Galleywood Common
Management Plan
2019 – 2025

Galleywood Common Management Plan 2019

Contents

The Users

Galleywood Common provides a unique mix of recreation, biodiversity and historical features which attract large numbers of visitors. It is an important recreational area for local people who enjoy its varied habitats and distinctive history at the centre of the parish. It is also popular with visitors who stop while driving passed.
There is potential for greater use by local schools; access to toilets and indoor facilities can be arranged with the Galleywood Heritage Centre which can accommodate up to 200 people. A footway has been constructed from the Eagle Crossroads along Margaretting Road but care crossing over busy roads should be taken at all times.

The Site

Galleywood Common Local Nature Reserve was identified as being the most important and distinctive feature of the Parish (Galleywood Village Design Statement 2005). It stated that the Common has a very strong character and has always been an important feature of the hamlet around which the village grew, providing grazing land, furze and wood for gathering hoggin and gravel for building and road making.

The common is visible from main roads and the surrounding area and its character makes it very distinctive in this area.

It is currently the only Local Wildlife Site in the Parish; however it provides important ecological connections to other sites to the south. It forms part of a valuable chain of heathland sites running from Epping Forest to Colchester.

Image courtesy of John Turkentine

The Management Strategy

Working closely with the Galleywood Common Liaison Group Chelmsford City Council is committed to protecting and enhancing the character of the Common by retaining its mosaic of heathland, grassland and woods while ensuring that it is a safe, welcoming site that can be enjoyed by everyone.

Related websites

https://www.chelmsford.gov.uk/parks-and-allotments/find-a-park/?entryid1058=24852&p=2

http://www.galleywoodheritagecentre.org.uk/

1.0 Location and Status

1.1 Galleywood Common is situated 2 miles south of Chelmsford on the B1007 Stock Road, in the Parish of Galleywood, Essex. Plan 1 shows the area of the Common. Chelmsford City Council owns the freehold of the land registered as common land and the associated public open space land acquired in exchange for developments utilising parts of the original Common.

1.2 The site lies between eastings 695 and 707, and northings 012 and 031. The grid reference of the Galleywood Heritage Centre near the centre of the Common is TL702027. The Common is contained within four 1km squares – 7003, 6902, 7002, 7001.

1.3 The site area covers 47 hectares (116 acres) and is registered as Common land under the Commons Registration Act 1965 (Register Unit No C.L.16). There is an area of public open space north of G14 totalling 1.1a (2.7acres). This was acquired in exchange for common land taken for the construction of the A12 Chelmsford Southern bypass in 1986. An area of Public Open Space west of Stock Road was acquired in 2010 in exchange for SB3 as part of the Temple Farm planning permission. This area totals 0.83ha (2.05acres). Much of SB3 (approximately 0.5ha) has been retained.

1.4 Specific Commoners Rights are registered to the following properties:

- White House – to graze 2 horses, 2 cattle or 2 goats or a combination to give a maximum of 2 animals
- Parklands Farm – to graze 50 animals
- Cannon Leys Farm- to graze 30 head of cattle

1.5 The site was declared a Local Nature Reserve in 1993. It is designated as a Local Wildlife Site. The whole site is situated within the Metropolitan Green Belt.

2.0 The History of Galleywood Common

2.1 Introduction

2.1.1 Galleywood Common was historically part of the Manor of Great Baddow from Domesday and the following historical landmarks can be seen today; -

- The racecourse on Galleywood Common was the home of the Chelmsford races for 176 years between 1759 and 1935.
- The remains of the Napoleonic Defences
- Most of the nine-hole Galleywood Golf Links of the Chelmsford Golf Club, the first golf club in the Chelmsford area (1893-1912). The clubhouse was at the Horse and Groom public house on the Common.
- The Church of St. Michael and All Angels that was built in 1873 by Arthur Pryor, the owner of Hylands Park Estate.

- The brickworks which probably originated in the early 1800s when Galleywood was an important brick-making centre.
- A corn windmill first mentioned in 1777 was in use until the 1920's. It stood high on the Common in the grounds of Mill House, in Margaretting Road. The associated Mill pond still remains.

2.2 Horse Racing

2.2.1 The racecourse on Galleywood Common was the home of the Chelmsford races for 176 years between 1759 and 1935, after which it reverted to pony racing until the outbreak of the Second World War in 1939. Galleywood racecourse was one of the oldest in England and the principle racecourse in Essex. It has attracted prominent sporting personalities in its day including Admiral Rous, the senior steward and public handicapper of the Jockey Club, the so-called 'Dictator of the turf' who died in 1877.

2.2.2 The first recorded account of the Chelmsford Races was published in the Chelmsford Chronicle in 1764. The Chelmsford Races received royal patronage in 1770 when King George III gave 100 guineas prize money for a race called the Queen's Plate.

2.2.3 The 1860's were the heyday of horseracing on the Common and a new grandstand was built about 1863. Fortunes had declined by 1881 and the Royal Plate was discontinued, thus terminating royal patronage.

2.3 Napoleonic Defences

Image courtesy of John Turkentine

2.3.1 In 1803 defensive fortifications were constructed to the south of Chelmsford in response to the threat of a French invasion. They were intended to block an advance on London from a possible landing on the Essex coast.

Two artillery forts were constructed; one at Widford commanding the Clacton Road and one at Galleywood on the Maldon Road. The forts were linked and protected by a series of batteries and redoubts on rising ground. These fortifications were almost entirely constructed of earth and timber but were resilient against artillery of the day.

Almost as soon as the works were completed their importance declined. The defeat of the French (and Spanish) fleet at Trafalgar in 1805 lifted the threat of invasion. As a result, even before the defeat of Napoleon at Waterloo in 1815, the works seem to have been largely decommissioned and materials sold off.

Little of the defences now survive. Elements of the fort and bastion remain at Widford as features of a golf course and a small part of the fort survive on Galleywood Common.

Image courtesy of John Turkentine

2.3.2 The main surviving earthworks of the Galleywood fort lie immediately south of Margaretting Road. They form the southern intermediate bastion and the southern battery, some 50m to the southeast.

2.3.3 The southern battery is difficult to interpret due to its incompleteness and vegetation cover. The rampart and ditch of the southern intermediate bastion are substantial enough to be seen and are worthy of interpretation.

2.4 <u>The Golf Course</u>

2.4.1 The Chelmsford Golf Club, located on Galleywood Common was the first golf club in the Chelmsford area (1893-1912). The clubhouse was at the Horse and Groom public house on the Common.

2.4.2 Walter Maximillian de Zoete was a founder member of the club and elected the first chairman of Galleywood Parish Council in 1894, Lord Rayleigh of Terling was the first president of the club and his brother-in-law, The Rt.Hon. Arthur Balfour M.P., Prime Minister from 1902-1905, was Vice President.

