts.
- Develop interpretation materials and continue with **events** such as walks, talks and workshops to engage with our audiences.

We have used a specially commissioned vision illustration to highlight the elements of change within the next 10 years of management (pg.42). The juxtaposition with the black and white drawings, reflects the importance of Kenley's heritage to society and the landscape we see today.

Below: Walkers around the airfield, Kenley Common (©Tim Nightingale)







Above: Main Common, Kenley Common (Gerard Mulryan)

5 Aims & targets

The aims of the 2021-2031 Management Plan seek to maintain a biodiverse nature reserve and provide a direction of travel towards achieving the vision for the site. The targets detailed here will be monitored throughout the plan and adjusted as needed to achieve the overall aims. Each aim is linked to the governing document of the Coulsdon Commons charity, the Corporation of London (Open Spaces) Act 1878.

Aim 1: Biological

Maintain the biodiversity of Kenley Common by managing the habitats to favourable condition and achieving conservation gains that benefit the site and beyond.

Aim 2: People and heritage

Encourage the sustainable use of Kenley Common for recreation, promoting community involvement whilst preserving and protecting this significant reminder of Britain's wartime history as the most complete fighter airfield associated with the Battle of Britain to have survived.

Aim 3: Estate assets and legal issues

To fulfil all legal obligations and to maintain estate and heritage structures in good condition so they are safe and secure, now and in the future.

Aim 1: Biological

The biological elements of Kenley Common are interdependent: habitats and species cannot be managed in isolation. In general, the stronger the nature reserve is in terms of habitat vigour and diversity, the more resilient it will be to the impact of outside influences such as climate change, pollution and habitat loss in surrounding areas.

4.1.1 Chalk grassland restoration and management

The magnificent chalk grasslands are what Kenley Common is best known for. We have got to a stage where we have achieved the majority of the restoration works across the downs that involved removing large scrub and woodland blocks.

Through careful management of the open downland, chalk grassland specialist species already present will gradually spread across the slopes to the newly cleared areas. This also requires the seasonal removal of certain plants, namely ragwort species, that can quickly colonise grasslands and, without action, can cause toxicity problems for grazing animals.

Target: Make grassland management with grazing animals less time consuming by reducing the amount of electric fencing the Rangers need to install each season, whilst ensuring that all areas of the chalk grassland are grazed effectively.

Achieved by:

- Install stock fencing around the whole perimeter of Whyteleafe Bank and Hilltop.
- Install a fence running along the top of Hilltop to protect the ancient woodland understory flora.

Target: Reduce the spread of successional hawthorn and bramble scrub on Whyteleafe Bank and Hilltop

Achieved by:

- Tree popping younger growth to remove the plant from the root.
- Larger, older scrub can be cut and the stump treated with an herbicide to stop regrowth.
- Annually brushcut bramble.

Below: Chalk grassland in Hilltop, Kenley Common (Timothy Hart)



4.1.2 Grassland management

The acid and neutral grasslands across the Common mostly have an annual hay cut for conservation management. This management needs to be reviewed as there are areas with increasing amounts of undesirable species such as creeping thistle (*Cirsium arvense*) and bramble (*Rubus fruticosus*). By altering the management of these meadows, through more regular cutting or targeted grazing it should be possible to enhance the floristic value of all the grasslands.

Target: Ensure grassland boundaries are maintained for both maximum habitat potential and access.

Achieved by:

- Managing scrub encroachment into the grassland through rotational cutting/ coppicing whilst maintaining successional scrub zones for breeding birds and winter food sources.
- Ensuring we leave at least 10% of all the hay meadows uncut each year to provide more overwintering habitat for invertebrates and late-flowering species through zones, blocks and/or strips depending on the meadow.

Target: Manage the grasslands to the encourage the highest biodiversity, whether through grazing or hay making.

Achieved by:

- Introducing grazing to more of the grassland areas, specifically Main Common, Seven Acre and 12 Acre.
- Continuing with the grazing regime on Whyteleafe Bank and Hilltop, including occasional late winter grazing.

Target: Enhancing low biodiverse grassland across the site.

Achieved by:

- Reviewing the cutting regime of certain areas of grassland such as areas which have previously been regularly mown for aesthetic purposes.
- Leaving areas uncut for the summer and then cutting and removing cuttings in late summer/autumn
- Seeding or planting with plugs to establish wildflowers.



Right: Walkers over Hilltop,
Kenley Common
(Brett Oliver)

Target: Protect delicate grassland habitats from compaction and trampling.

Achieved by:

- Maintaining safe and accessible mown footpaths for the public to encourage site exploration but discourage site users walking through the middle of the grasslands.

Target: Reduce the spread of ragwort across the site.

Achieved by:

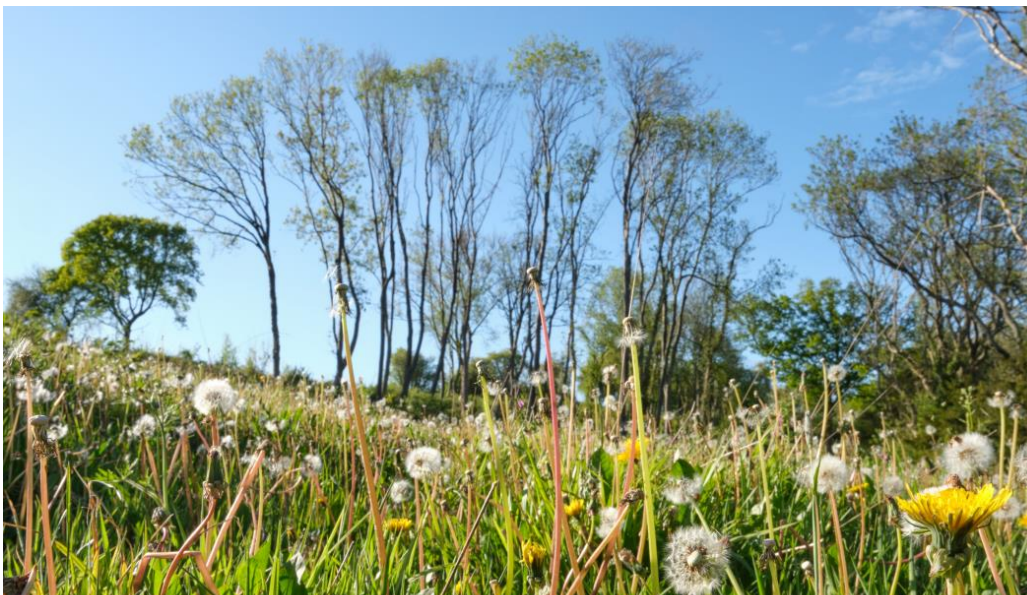
- Annually removing ragwort by hand.



Seeding Bunker Bank

Kidney vetch (*Anthyllis vulneraria*) is one of the desirable grassland species that would enhance the quality of the grassland on Kenley Common for invertebrates; Kidney vetch is the food plant for the small blue butterfly (*Cupido minimus*), but is also generally utilised by other butterfly species including the chalkhill blue (*Polyommatus coridon*) and adonis butterfly (*Polyommatus bellargus*).

Bunker Bank is a key area that would favour seeding as a means to improve biodiversity and specifically encourage butterfly species. The aspect, thin soils and proximity to priority chalk grasslands would therefore have a wider benefit to other invertebrates and less common wildflowers and herbs.



Target: Progressively manage and diversify the grassland sward on Bunker Bank

Achieved by:

- Exploring opportunities with local conservation land managers to collect and reseed areas of species-poor grassland with locally sourced material.
- Monitoring establishment of sward using wildflower surveys.
- Annually assessing whether hay cuts or grazing or a combination of both are the best management technique to increase biodiversity here following best practice and guidance.

Left: Bunker Bank, Kenley Common
(©Tim Nightingale)

Far left: Mown paths, Kenley Common

4.1.3 Grazing

Since 2019 we have been trialling a new “No Fence” system with our Sussex cattle in order to be more selective about where they graze across the Coulsdon Commons, without the need for electric fencing or permanent stock fencing. This new technology builds upon existing ‘invisible fence’ systems that have been used across other City of London Open Spaces. The main differences include a collar GPS system that allows us to locate cattle and draw grazing compartments on a mobile phone app.

This new grazing technique may also allow for better information to be gathered about grazing habits so we can fine tune the conservation grazing programme.

4.1.4 Day-to-day management of livestock

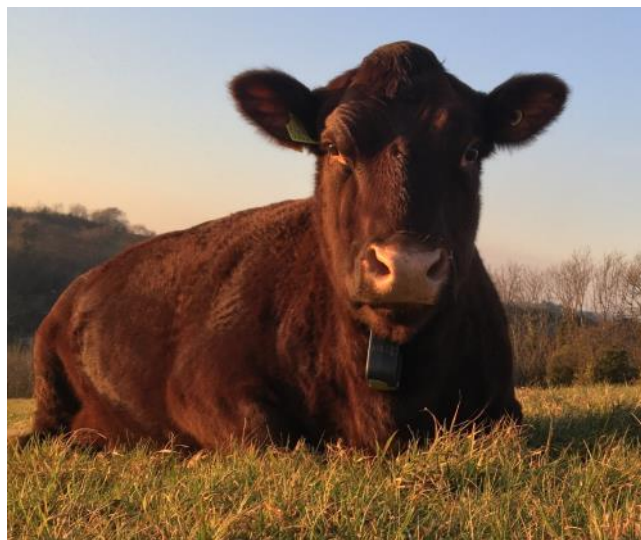
The livestock are checked every day by rangers or by trained volunteers. At certain times of the year, livestock management is particularly labour intensive. Across the Coulsdon Commons we have a specially selected group of livestock volunteers who help with cattle round-ups, livestock movements, sheep husbandry such as worming or foot trimming and general livestock management.