2.5 <u>Other points of Historic interest</u>

2.5.1 In 1894 the Lord of the Manor of Great Baddow, Archer Houblon, introduced the rights of grazing and gathering of wood and furze, and raised money by granting the right to dig gravel (for use in parish highway repair) and other “grants of waste”

2.5.2 During the First World War the grandstand was taken over by the army for billets and parts of the Common were used for training. 25 pounder guns were dug in opposite the grandstand as a defence against Zeppelins, and 46 acres of the Common were farmed to aid the war effort.

2.5.3 In 1923 horseracing was revived and enjoyed success until 1935 when steeple chasing gave way to pony racing, which continued until 1939. With the advent of the Second World War parts of the Common were cultivated again.

2.5.4 Galleywood Common is a Scheme Common under the Commons Act 1899. The first scheme of management and regulation was made by the Chelmsford Rural District Council on the 1st April 1924. It purchased the Manorial Rights of the Common from Archer Houblon in 1936 and completed the freehold purchase in 1946 of the land and property of the racecourse owned by the Chelmsford Racehorse Company Ltd. It also acquired the 116 acres of Galleywood Common from the Lord of the Manor of Great Baddow, Archer Houblon.

2.5.5 Galleywood Common was registered as Common land under the Commons Registration Act of 1965. Grazing rights were registered to three Commoners for a total of up to 82 animals.

2.5.6 The Council covenanted in 1965 to maintain Galleywood Common in perpetuity for the benefit of the inhabitants of the surrounding locality.

2.5.7 In July 1993 the Common was declared a Local Nature Reserve.

3.0 Management of the Common

3.1 The second scheme for management of the Common was made on 18th May 1965 by the Rural District Council and approved by order of the Minister of Land and Natural Resources on 27th May 1965. The Secretary of State confirmed the byelaws relating to this scheme which came into operation on the 1st October 1966 (see appendix 1). Subsequent management plans must conform to the legal constraints of the 1965 scheme and its byelaws.

3.2 An initial management plan was adopted in September 1990. A new management plan which formed part of a successful Countryside Stewardship Scheme application was adopted in 1996 following public consultation. The Countryside Stewardship agreement ran until 2006. A new 10 year plan was produced in 2007.

3.3 An inaugural meeting was convened on 3rd August 1987 to establish an Association for the care and protection of the Common. The Galleywood Common Liaison Group, (GCLG) an informal panel of Ward Councillors, residents and users, held their first meeting with Galleywood Parish Council and Chelmsford Borough Council on 10th August 1988.

3.4 Galleywood Common and the adjacent lands covered by the Management Plan are managed by Chelmsford City Council's Parks and Green Space Department.

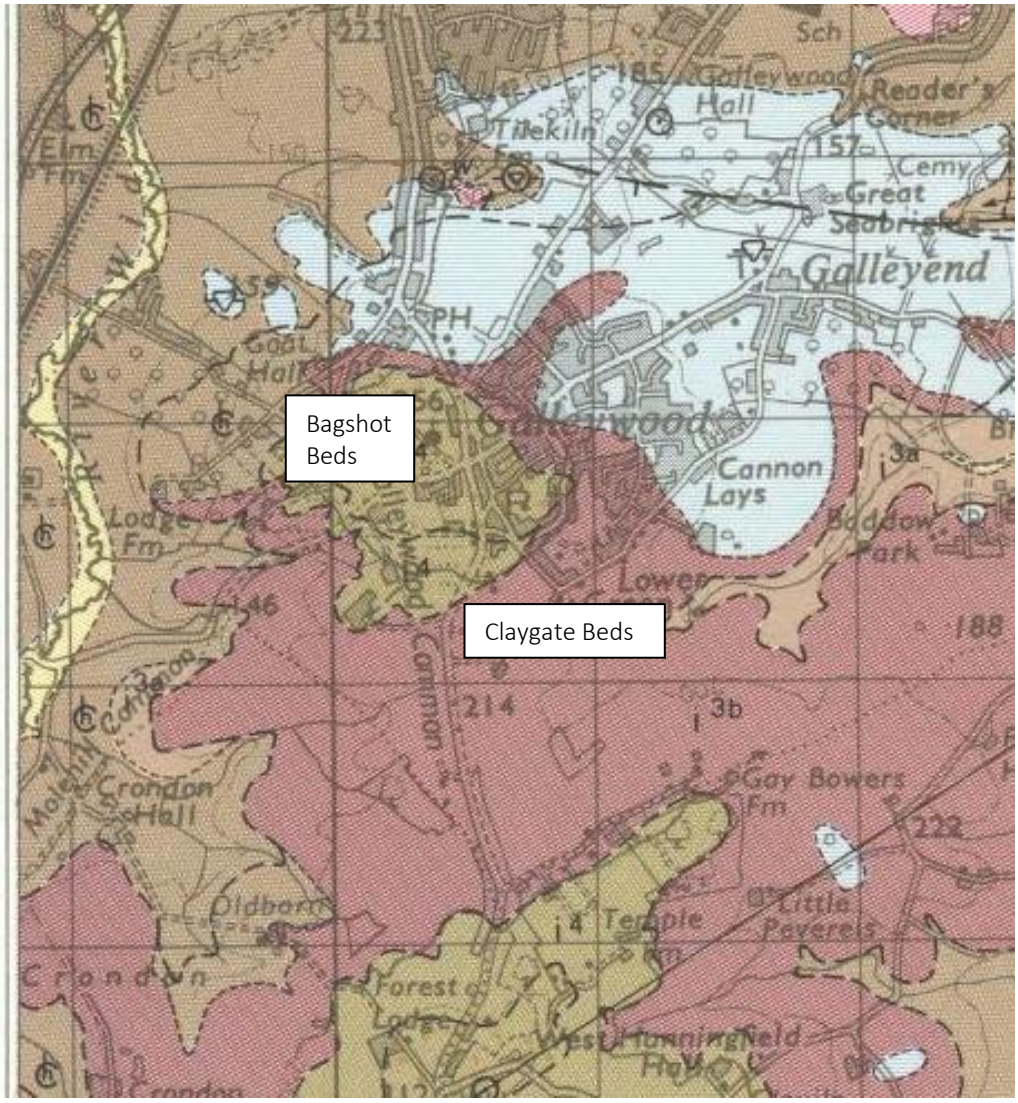
4.0 Geology

4.1 The surface geological formations of the Common encompass a transitional period from the end of the Eocene (London Clay Sea) through to Pleistocene cold stages. Bagshot Bed deposits that in turn sit on top of Claygate Beds cap the Galleywood ridge. Both these formations are complex, containing layers and mixtures of pebbles, gravel, sand, grits and clays which were subject to significant disturbance and mixing during the Ice Age.