Right: Sussex cattle with a NoFence collar,

Target: Have the whole herd trained with the No Fence system

Achieved by:

- Ensuring all animals have been trained with the collars and are monitored.
- Using the system in new compartments on Kenley Common without the need for temporary electric fencing, such as Whyteleafe Bank, Main Common and Seven Acre.
- All rangers being alerted immediately through the No Fence app if a cow leaves the designated compartment and can respond promptly.



Target: Maintain a specialist livestock volunteer team who can assist rangers with day-to-day livestock management

Achieved by:

- Continuing to support our dedicated livestock lookers.
- Training volunteers to help with general livestock management until we have a small, skilled and dedicated group we can call on to help as and when needed.

Below: Sussex cattle being moved



4.1.5 Woodland management

Woodlands make up just over a third of Kenley Common, the majority being mixed broad-leaved deciduous woodlands, with a mixture of ancient and secondary woodlands. Over the life of this management plan we will be working to increase biodiversity within these woodlands, whilst controlling undesirable species such as laurel (*Laurus nobilis*) and controlling the spread of holly that can otherwise shade out and smother plants on the ground and in the woodland understory.

Target: Create a mosaic of age classes and a multi-storied canopy including plenty of links between different levels of the canopy and undergrowth, benefitting all wildlife and encouraging dormice to populate the site.

Achieved by:

- Continuing the 20-year hazel coppicing rotation.
- Hazel-layering to increase the density of hazel coppice stools.
- Thinning woodland edges to graded grass-scrub-wood interface up to 10m into woodland.

Target: Ensure woodland ground flora thrives by providing space to grow where sunlight can reach the woodland floor.

Achieved by:

- Thinning dense canopies to encourage development of understorey and ground flora.
- Managing the holly understory throughout the woodlands around Main Common and Seven Acre.

Target: Increase areas of potential habitat for reptiles, amphibians and invertebrates.

Achieved by:

- Creating natural hibernacula through the woodlands and scrub areas, particularly near ponds.
- Increasing the amount of log piles retained throughout the woodlands after tree works.
- Identifying potential sites for buried logs to support populations of stag beetles and other invertebrates.

Below: Bluebells, Kenley Common
(Brett Oliver)





Left: Oak woodland,
Kenley Common (@Tim Nightingale)

Target: Have a better understanding of the veteran trees including locations, management required and habitat potential to better protect them.

Achieved by:

- Re-surveying the ancient, veteran and maiden trees on the Common to assess condition and identify any preservation work including pruning, clearing surrounding vegetation halo release and other stresses that may be affecting the health of the trees.
- Surveying for bats to locate potential roost sites.

4.1.6 Managing arisings from woodland management

All felling, clearance and extraction activities should be carefully planned and timed to minimise disturbance and damage to wildlife.

As far as possible, sustainable use of all arisings should be found within the woodland, examples include deadwood habitat creation, charcoal making and using hazel stakes and binders for hedge laying. If this is not possible, regional markets such as firewood sales and wood chip for biofuel can recover some of the costs of habitat management whilst removing excess nutrients from particularly sensitive areas.

When we do have to burn wood and brash cut

during habitat work, we use a burning platform to avoid damaging the soil and influencing the type of vegetation that would grow on burn sites.

Target: Sustainable use of habitat work arisings

Achieved by:

- Begin milling timber from woodland management for use on the Common e.g. bench tops, fence posts, rails etc.
- Identifying possible markets for supply of wood product.
- Utilising local volunteer skills and enthusiasm practice traditional woodland management techniques such as layering and hedgelaying.

Target: No damage to soil or tree canopy as a result of burning excess brash resulting from habitat works

Achieved by:

- Using a burning platform for all fires on the Common.
- Positioning platforms in clear areas to avoid damaging tree canopies.
- Ensuring the method is appropriate for the job, avoiding damage when moving the burning platform and using additional protection underneath as required.

4.1.7 Decaying wood

The presence of dead and decaying wood is important to the health of woodlands and plays a big part in nutrient recycling. When left in situ, deadwood provides a constantly changing series of microhabitats.

The cavities, holes and hollows associated with the decay of heartwood provide valuable nesting and roosting sites for birds, bats and hibernating invertebrates.

Target: Management of deadwood as a habitat by protecting existing biomass and ensuring continuous supply of deadwood.