4.2 The complexities of deposits can give rise to water logging during wet spells and drought when rainfall is low. The deposits are easily leached leading to poor acidic soils. Springs occur on slopes where the easily drained surface deposits meet less permeable layers.

4.3 The surface geology left from the last stages of the Eocene, together with the glacial sands and gravels of the Pleistocene have given rise to the two types of Essex heathland. Ice-age sand and gravel deposits gave rise to the former very extensive heaths of the Danbury ridge and Tiptree. Claygate beds and Bagshot sands and gravels have given rise to heaths at Mill Green, Thundersley and Galleywood and former heaths at Stock and Ramsden Common.

4.4 Galleywood Common occupies the top, west and south facing slopes of the Galleywood ridge. This ridge (maximum height is 78 metres above sea level) is the northern extension of the ridge running from Thorndon through Billericay and Stock to Galleywood. The ridge falls away to the valley of the river Wid in the west, the Sandon Brook to the east and to the rivers Chelmer and Can to the north.



Extract from British Geological Survey

5.0 Development of Lowland Heath

5.1 Lowland heath develops on poor quality, acidic soils and is normally maintained by grazing or burning.

5.2 The lowland heath at Galleywood was used for low intensity grazing and other activities such as gathering firewood. The decline of grazing and other agricultural changes across Britain led to heaths developing increasing levels of scrub and woodland leading to the loss of the open stands of heather and acid grassland.

5.3 In the absence of sheep and cattle, the heaths had been maintained by large numbers of rabbits. The arrival of myxomatosis in the late 1950s and early 1960s greatly reduced the rabbit population leading to increased rates of ecological succession (i.e. the development of scrub and woodland).

5.4 Lowland heaths usually contain a mosaic of habitats of which dwarf-shrub heath is usually the principal component. These additional habitats including acid grassland, mires, ponds, areas of gorse, bracken, scrub and small areas of woodland all enhance the biodiversity richness of lowland heath.

5.5 Rare plant species have been recorded on Galleywood Common for many years. Some species such as the Round-leaved Sundew, Bogbean and Heath Spotted-Orchid are no longer found on the site. Other notable and rare species, including fungi, are still present and the improved management is promoting these.

6.0 Key Achievements since management resumed in 1996

6.1 Work delivering the first comprehensive Galleywood Common management plan commenced in 1996.

6.1.1 Areas HS1 and HS2 were seeded using heather seed from Dunwich Heath, Suffolk and now show good heather establishment together with acid grasses on the exposed gravel soils. The southern part of HS1 has been more successful than the northern section, particularly where the original soils were exposed. Where topsoil remained in both areas only vigorous grass species grow.

6.1.2 Regular management of the main areas of Bracken (B1,B2,B3 & B4) has achieved significant reductions in its extent. The management involved bracken being systematically rolled in order to weaken and control them. This has been successful and areas B1 & B4 in particular are almost free of Bracken. B1 has reverted to a glade and is essentially part of W4.

6.1.3 The focus during the period 2007 – 2017 has been on maintaining and enhancing the existing areas of heath, improving the management of grassland areas through the regular hay cut regime and controlling the spread of bracken.

7.0 Site Description

7.1 Galleywood Common comprises a mosaic of interrelated habitats which reflect variations in soil type, former land-use and past and present management. The following sections summarise the habitats as well as key species that have specific management implications for those habitats.

7.2 Lowland heath

7.2.1 The areas of lowland heath are confined to the more acidic, free draining soils on the higher ground in the northern part of the common. H1 is the largest area which contains a good quantity of heather. It was restored in February 1997 Significant quantities of gorse and bracken are also present in this area and require active management to limit their spread.

7.2.2 HS1 & HS2 were seeded with heather in 1997. The heather has successfully established in these areas although the spread of heather has been constrained by the regular cutting of the surrounding grassland.

7.2.3 HG also contains some heather although bramble, bracken and scrub are encroaching on the main patches.

7.3 Grassland

7.3.1 Galleywood Common contains areas of acid and neutral grassland. The acid grassland is found on the higher ground at the northern half of the site. Here the soils typically are thin and lie over deposits of sands and pebbles which make them free draining. The grassland in the southern half is more neutral as a result of the soils being deeper and more clayey.

7.3.2 Acid grassland is an important component of lowland heaths. At Galleywood Common they are primarily associated with G4, HG, G5 and G6. Typical acid grassland species such as Harebell and Heath Bedstraw have been recorded in these areas. Where thicker soils persist, coarser vegetation is able to establish.

7.3.3 The neutral grassland is associated with the open grassland on the lower ground to the south of the site. These areas (G7 & G8) are cut annually for hay. These contain a mix of species including black knapweed, birds-foot trefoil, meadow buttercup and mouse-ear.

7.3.4 G9 was sown with a wildflower seed mix, funded by a local resident in autumn 2016.
Seed from these wild flowers can also be collected and sown in G10.

7.3.5 U1 is a seasonally wet area that supports a mix of acid grassland, rushes, and mosses but with large amounts of gorse and bramble encroaching from the south and east.

7.4 Bracken

7.4.2 Bracken has long been associated with heathlands and it had an economic value in the past. The lack of active management can lead to bracken becoming an invasive weed on heathland. Once established, it spreads freely and develops a humus layer that adds to the fertility of the soil and increases vigour. This results in tall, dense stands of bracken which out-compete other species.

7.4.3 Bracken had become dominant on parts of the Common; however regular management over the past 20 years has resulted in a significant reduction of the quantity of bracken in these areas. If management was to stop it would soon re-establish. Further control of bracken areas could help increase the area of heather and acid grassland. The largest patches are now in UG and H1.

7.5 Gorse

7.5.2 Gorse is a common heathland shrub and is widely found on the Common. It is fast growing and fixes nitrogen from the soil and so will out-compete heather and other heathland vegetation. Its life cycle is similar to heather (4 stages: pioneer, building, mature, degeneration) but it grows faster and much larger. It frequently develops with other heathland shrubs but can form large single species stands that exclude other plants. It can pose a serious fire risk due to the build-up of dry leaf litter beneath the plants.

7.5.3 Gorse is a valuable wildlife plant but it needs management to control its spread and to maintain a balance of its age classes. Clearance works are required in parts of the site to prevent monocultures of gorse forming and to retain open heath and grassland. A new phase of gorse management began in 2017 in H1 and UG focusing in particular in areas where it was starting to adversely affect stands of heather.