Achieved by:

- Retention of aerial deadwood and creation of further standing deadwood where risk management will allow.
- Retention of fallen deadwood in situ in large pieces close to the source tree.
- Diverting public or fencing off veteran trees where there is a significant risk to the public.
- Retention of cut timber arisings from tree management in log piles stacked nearby.
- Retention of flowering and fruiting vegetation near deadwood for birds, mammals and pollinating invertebrates.
- Creating more deadwood habitat piles near to the grasslands.



4.1.8 Pond creation

We know the importance of water to sustain life on Earth. Historically, there were two large ponds on Kenley Common. We have evidence of several species of reptiles and amphibians on site, as well as numerous birds and mammal species who require a consistent water source. Therefore, we are aiming to create at least one pond on Kenley Common to help support these varied species and enhance the habitat for all wildlife here and for visitors to appreciate.

Target: Create the first ponds on Kenley Common for over 100 years.

Achieved by:

- Digging into the clay within Plantation Woodland utilising the natural geology of the area to create a new pond, which, over time will fill with rainwater and become colonised by aquatic plants and animals.
- Monitor new ponds and consider whether a dead hedge or fence is required to protect it from dog disturbance.
- Investigating other locations for the possible creation of further ponds on Kenley Common.

Left: Invertebrate activity in deadwood, Kenley Common

4.1.8 Hedge creation and management

Our aim is to manage the hedges on Kenley Common to their maximum wildlife potential, increasing biodiversity and enabling them to be valuable habitat resources year-round. We are proposing to increase the number of conservation hedges which means adjusting the management of these hedgerows (such as the timing and frequency of trimming), as well as planting a new hedge line as a wildlife corridor to connect woodland habitats.

Below: Hedgerow along Whyteleafe Bank, Kenley Common (@Tim Nightingale)



Target: Maintain hedges for their wildlife value and increase the longevity of all hedges on site.

Achieved by:

- Putting all hedges into a coppice/laying rotation.
- Avoiding cutting during sensitive times of the year (never during bird nest season) when food for birds and pollinators is scarce.
- Managing more of the hedges on Kenley Common for biodiversity.

Target: Ensure all habitats on site are connected by wildlife corridors.

Achieved by:

- Planting a new hedge linking Western Front and the woodland between Seven Acre and Twelve Acre.
- Selecting a diverse range of native tree species.

Target: Maximise the number of hedges on site to improve biodiversity and link all habitats.

Achieved by:

- Finishing hedge laying the conservation hedge at the bottom of Hilltop meadow.
- Finishing hedge laying the boundary hedge along Hayes Lane.

4.1.10 Successional wood and scrub

Scrub is maintained using proactive management techniques to largely suppress the establishment of trees and promote continuous scrub growth. Cutting rotations vary so that scrub blocks are cut at different ages across the site. Birds that nest in scrub often require a vigorous field layer margin skirting the scrub block to protect low and vulnerable nests. Many of the insect species associated with scrub specialise in the decaying wood component,

and these insects need ready access to nectar and pollens. This highlights the need for a well-maintained mosaic that includes standing and fallen dead wood and a well-structured interface between scrub, grassland and woodland.

One species which benefits from regularly cut scrub is the brown hairstreak butterfly (pg.27). A blackthorn thicket on the top of Bunker Bank is a key habitat managed for the brown hairstreak. The four-year rotation is designed to give the correct mix of habitat elements required to support egg laying of the brown hairstreak butterflies.

Open space is the most important part of woodland and scrub for butterflies, especially its edge habitat where the warmest conditions are found. Grading edges and cutting scallops increases the structural diversity of the woodland and provides sheltered herb-rich grassy areas, supporting butterflies, moths and other invertebrates.

Target: Create butterfly-friendly scallops on scrub edges and rides.

Achieved by:

- Cutting one scallop each year along scrub/woodland edges and leaving to grow on a cycle of 8-20 years.
- Cutting only outside of the breeding bird season (March to August).

Target: Management of the blackthorn thicket to sustain a thriving population of brown hairstreak butterfly

Achieved by:

- Cutting no more than a quarter of the blackthorn thicket in each year, ensuring that there are uncut sections of different ages.
- Cutting only outside of the breeding bird season (March to August).



Above: Brown hairstreak eggs on young blackthorn, Kenley Common



Left: Speckled wood, Kenley Common, (Bill Bessant)



Above: Bumblebee on a rosebay willowherb, Kenley Common, (Gerard Mulryan)

4.1.11 Species monitoring and research

We know that over the past 10 years our biological recording has not been sufficient. Although we have a good data coverage on butterfly species, vascular plants and fungi on the Common, we are lacking in up-to-date data on many other species.

This information can help guide the future management of the habitats on Kenley Common and is essential in understanding the effects of our long-term management.

As habitat restoration progresses and areas change, the associated fauna and flora will also change. Throughout all our work it is important to record actions that are carried out and to evaluate the success of techniques used. In addition, long term monitoring is especially valuable because it provides data showing how species and habitats are being affected by climate change that can be used to inform mitigation and response measures.

The data we collect contributes to many national monitoring programmes: the data gathered informs not only the work carried out on the nature reserve but also across the country.

Aim 2: People

Encourage the sustainable use of Kenley Common for recreation, promoting community involvement, whilst preserving and protecting this significant reminder of Britain’s wartime history as the most complete fighter airfield associated with the Battle of Britain to have survived.

Kenley Common is protected forever for people to enjoy by virtue of the Corporation of London (Open Spaces) Act 1878. The Act allows people access to Kenley Common for recreation. Byelaws made under the Act regulate activity to protect the Common and its visitors. The 1878 Act, together with a 2018 update, permit some other types of activity, such as organised events and some forms of commercial activity to occur under license.

Kenley Common is a site of national and international importance due to the quality of the remaining heritage features from the two World Wars. Preserving and promoting these features and the history they represent is so important. It is also a place where people can come to reflect and remember those who fought and served for our country and the sacrifices made by the service people during the wars. The RAF Kenley Tribute is an invaluable

memorial for not just the local community but people from all over the world who have a connection to what was Kenley Airfield and the people who served here. Memorial events including Remembrance Sunday and the Battle of Britain Day are key events in the calendar where people feel drawn to Kenley Common to remember and commemorate.

The following section uses the criteria of the Green Flag Award scheme to assess service delivery in relation to people.

4.2.1 A welcoming place

Target: Maintain Kenley Common as a welcoming place

Achieved by:

- Regular ranger patrolling to provide visual presence and interaction with visitors.
- Regular litter picking to keep the site clean and safe for people and animals.
- Keeping paths and rides clear of encroaching vegetation and regularly mown.
- Providing and maintaining safe bridleways and permissive rides.
- Working towards making the site as accessible as possible for all site users.
- Improving particularly boggy parts of the unsurfaced path network for access.
- Investigate alternative material to woodchip on bridleways to improve access year-round.

Below: A guided walk around the airfield, Kenley Common



Target: Provide appropriate signage

Achieved by:

- Maintaining the new heritage trail to a high standard.
- Maintaining and improving way marker signs to demarcate Public Footpaths, Public Bridleways and permissive rides.
- Replace all finger posts as and when necessary.
- Keeping information on the notice boards relevant and up to date.
- Using temporary signage (including those about grazing) before and after habitat work, to highlight what's taking place and why.

4.2.4 Community involvement

Kenley Common has benefitted from significant levels of community involvement over the past 10 years. There are many volunteer groups we have connections with on site including The Conservation Volunteers (TCV), Downlands Partnership and Kenley Revival volunteers, corporate groups in addition to our own practical, livestock, events and survey volunteers.

We aim to actively encourage all members of our community to get involved in conservation work on Kenley Common.

Below: Dog walker, Kenley Common
(© Tim Nightingale)



Target: Widening participation of our local community

Achieved by:

- Putting a call out to wildlife enthusiasts to undertake surveying and monitoring on Kenley Common.
- Enabling and encouraging more work experience students to shadow rangers and assist with practical projects.
- Promote youth volunteering opportunities on weekends and during college holidays.
- Encourage more secondary schools to get involved in conservation days on the Common.
- Continuing to make connections with local scout and brownie groups, facilitating group activities on site.

Below: Kenley conservation volunteers, Kenley Common



Target: Supporting volunteer groups on Kenley Common

Achieved by:

- Leading a programme of regular volunteer tasks on Kenley Common.
- Keeping volunteer tasks interesting and varied throughout the year, ensuring the volunteers know exactly why we are carrying out the task and the benefit it has to the Common.
- Ensuring there are tasks and opportunities for people with varying skill sets and interests such as wildlife surveying, practical conservation, events, heritage conservation etc.
- Continuing to involve other volunteering organisations such as TCV, CCV, Downlands Partnership, KRP, KAFG and RAFA.
- Seeking opportunities to recruit a greater diversity of volunteers and specifically those who are less represented in nature conservation.

4.2.6 Activities and events

On Kenley Common we aim to actively engage with all site users, encouraging our local community to get involved and participate in a diverse and varied range of events and activities. These will provide opportunities for people to explore, learn about and celebrate Kenley. Over the next 10 years we aim to target our

events programme to encourage a wider range of participants to get involved.

We would like to hold an informal community day once a year to promote the work the rangers and volunteers do, with a range of informal activities for members of the public to observe or participate in, whilst speaking to the public about their interests or concerns on site. Under the 2018 Act, charges can be levied for

licensing events and commercial activities. Whilst not wanting to discourage visitors to the site, we should ensure certain activities are balanced according to the sensitive nature of the site.