7.5.4 To be fully effective it is necessary to ensure that the stumps are treated or removed once the plants have been cut. Also it is necessary to remove the leaf litter to allow other species to establish.

7.5 Ponds

The ponds at Galleywood comprise a mix of permanent and seasonal waterbodies. The largest, P3, holds water throughout the year. Increased light levels to the pond edges have increased the amount of emergent vegetation present. It has the greatest amenity value. The Mill Pond which is close to the highest point on the Common is seasonal due to the limited sources of water draining into it. It is likely that its original clay lining has been damaged over the course of time. P1 close to the edge of H1 is also larger seasonal. There are opportunities to enhance its bankside vegetation by managing the extent of bramble, bracken and scrub shading these areas.

Image courtesy of John Turkentine

7.5.1 Within W1 in particular there are a number of former gravel workings which are seasonally wet. Heavy shading restricts the vegetation that can establish within these areas.

7.6 Mire and Wet Heath

7.6.1 The western slopes at Galleywood, contained a spring line where the free-draining soils met the underlying clay soils. A mire, known as the Bog, is associated with this feature. It is currently drying out primarily due to a combination of low rainfall and exacerbated by the number of surrounding trees and scrub which shade the mire and remove the water. Bramble and bracken together with more competitive wetland species such as Marsh Thistle dominate much of the site.

7.6.2 Uncommon plants include Sphagnum mosses, Wood Horsetail, Lesser Skullcap, Marsh Pennywort, Star Sedge, and Ragged Robin have been recorded on the mire in recent years although a number of rarities like the Heath Spotted-Orchid, Bogbean and Straight Beaked Sedge are no longer present.

7.6.3 There are other wetland areas within the lower slopes of W4, MW1 and MW2 although these are mainly shaded by tree cover which restricts the range of species that are present.

7.7 Marsh

7.7.1 There are areas of marshy ground within W5 and W6. These areas are increasingly dry and willows have established in the northern sections. It is possible that changes in drainage, including road run-off have exacerbated the drying out of these areas.

7.8 Mature woodland

7.8.1 Mature secondary woodland has established on the steeper western slopes of the Common, where grazing would have stopped earliest. It is dominated by tall, densely spaced oak with some birch and hornbeam. The density of the trees in MW2 in particular has resulted in many trees being very tall and slender specimens with small crowns. These trees are also prone to storm damage. The lack of active management is leading to many trees dying as they cannot compete for light.

7.8.2 In addition the density of the trees together with the gravelly soils restricts the ground flora in these areas. It is mainly dominated by bramble with large areas of bare ground.

7.8.3 A wet area associated with a spring and a small valley feature within MW2 supports a more diverse flora.

7.9 Shelter belts

7.9.1 There are established narrow belts of woodland on the boundaries of the Common, in the extreme north and south of the Common and adjacent to Rous Cottage, which primarily function as landscape features.

7.10 Secondary woodland

7.10.1 The most significant effect on woodland was the closure of the racecourse in 1939. Whilst the racecourse was in use, local farmers were employed to clear all new tree growth on the course itself and elsewhere on The Common where trees would spoil the view of the races. The large numbers of spectators on race days would also keep any emerging growth down. Further clearance took place when the golf course was created in 1893 and this continued until 1912.

With the loss of grazing on the Common and decline in rabbit numbers since the Second World War woodland has started to developed within many parts of the Common. These woods are dominated by silver birch with young oak establishing. Where their canopies are relatively open bracken and bramble dominate the understorey. However, in more established areas such as W1 the heavier shade results in significant areas of bare ground.

7.10.2 Some small glade areas have been created in the past in W4; however, their limited size restricts the ground flora that is present.

7.10.3 The area of exchange land south of the A12 will be planted with trees and allowed to develop as woodland.

7.11 Recreation use

7.11.1 The proximity of the Common to the village centre as well as easy access from the City Centre and A12 means that the site is well-used for informal recreation. The most popular use is for dog walking however the former race course provides a popular permissive horse riding route, although horse riding over the wider Common is restricted (see 12.2.1).

7.11.12 A number of Public Footpaths and Bridleways also link to the site. There are large numbers of small, informal paths across the site which can be difficult to navigate.

7.11.13 There is no defined circular route through the whole site although there are existing paths which if improved could achieve this. While it is possible to circumnavigate the Common when the ground is dry and not overgrown, an all year route should be provided.

8.0 Site evaluation

8.1 Site in context (See Plan 1)

8.1.1 Galleywood Common is situated close to the village centre with two of the main roads through the village crossing the Common. Its historical features, landscape character and recreation value are all important factors that should inform the management of the site.

8.1.2 The Galleywood Village Design Statement identified the Common as the most important and distinctive feature of the parish and required that any development should pay it the greatest respect. Any activities taking place on the Common should not harm this important landscape and amenity feature.

8.1.3 The Common contributes significantly to the landscape character of the area. The mature woodlands on the western slopes provide a wooded feel when viewed from the west. The large open grassland in the southern half of the site provides a distinctive open feature that is unusual in this area.

8.1.4 The development of scrub and woodland beside the roads running through the Common has resulted in the loss of some of the historic openness with limited views into some parts of the Common. Small scale scrub management and coppicing in key locations will help restore views into the site while not requiring the removal of larger trees. It will be necessary to ensure that the works do not increase the risk of unauthorised access or parking.

Gorse along the edge of Margaretting Road restricting views over the open common

8.1.5 Galleywood Common is currently the only Local Wildlife Site within the Parish of Galleywood. It is also one of three Local Nature Reserves within Chelmsford.

8.2 <u>Assessment of habitat value</u>

8.2.1 Lowland heathland, acid grassland and deciduous woodland are all Habitats of Principal Importance for England as identified in s41 of the Natural Environment and Rural Communities Act 2006.

8.2.2 Lowland heath and acid grassland are rare habitats within Essex; in 2002 it was estimated that there was 5.5ha of Calluna heath and 231ha of acid grassland in the County. Galleywood Common contains approximately one hectare of heathland and over 2.5 hectares of acid grassland, therefore, despite its relatively small size is a valuable heathland site within Essex. It forms part of a line of heathland/acid grassland sites that extend along a ridge between Mill Green near Ingatestone, Danbury and Tiptree.

8.2.3 H1, at approximately 0.9 hectare, is the largest block of heather-dominated lowland heath on the site and is at the centre of the main heath/acid grassland area. There are several smaller parcels situated close by. Their small size means that they lack resilience to climate change factors or the curtailment of active management.

8.2.4 There is a need therefore to increase the size and connectivity of the heath and acid grassland areas within the Common. It is considered that there is little scope to significantly increase the overall area of heather on the Common as this would require the clearance of stands of woodland. However changes of management in and around the fringes of the main heath areas will enable some increase in the quantity and quality of this habitat to be achieved but would not require the removal of woodland. This should significantly increase their long-term resilience.