Below: Sky Heroes event, Kenley Common
(© C.Toteman)



Right: Meet the calves event, Merlewood Estate Yard

Target: Provide and facilitate events.

Achieved by:

- A ranger-lead programme with a wide variety of events throughout the year including:
- Family events (during weekends and school holidays)
- Nature walks and talks
- Heritage themed events
- Meet the ranger events, learning about management and upcoming projects
- Community days
- “Helping on the Common” days (e.g. litter picking)
- Practical craft workshops (e.g. bushcraft, festive wreath making)
- Health walks and rambles
- Practical volunteering
- Wildlife surveys and citizen science (e.g. nature BioBlitz, moth trapping)
- Outreach talks to local clubs and societies.
- Promoting events through a variety of media, using an electronic booking system.
- Exploring options for charging for certain activities using authority given by the 2018 Act.
- Gather feedback from activities and use to help plan and tailor future events.



4.2.7 Educational visits, work experience and student studies

Kenley Common is a great place to learn about the wonders, complexity and fragility of nature. It naturally provides places for learning and play without the need for artificial enhancement. The Common can function as an outdoor classroom for a range of studies and activities.

The site is also a place where students can come and engage with the physical heritage features on site, learning about how airfields across the

country helped in both World Wars, whilst understanding the sacrifice service men and women made during the wars.

The Ranger team responds positively to requests by schools, colleges and youth groups to provide educational sessions on site whenever possible. Work experience can be accommodated within safeguarding constraints. We would like to encourage more undergraduate and postgraduate studies of Kenley Common through links with higher education establishments.

Target: Provide opportunities for formal learning.

Achieved by:

- Responding positively to requests to provide educational activities.
- Supporting and leading visits by schools and educational establishments.
- Guiding educational organisations on the safe use of the Common in relation to specific hazards such as livestock, ground conditions and electric fencing.
- Providing work experience placements when safeguarding measures are possible.
- Advising students on possible topics for study where there are gaps in our knowledge or projects of interest.

and Heritage department in order to share experiences and knowledge, as well as learn about new projects which could be relevant on Kenley Common.

Our designated livestock ranger regularly communicates with other open spaces who have livestock for conservation grazing, especially when it comes to the new “NoFence” system we have been trialling.

Target: Maintain good working relationships with other public open spaces and organisations

Achieved by:

- Rangers will continue attending Culture Days to encourage networking with other open spaces.
- Regularly liaising with Croydon Council's teams who manage the other sites within the South London Downs NNR.
- Continue working with other conservation graziers to keep up to date with methods and ideas to enhance our grazing approach on Kenley Common.

4.2.8 Liaison with other public open spaces

Through the creation of the South London Downs NNR, we have strengthened our relationship with Croydon Council who own several large open spaces local to Kenley Common. This partnership has enabled us to protect more of the open spaces in the local area, raising the profile of the site collectively. We can also collaborate with grant applications, habitat conservation projects and public communications.

Annually, the rangers attend networking “Culture Days” days within the Open Spaces

Below: Lord Mayor of London's visit, Kenley Common



Aim 3: Estate assets & legal issues

To fulfil all legal obligations and to maintain estate and heritage structures in good condition so they are safe and secure, now and in the future.

4.3.1 Conserve and protect heritage features

The 11 remaining blast pens on Kenley Common are categorised into two Scheduled Monuments by Historic England. They have been given this scheduling as the structures are still so well preserved, along with the other features on site such as aircraft tie-downs, Picket-Hamilton forts, concrete dispersal tracks and gunning placements. Together these features compile the most intact fighter airfield from the Battle of Britain period.

Through the Management and Maintenance Plan produced as part of the Kenley Revival Project, the future maintenance requirements for these heritage features onsite have been outlined. These works will mainly be funded by City Surveyors and include works relating to the brickwork, concrete, ironmongery, signage and earthworks. All of this planned future maintenance will ensure the continued preservation of these invaluable heritage features.

Memorial features

On Kenley Common there is a memorial to the service men and women who served and died on Kenley Airfield during WWII; the RAF Kenley Tribute. Designed by Fred Webb and sculpted by Bridget Powell, this memorial stone commemorates all who served at RAF Kenley between 1917 and 1959, both on the ground and in the air.

The white Portland stone monument takes the form of an open book whose pages list the number of each squadron based here. The figures on the central panel represent the ground staff, aircrew and women personnel who played such an important role in the defence of Britain.

Target: Maintain the RAF tribute to a high standard year-round, ensuring the tribute blast pen is clean and tidy for the Remembrance Sunday ceremony every year.