8.2.5 There has been success in getting heather to re-establish in HS1 & 2. It is considered that small-scale changes in management of the surrounding areas could further increase the extent of the heather in these areas without requiring any removal of trees or other significant works.

8.2.6 In all of the heathland areas gorse and bracken are an ongoing management issues as they rapidly spread and out-compete the heather.

Patch of heather with birch saplings, gorse and bramble encroaching

8.2.7 The grassland on the higher ground in the northern part of the Common contains the best mix of acid grassland species. The aim should be to enhance these areas and improve habitat connectivity between G4, HS1, B2, U1 and HG

8.2.8 Grassland within the southern half of the Common is less acidic and contains soils with higher clay content. The current annual hay cut is allowing a typical neutral grassland flora to develop while maintaining the amenity value of this area. It is considered the most appropriate regime for these areas (G5-8).

8.2.9 G9 should be monitored to assess how well the wildflower seeding has worked and the detailed management decided accordingly.

8.2.10 Grassland within the horse rides (G13, G16) is subject to high levels of recreational pressures which reduce their potential value for biodiversity. In addition the build-up of leaves and the heavy shading from the overhanging trees also restricts the ground flora in these areas.

8.2.11 The area of former landfill (G3) is an area of amenity grassland with limited ecological value. It is not considered that management operations to increase its ecological value are a priority during the course of this plan. The scrub developing on the edge of G3 beside H1 is well-used by nesting birds and should be retained. The scrub should be maintained to ensure that it does not impinge on the amenity value of G3

8.2.12 There are several ponds, a mire and marsh areas across the Common. Many of these features are becoming increasingly dry. It is unclear if this is a result of the low rainfall or if drainage has been affected over time as the village and surrounding infrastructure has continued to develop. It is important therefore to consider ways of ensuring that water is not diverted from the site while ensuring that road runoff does not introduce pollutants into the wetland areas.

8.2.13 The mire still contains uncommon species such as Lesser Skullcap; however it is important to ensure that taller, more competitive species such as Reed-mace and Marsh Thistle do not become dominant. Bracken is also encroaching into this area. More regular management of this area is required to retain sufficient open areas.

8.2.14 U1, the area of wetter acid grassland, is currently becoming overgrown by gorse spreading from the eastern side of the area. There should be a programme to remove most of the gorse to retain the acid grassland and small seasonal wetlands that provide a valuable microhabitat. There are opportunities to improve public access through this area and into the Napoleonic defences.

8.2.15 In the past it is likely that a combination of factors such as grazing, the effects of the racecourse and associated visitors all helped to reduce the development of woodland. Since these activities have ceased the woodlands have developed with little intervention. In most of the woods this is considered to be appropriate in the short to medium term; however some management is necessary to improve the quality of the mature woodlands and to control invasive species. The mature woods contain large stands of tall densely spaced oaks that should be thinned to favour the better quality trees and to allow the development of a shrub layer. Some glades should also be created to increase the range of microhabitats that are available to favour invertebrates and foraging bats.

8.2.16 Laurel is establishing in all of the woods and this should be removed wherever it occurs to prevent it becoming dominant. In W3 and some other areas holly is also becoming too dominant and should be thinned.

8.2.17 The area of Exchange Land north of G14, provided to compensate for the loss of part of the common during the construction of the A12, is maintained by an annual hay cut in line with other surrounding grassland. It is fully accessible to the public and is close to the village centre.

8.2.18 As part of the Temple Farm development part of SB3 was required for highway works. An area of former farmland on the west side of Stock Road was given in exchange. This exchange land will be planted with trees in 2018/19 to form a more continuous woodland belt linking to the ancient woodland to the west. The public footpath runs through part of the site.

8.3 Climate Change and Galleywood Common

8.3.1 The Natural England Climate Change Adaption Manual, published in 2014, considers Lowland Heathland to be of Medium sensitivity to climate change.

8.3.2 Increased mean temperatures are considered likely to encourage the growth of more competitive grasses, which could result in heath changing to acid grassland. Also it could favour bracken.

8.3.3 Lower rainfall will adversely affect wet heath and other wetland habitats. Warmer, drier summers also increase the risk of wildfires. Galleywood is in the county with the lowest rainfall. The wetland features on Galleywood Common are already suffering from lower rainfall. The Mire is becoming drier and the Marsh and all of the ponds except P3 dry up at some point in the year.

8.3.4 Natural England recommends potential adaption options in its Manual. Of particular relevance to Galleywood Common is the potential need to increase the intensity of management to maintain the existing condition of key habitats as climate change is likely to benefit grasses and bracken growth. The adaption options of relevance for Galleywood Common are:-

- Adapt the intensity of management to changing growth characteristics of the heathland, for example by increasing grazing pressure or grass cutting cycles. For Galleywood Common over time an additional spring grass cut and collect may be required to maintain condition
- Ensure fire contingency plans are in place. These may include changes in the design and management of habitats to reduce fire risk, such as firebreaks, fire ponds and the closure of some areas at times of high fire risk. At present the location of grassland areas and existing management is considered appropriate to reduce the potential risk of fires affecting surrounding properties.
- Ensure sufficient management capacity to be able to respond flexibly to changing conditions, such as a reduced window for winter management, and wetter conditions preventing winter operations. The management plan will help the City Council to be able to programme in works to reduce the risk of disruption.

- Consider maintaining broadleaved (not conifer) woodland in localised areas to provide a firebreak or a buffer next to urban areas. On Galleywood Common broadleaved woods form buffers to most of the residential properties bounding the site.
- Maintain structural diversity in the vegetation to provide a wide range of micro habitats and niches, including, where possible, bare ground, areas dominated by mosses and lichens, herbs, dwarf shrubs of diverse age classes, wet heath and mire, and scattered trees and shrubs. The Management Plan is seeking to ensure that the existing microhabitats on the Common are retained and enhanced.
- Ensure hydrological conditions are fully conserved, for example through blocking artificial drainage and reducing abstraction pressure. Consideration is being given to how this can been achieved particularly below the Mire.
- Increase the area of existing habitat and reduce the effects of fragmentation through targeted re-creation and restoration around existing patches, to increase the core area and reduce edge effects. The Management Plan is seeking to increase the connectivity of the heath and acid grassland parcels to reduce the extent of habitat fragmentation on site.

8.3.5 Associated with climate change it is increasingly recognised that nitrogen emissions from fossil fuels pollution is having a significant detrimental effect on sensitive habitats such as heathland. It acts as a fertilizer which favours competitive species such as nettles and hogweed over less competitive species such as harebell.

8.3.6 Galleywood Common with its close proximity to the A12 and other busy roads within the City is considered to be at risk from the build-up of nitrogen. It is important that management actions such as hay cutting are continued to minimise the effects of nutrient accumulation. The effects on the secondary woodland are considered to be less significant.

9.0 Management priorities

9.1 Overarching principles

9.1.1 There has been sensitivity from some local residents to past management proposals that suggested significant tree felling, primarily to restore the heathland. As a result the management works over the past 10 years have focussed on maintaining the areas of heather and acid grassland restored previously. It is considered however that there is scope to increase the extent and quality of the heathland and acid grassland within their existing areas without the need to remove areas of woodland. This is considered vital to ensure that these priority habitats are resilient to climate change and to retaining the character of the common.

9.1.2 It is considered that the current management of the neutral grassland is achieving a balance between enhancing their biodiversity value and meeting wider recreation and amenity objectives. This should continue to be maintained using the same mowing regimes.

9.2.3 The mature woodland areas would benefit from some management works to thin dense tree stands to encourage more scrub and ground cover in all of the wooded areas.

10. Habitat Management objectives /requirements

10.1 Lowland Heath

10.1.1 The management objectives for the next 10 years are to maintain the existing areas of heather and to increase the extent of the heather within those areas.

10.1.2 To achieve this it will be necessary to remove bramble, bracken and scrub that are present in H1 HS1 & 2 and HG. In addition leaf and Bracken litter should be removed to prevent a build-up of humus and nutrients. This material would be removed from site and composted by Chelmsford City Council. In some localised areas it would be beneficial to undertake small-scale stripping of topsoil down to the gravel layer to achieve the necessary reduction in soil fertility. These areas would total approximately 250m^2 and should be phased. This would be carried out only prior to discussions with the Commoners and Liaison Group.

10.1.3 To enable young heather a chance to re-establish, particularly in HS1, grass-cutting programmes should not follow the standard mowing regime. Bramble, stinging nettle and other competitive species will need to be removed to prevent them encroaching into these areas. This should be carried out by hand by a suitably trained operative to ensure that young heather is not cut. The extent this management will vary from year to year.

10.1.4 Gorse will need to be managed to ensure that it does not become dominant. There are large stands within H1 and it is beginning to spread into HS1. It will need to be cut back and the stumps and leaf litter removed. Where possible the roots should also be removed.

Image courtesy of John Turkentine

10.1.5 The removal of small perimeter trees or lower branches of larger specimens will help reduce leaf build up and excessive shading. This will primarily be on the perimeter of H1 but should also occur around the perimeters of the car parks.

10.2 Woodland

10.2.1 All of the woods on the Common are secondary and there has been no history of woodland management in any of the woods. There is a need to manage these woods over time to select the better trees and to increase the understorey to benefit nesting birds and other animals.

10.2.2 Most of the younger secondary woods require some limited intervention during the period of this plan. These works will include

- removing any laurel and controlling the spread of holly to prevent them coming to dominate the understorey
- maintaining trees close to the main paths for safety
- coppicing willows within low-lying wet areas in W5 to improve the species diversity. Also coppice willows in and around Mire 2 in W6, including small groups beside the B1007.
- prevent further over-shading of grassland areas (particularly G4 and G16) and remove over-extended branches and scrub
- coppice scrub elm in W7
- where safe to do so standing deadwood should be retained

10.3 MW 1 & 2 (Mature Woodland)

10.3.1 The main focus will be on improving the quality of mature woodland. The lack of past management means that the trees are tall and thin and many are dying or subject to storm damage. Introducing regular thinning will, over time, improve the age structure of the retained trees and the increase the ground flora and shrub layer within the woods to benefit biodiversity. The stands of oak should be thinned by 20% every five years.

10.3.2 Due to the terrain and sensitivity of the site any extraction of timber should be carried out using heavy horses.

10.4 Shelter Belts

10.4.1 The shelter belts beside the B1007 require no specific management at present. It will be necessary to monitor their condition on a regular cycle to manage potential risk. There are permissive access for horse-riders in SB2 and SB3 which will require some maintenance to ensure that they remain open.

10.4.2 It has been decided that the exchange land south of the A12 opposite SB3 will be planted with trees in 2018/19 so that it forms a continuous wooded belt linking the existing shelter belt opposite to SB3 to Lady Grove, an ancient woodland.

10.5 Ponds and wet land habitat

10.5.1 P1 (Pond)

The bracken, bramble and young trees growing on the banks should be managed to enable a more diverse flora to develop. Surveys of amphibians are being carried out during 2018 by members of the local Amphibian and Reptile Group which will help determine what species are present and any changes in management that might benefit these animals.

Image courtesy of John Turkentine

10.5.2 P2 (Mill Pond)

Retain large Oaks on boundary with Margaretting Rd, but remove the lower branches overhanging the pond.

10.5.3 P3 (Brick Kiln Pond)

The southern banks should be maintained clear of overhanging trees to reduce excessive shading. The extent of emergent vegetation should be monitored to ensure that sufficient open water is retained.

10.5.4 Mire 1 (Mire) see also W4

The area should be managed to ensure that it remains largely open to favour less competitive, rarer species.

10.5.5 M1 (Marsh)

Coppice Willows to maintain open character to encourage other wetland plants to establish.

10.6 Bracken

10.6.1 Although the main stands of Bracken have been controlled, numerous small pockets persist throughout the Common. These require ongoing control by rolling, primarily using a purpose built, horse drawn implement, to prevent it re-establishing.

10.6.2 Some of the areas where bracken remains are associated with the heather stands and it is a priority for it to be removed from these.

10.7 Grassland

10.7.1 Cutting regimes

The grassland areas provide a variety of functions on site; they provide areas for informal recreation, amenity and biodiversity. This requires a number of cutting regimes are undertaken to ensure that the site delivers. Plan 2 identifies the grass management regimes for each area of grassland on the site. The regimes are:

- Regime 3 – cut every 2 weeks for areas of high amenity
- Regime 4 – cut every month for areas of public recreation
- Regime 4 on every other visit – for areas of higher biodiversity value
- Annual hay cut – for areas of high biodiversity value where long grass will not interfere with recreation use.

10.7.2 G9

This area was seeded with a wildflower seed mix in autumn 2016. This will require appropriate maintenance to achieve good quality establishment. This will include the annual cut and collection of the grass in the autumn.

10.7.3 G13 (Grass)

Cut outside of racecourse to regime 4 (cut approximately once a month).
Cut inside of racecourse every other visit (i.e. once every two months)

10.7.4 G14 (Grass)

Cut twice a year (spring and autumn) and remove arisings.