Achieved by:

- Continuing to maintain and conserve the stonework.
- Ensuring the surrounding blast pen is maintained to a high standard year round.
- Ensuring the blast pen has been arm mowed and stinned in preparation for Remembrance Sunday.
- Laying a wreath on behalf of the City of London Corporation on Remembrance Sunday.

Below: RAF Tribute, Kenley Common





Left: Community archaeology dig, Kenley Common
Below: Arm mowing vegetation on the blast pens, Kenley Common



Target: Preserve, protect and promote heritage features.

Achieved by:

- Work to the 10-year Management and Maintenance plan produced for the end of the Kenley Revival Project.
- Ranger staff to undertake jobs designated to them such as rod and flush through drains, re-grading banks, annual cutting of blast pen vegetation, cleaning the heritage signs etc.
- Patrolling and enforcing byelaws to protect heritage features.
- Conserving and storing artefacts in good condition.
- Liaising with Historic England as and when required.
- Continue to uncover the slit trenches on Bunker Bank and other archaeological features.



Left: Uncovering airfield structures, Kenley Common

Above: Clearing the drains, Kenley Common

4.3.2 Tree safety

The tree safety strategy for Kenley Common takes full account of the conservation importance of the site. The inspection process should not lead to a loss of character or species diversity. Rather, it should assist the management process ensuring that, as far as reasonably practicable, balance is maintained between conservation and risk management. Accordingly, the following principles are applied:

- Standing dead timber is an important resource and is left wherever possible. Dead trees are 'reduced' if safety work is necessary.

- Limbs or timber felled are left in situ wherever possible.
- The presence of fungal bodies on trees is not to be taken as an automatic indication that the tree is dangerous but may act as an indicator that further, detailed, inspection is required.
- When considering remedial action to reduce risk, due consideration is given to removing the target from the hazard wherever possible.

Zoning

Zoning is an important part of managing tree risk. Each part of the Common is divided into one of three risk zones; high, medium and low risk.

ZONE	FREQUENCY
 1. High risk Main public areas, properties, roads, easy access routes etc.	Annually in autumn/ winter (any trees retained noted to have defects but not felled - inspected every six months)
 2. Medium risk Other areas frequented by the public not included above	At least every two years (retained trees every 12 months)
 3. Low risk	During normal routine patrols
Zones 1 and 2 following a storm event (winds gusting 45 mph+)	Areas inspected as soon as practicable after the event (usually next day but always within five days)



Left: Storm damage to a veteran tree, Kenley Common, (© Tim Nightingale)

4.3.3 Bats and other protected species

All bats and their roosts are protected in law: all trees must be inspected before any surgery or felling. Surveys should also be made before any work on trees and improvements made to bat habitats wherever possible. In addition, general bat surveys should be carried out to ensure that the best information is available about where and how bats are using Kenley Common. Full details are given in the bat policy.

Target: Prevent any harm to bats, their roosts, or other protected species.

Achieved by:

- Implementing the bat policy; ensuring the needs/legislation regarding other protected species like badgers are adhered to when carrying out habitat work.

4.3.4 Residential boundaries

Residential boundaries are managed according to set criteria to ensure safety and consistency. Managing for light and views are not generally considered appropriate reasons to undertake work. Generally, homeowners are not permitted access across the Common to maintain their properties, although exceptions are sometimes granted if the work benefits the Common or its visitors – for example tree safety work. Wayleaves for gateway access from boundary gardens can be purchased annually.

Target: Manage residential boundaries.

Achieved by:

- Regularly patrolling and inspecting (including tree safety).
- Using set criteria to determine requests to manage vegetation.
- Annually issuing wayleaves to allow neighbours direct access onto the Common.
- Only permitting under licence access across the Common to the rear of properties for maintenance if the proposed work benefits the Common or its visitors (tree safety for example).
- Challenging fly-tipping of garden waste along residential boundaries

Achieving external quality standards validates management practices and gives assurance to our community, staff and elected Members that Kenley Common is being well run. Kenley Common has successfully achieved a Green Flag award every year since 2007 and a Green Heritage award since 2012. External assessments of wildlife and habitat quality are welcomed and outside input into surveying and data analysis is sought.

Target: Seek external accreditation.

Achieved by:

- Applying annually for Green Flag and Green Heritage Award
- Seeking professional input into wildlife and habitat assessments.
- Welcoming specialist groups to survey for species.

Below: Woodland bridleway, Kenley Common, (© Tim Nightingale)





Above: Lime tree fruits, Kenley Common (Gerard Mulryan)

6

2021 –2031 Work Programme

The following section details the works that will be carried out to achieve the aims and objectives of this management plan.

The table on the following pages summarises when the major projects will be undertaken on Kenley Common in the next 10 years. An annual plan and details of each project further guide the work.