10.7.5 Public Open Space Land North of G14
Cut as G14 but avoid cutting back fruiting brambles on south facing hedge as it is a favoured location for blackberry picking.

10.8 Landfill areas

10.8.1 The landfill areas in B2, G3, & W6 could pose a hazard due to glass and other materials coming to the surface. No work should be carried out in these unless a health and safety hazard is identified. There is a long term aspiration that should funds become available that the old landfill should be removed to enable the restoration of more appropriate habitat.

10.8.2 The areas in B2 and W6 area defined by stinging nettle and uneven ground which deter public access across these areas. These nettle stands should be retained.

11.0 Specific management operations

11.1 Land west of Heritage Centre access.

11.1.1 The entrance to the nursery and Heritage Centre is opposite the northern part of HS2. This area is used for parking and/or turning. This is resulting in an area of bare ground. To the north the edge of MW2 is dense willow scrub. The willow scrub should be coppiced and left to regenerate. This should be repeated every 5-7 years to retain dense cover. This should produce a more open attractive approach which also provides additional cover for nesting birds.

11.2 Management proposals for the Napoleonic defences

11.2.1 The earthworks are being managed to prevent damage by trees and recreational uses. This requires the coppicing of larger trees to prevent wind movement damaging the banks.

11.2.2 The removal of dense holly, which is starting to dominate, will allow more ground flora to develop which will help bind the soil. This will also enable visitors to see the historic features more clearly.

11.3 Management proposals for the Southern intermediate bastion

11.3.1 Management of the trees on the ditches and mounds is ongoing. Stumps have been allowed to regenerate and subsequent growth will be coppiced to allowing roots to bind the earth works together. Increased light levels will allow other shrubs and grasses to establish, providing further stability to the topsoil. The access path needs to be maintained to keep it clear throughout the year.

11.3.2 Provide interpretive signage to explain the management work and significance of the works.

11.4 Management proposals for the racecourse

11.4.1 The distinctive white painted racecourse fence is a local landmark and should be retained. Repairs should be carried out as required to retain the fence in sound condition.

11.4.2 Horses are permitted to use the inside of the northern racecourse loop and the grass is cut approximately once every 2 months during the summer to reduce damage to the turf.

11.4.3 Trees growing on the Common should be cut back from the racecourse to avoid encroachment.

12.0 Recreation and Public Access

12.1 Access

12.1.1 Galleywood Common is freely accessible to the public throughout the year. The Common has two bridleways (BR 79 & 80) and four public footpaths (numbered 47, 49, 50 & 81) running into and through it. BR79 mainly follows surfaced routes. BR80 runs outside the boundary of MW2 and is in good condition. The footpaths are all open although sections of FP 49 are not well-defined on the ground.

12.1.2 There are four car parks located:

1) Outside St. Michael and All Angels Church,
2) Adjacent to the Horse and Groom Public House,
3) Adjacent to Wood Farm, and
4) Off Margaretting Road.

12.1.3 In addition to the public rights of way there are a large number of informal routes, particularly in the northern half of the site which is closer to the main residential areas. In some areas, particularly W1, there are many criss-crossing routes. Efforts should be made to better define key routes and discourage the use of others to reduce disturbance to the trees, wet areas and establishing ground flora. This will include enhancing the route that circumnavigates the Common.

12.1.4 Currently there is no clearly defined circular walk around the Common. This is resulting in limited use of areas such as W4 and MW1 &2 and over use of H1 and W1 which have low recreational carrying capacities. Minor improvements to the path and additional signage would encourage the use of these areas.

12.2 Horse Riding

12.2.1 In addition to the two bridleways, horse riding is currently permitted on a permissive basis on "the gallops" (G7, the area west of B1007, Stock Road, between Wood Farm and The Chase) and the inside of the northern loop of the racecourse round the Church. Wooden bollards define a permissive route from Stock Road to Rous Chase.

12.2.2 There is also permissive access for horses through SB2 and SB3 which will help riders to avoid busy sections of road.

12.2.3 The routes are shown on Plan 7. It is proposed that clearer information will be provided for riders in particular to show which areas can be used by horse riders and which cannot.

12.3 Signage

12.3.1 Byelaw signs showing habitats on the common are provided at points:

1) Outside St.Michael and All Angels Church
2) In Wood Farm car park
3) In the main car park off Margaretting Road
4) Outside the Horse & Groom PH

12.3.2 It is considered necessary to provide additional interpretive materials, primarily information panel, to provide visitors with additional background on the history and biodiversity of the Common. Consideration should also be given to developing app-based interpretation. The enhancement of interpretative materials on site will require additional funding to be identified.

12.4 Marketing and Communications

Activities on the Common are promoted using the City Council website, the Parish Council website including walks leaflets, Galleywood Heritage Centre and specific notices on site.

12.5 Community engagement

The Common is a much valued local resource and there is significant interest in its ongoing management. Since 1992 the Galleywood Common Liaison Group, (GCLG) an informal panel of councillors and residents' representatives, monitors progress in the management plan is development and has been the first point of contact with the local community.

12.6 Volunteers

Volunteers have been involved in undertaking much valuable work on the Common for many years. Previously these projects were run by outside bodies. Since 2016 the volunteers have been managed by the City Council's volunteer co-ordinator which enables better management and greater flexibility to be achieved. The volunteers normally meet every month.

12.7 Events

The opportunities for organising specific events on site are limited. There is open public access to the site which means that it is not possible to close off areas. The presence of busy roads through the site also limits opportunities. The open space on G12 offers the best location for events as it is by the Horse and Groom Pub and away from busy roads.

Consideration will be given to organising more activities on the Common to increase awareness of the site.

Action Plan – 2018-2022
Grassland Areas

Area	Plan ref	Management operation	Year	Who
All		Maintain firebreaks where abutting residential properties	Annually or as required	Parks service
G5, G6, G7, G8, G10	1 & 2	Continue to maintain by annual hay cut and collection	Annually	Parks services/ Contractors
G9	2	Area reseeded autumn 2016 – undertake cut and collection once vegetation has established	Annually	Parks services
G4	2	Central area to be cut for hay/late season cut and collection as required.	Annually	Parks services
	2	Northern and southern sections to managed as Regime 4	Ongoing	Parks Services
	6	Cut back bramble and scrub encroaching from W6 and W8 and beside the car park access road.	Ongoing	Volunteers/ contractors
G14	2	Cut back bramble at western end to retain open grassland. Scallop edges to create microhabitats	2018/19	Volunteers /contractors
	2	Hay cut or cut and collect annually.	Annually	Parks services/ Contractors
B4	4	Removal lower branches from trees growing within the area to enable cutting and collection to be carried out more effective and to reduce the areas of bracken within these areas	2018/19	Volunteers/ Parks Services/ contractors
	4	Continue bracken management regime as required	Ongoing	Parks services/ Contractors
Exchange land	2	Maintain grassland by annual hay cut and collection	Annually	Parks services

Woodland Areas

Area	Plan ref	Management operation	Year	Who
All	1	Ensure that any laurel is removed from the woods as it begins to develop. Ideally roots should be removed. If not possible treat roots with appropriate herbicide	Ongoing	Volunteers/ contractors
		Monitor trees beside main paths as part of safety assessment. Record details of the survey and any actions required.	Ongoing	Parks service
W1	3	Cut back trees encroaching into H1 where heather has established.	2018/19	Volunteers/ contractors
W3	5	Reduce the quantity of holly within the woodland by up to 30% over the period of the plan.	Ongoing	Volunteers/ contractors
	5	Remove all laurel growing within the area – initial clearance Clear new growth.	2018/19 Ongoing	Volunteers/ contractors
W5	6	Coppice areas of collapsed sallow and other scrub to provide denser cover for nesting birds.	Ongoing	Volunteers/ contractors
W5 W8	5 & 6	Cut back trees / low branches that are overhanging G4 resulting in this part of the grassland becoming covered with leaves.	2018/19	Contractors
MW2	4	Undertake 20% thinning of oaks etc on the lower, western slopes to allow the remaining trees to develop better and improve age structure and ground flora. In particular favour areas where young hornbeam and hawthorn are establishing. Timber can be left in situ or removed using horses.	2019/20 & 2023/24	Specialist contractors using horses for extraction works
	4	Retain existing dead standing timber where safe to do so. Fallen timber can be left in situ unless it is blocking paths.	Ongoing	
	4	Coppice back poor quality sallow and other vegetation on western side of the Heritage Centre access road to enhance the appearance of the lane and to enhance the vegetation for nesting birds.	2019/ & 2024/25	Contractors
Exchange land south of A12	1	Prepare ground and plant with trees at a maximum of 2m centres.	2018/19	Parks services/ volunteers

Heathland Areas

Area	Plan ref	Management operation	Year	Who
H1 North	3	Cut back gorse and treat with suitable herbicide or remove stumps with a small digger to prevent regrowth. Rake /scrape areas in cleared areas to encourage heather to re-establish. This could include scattering seed collected from heather in adjoining area. Cut back mature gorse stands by at least 15% per year. Remove young gorse developing in heather areas to prevent it establishing.	Annually in the winter	Volunteers/ Parks service
H1 South		Clear areas of dead bracken in winter to benefit other plant species. Undertake cyclical cutting of gorse to manage its spread.	Annually in the winter	Volunteers
	3	Cut back gorse and treat stumps to prevent regrowth. Rake /scrape areas in cleared areas to encourage heather to re-establish. This could include scattering seed collected from heather in adjoining area. Cut back mature gorse stands by at least 15% per year. Remove young gorse developing in heather areas to prevent it establishing.	Annually in the winter	Volunteers
H1	3	Groups of mature (c20 years old) heather plants should be coppiced in rotation to prevent them becoming over-mature and dying.	Annually as required	Volunteers
HS1 North & South	5	Grassland around the main heather stands has been removed from the grass maintenance regime to enable heather seedlings to establish. Remove invasive species such as bramble and bracken spreading from the northern edge. Cut by hand coarser grasses that may be establishing to prevent young heather from being out-competed.	Annually	Parks service/ volunteers
HS2	5	Maintain existing heather area by removing encroaching birch, bramble and other invasive species that are establishing.	Ongoing	Volunteers
	5	Manage grass areas around heather by hand to prevent establishment of weed species and to allow young heather to establish.	Ongoing	Volunteers/ Park services
	5	Scrape off and remove from site topsoil/humus layer on western part of the area to reduce nutrient levels and encourage heather to re-establish.	2019/20	Parks services/ Contractors

		Cut back overhanging branches on adjacent trees to reduce shading.		
U1	5	Cut out sections of gorse beside Margaretting Road to open up views across area.	2018/19	Parks Services / volunteers
	5	Cut back gorse and remove/treat stumps to prevent regrowth. Cut 20% per year.	Ongoing	Volunteers
	5	Cut and clear bracken in south of area during summer months.	Summer ongoing	Volunteers
	5	Clear build-up of bracken litter and monitor in future years.	Winter 2017/18	Volunteers
HG	5	Clear gorse and other scrub from around patches of heather. Remove leaf litter and where possible the roots.	Annually	Volunteers
		Remove patches of turf to encourage heather to spread.	2019/20	Volunteers
		Manage bracken to control its spread including clearing dead material in winter.	Ongoing	Contractors / volunteers
W3/B2/ HG	5	Clear vegetation from around the small patches of heather growing on the northern bank of the southern intermediate bastion. Clear bracken to the north of the earthworks to improve connectivity with HG.	Annually	Parks Services

Ponds and wetlands

Area	Plan ref	Management operation	Year	Who
P1	3	Cut back bracken bramble and young willow to open up bank edges.	2018/19	Volunteers
P3	6	Monitor spread of emergent vegetation within the open water areas.	Ongoing	Parks Services
	6	Cut back vegetation shading southern side of the pond.	As required	Volunteers/ Parks Services
Mire	4	Winter works Cut and clear build-up of dead bracken and 25% of Typha. Remove small birches overhanging area.	Annually	Volunteers
Marsh	6	Coppice willows growing in the areas identified in small groups on rotation.	Annually	Volunteers/ contractors

Develop primary circular route

Area	Plan ref	Management operation	Year	Who
MW1 & 2	4	Widen path close to western boundary and open up crossing point at Margaretting Road to achieve a circular walk through the Common.	2018/19	Contractors / Parks Services
MW2	4	Install culvert bridge and surfacing over spring area.	2019/20	Parks Services
U1/ W3/W5	5	Identify primary route and widen where required.	2018/19	Contractors/ volunteers

Access maintenance

Area	Plan ref	Management operation	Year	Who
G13	2 & 3	Maintain horse ride fencing as required.	Ongoing	Parks Services
All		Replace signage as necessary.	Ongoing	Parks Services/ ECC

Napoleonic Defences

Area	Plan ref	Management operation	Year	Who
	5	Control holly growing on the earthworks as required	Ongoing	Volunteers
	5	Clear and maintain a path between HS1 and HG to reduce recreation pressures on the banks.	Ongoing	Volunteers / Parks Services
All		Investigate opportunities to increase interpretation of key features. Carry out in liaison with a working group, local historians and interested parties.	2019/20	Signs to be commissioned and installed by Parks Services