Other documents steer our work too. For example, the Open Spaces Department Business Plan is a City of London document listing the key projects for the Department and each open space.

This aims to enrich people's lives by enhancing and promoting access to ecologically diverse open spaces and outstanding heritage assets across London and beyond. Kenley Common receives grant funding from Natural England in the form of a Countryside Stewardship Scheme Agreement. This gives an area payment for some habitat types and also money for specific projects.

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[illegible]

[illegible]

[illegible]

[illegible]

CODE	OBJECTIVE 3: ESTATE ASSETS & LEGAL ISSUES	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
EST6	Target: Seek external accreditation	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
EST6.1	Annual application for Green Flag and Green Heritage accreditation	2	2	2	2	2	2	2	2	2	2
EST6.2	Seek professional input into wildlife and habitat assessments	3	3	3	3	3	3	3	3	3	3
EST6.3	Welcome specialist groups to survey for species	3	3	3	3	3	3	3	3	3	3
EST7	Target: Fulfil all other legal obligations	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
EST7.1	Liaise with Natural England	1	1	1	1	1	1	1	1	1	1
EST7.2	Liaise with Historic England	1	1	1	1	1	1	1	1	1	1
EST7.3	Produce new Management Plan										1
EST7.4	Fulfil all Countryside Stewardship requirements	1	1	1	1	1					

Background information

Ancient woodland: woodland that has existed since at least 1600.

Archaeological Priority Areas (APAs):

are areas where there is significant known archaeological interest or potential for new discoveries. APAs are set out in the London boroughs' local plans.

Blast pen: earth covered revetments where one or more military aircraft would have been stored. The angled nature of the revetments would direct nearby blasts up and over the bank to avoid damaging aircraft.

Coppice: a tree or block of trees cut once or more, close to ground level to obtain wood from the branches.

National Nature Reserve (NNR): are designated by Natural England as key places for wildlife and natural features in England. They were established to protect the most significant areas of habitat and of geological formations.

Priority species: are species that were identified as being the most threatened and requiring conservation action under the UK Biodiversity

Action Plan (UK BAP). Formerly BAP priority species.

Pickett-Hamilton fort: a type of hardened field fortification built in Britain during the invasion crisis of 1940–1941.

IUCN/Red data book: list (originally a red book) of rare and threatened species of plant and animal. The International Union for Conservation of Nature (IUCN) Red List is a critical indicator of the health of the world's biodiversity.

Scheduled Monument (SM): a structure listed by English Heritage as being of importance and hence protected. Secondary woodland: woodland that has grown up on previously open land such as heathland or farmland.

Site of Nature Conservation Importance (SNCI): are areas which are designated locally for their wildlife importance.

Sward: an expanse of short grass and vegetation.

Veteran tree: a tree is one that is biologically, aesthetically or culturally important because of its age, size or condition.

The 2021–31 Kenley Common Management Plan has been ratified by Natural England (tbc).

This plan was drawn up by Coral Farmer, Tom Oliver, Barry Gutteridge and Allan Cameron; editing and design by Tom Oliver; Illustration by Dan Powell; photographs by Tim Nightingale, Gerard Mulryan, Zuza Featherstone, Gary Watson, Bill Bessant, Timothy Hart, Jack Folkstone, Brett Oliver, Simon Issacs and Tim Hunt.

Thank you to those who have commented on and contributed to the plan, including staff and volunteers from the Coulsdon Commons, Tim Nightingale, Dr Jane McLaughlin and Bill Bessant.

Cover photo: Gerard Mulryan.



Above: Sunset over Kenley Common, (© Tim Nightingale)

The City of London Corporation is the governing body for the Square Mile dedicated to a vibrant and thriving City, supporting a diverse and sustainable London within a globally successful UK.

The City owns and manages almost 4,500 ha of green spaces, parks and gardens in and around London as part of its commitment to sustaining a world class city. Each Open Space is a unique resource managed for the use and enjoyment of the public and for the conservation of wildlife and historic landscape.

The City's Open Spaces are protected under their own Acts of Parliament (Corporation of London (Open Spaces) Act, 1878 and City of London Corporation (Open Spaces) Act 2018). These enable the City to acquire land which, under the terms of the 1878 Act, must remain unenclosed and unbuilt upon as open spaces for the recreation and enjoyment of the public whilst preserving the natural aspect and protecting the trees and ground vegetation.

The 2018 Act clarifies that the City of London can undertake management and husbandry

activities such as cutting trees, managing the other vegetation and grazing.

The City of London is required by law to comply with certain duties relating to conservation as set out in section 28G of the Wildlife & Countryside Act (1981, as amended) and the Natural Environment and Rural Communities Act (2006). These require the City of London to take reasonable steps to further the conservation and enhancement of its Open Spaces



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