

NEW MILTON TOWN COUNCIL

BARTON COMMON

Site of Importance for Nature Conservation

10 YEAR WILDLIFE HABITAT MANGEMENT PLAN 2022-2032

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1. INTRODUCTION

Barton Common lies centrally and to the south of the Parish of New Milton, a few hundred metres north of the constantly eroding cliff edge. The section of the Common enclosed by fencing, comprises approximately 12ha of heath/dry grassland, secondary woodland, isolated and small clumps of trees, and stands (or brakes) of gorse, bramble and bracken. It is the larger part of a once more extensive, contiguous area of common land and having exchanged ownership several times, is now part of New Milton Town Council's (NMTC) landholding (see Map 7.1).

Barton Common is bisected by a stream flowing roughly north-east to south-west which dries in late summer most years. This rises on adjacent land to the north, partly fed by a spring, or springs, within Barton Common North, and has created a shallow valley in which the ground lies wet for most of the year. A much smaller stream rises in the woodland in the north-east corner of the site and at times of high rainfall and in most winters, this is active and flows into the main stream bisecting the site. There are a few places along the valley sides where groundwater emerges and seeps through the surface vegetation.

The water course through Barton Common is a tributary of a constantly flowing, larger stream which runs north-west to south-east to the sea through a deep incision in the soft cliff to the south of the site, known as Bec(k)ton Bunny.

There is a small gravel-surfaced car park to the west and an informal lay-by adjacent to Milford Road to the north-east. The site is fenced and nine pedestrian and two vehicular access gates provide access onto the site. The common is crossed by three public footpaths and numerous informal paths have developed over time, which gives the public free and open access to all parts of the site.

There are currently 14 public bench-seats, some of which are dedicated, installed on concrete pads distributed around the site.

Of particular note is an historical linear ditch and bank feature, along the eastern boundary running north-east to south-west. Now densely packed with very old holly trees, at its northern end on the Ordnance Survey map of 1867 (see **Appendix 1**), this boundary feature is shown incorporated into a thin strip of woodland.

2. DESCRIPTION

2.1 CULTURAL HISTORY

The local areas of Barton, Milton, Bashley, Ashley and Fernhill are all mentioned in the Domesday Book of 1086.

There have been records relating to Milton Parish going back to the 11th Century. Barton Common lies within one of the six Manors within the parish, Barton Manor, to the south. Barton Manor was first mentioned in 1559 when John Dowce died and this was mentioned in his will. It was acquired by William Juniper, and on his death in the will, there is mention of Barmeton (Barton) farm. In 1654 it is recorded that Richard Stephens, Lord of Winkton Manor owned the 'site of the manor' of Barton and the land remained in that family until 1733 when it was sold to a Thomas Le Marchant. In 1771 John Le Marchant sold 'the scite (sic) of the Manor of Barton' to Edward Dampier of Corfe Castle; then in 1841 the Tithe map (see **Appendix 1**) shows Barton Common in the ownership of John Bursey Esq (and others). Land changed hands again and subsequently Mr Dampier Crossley who, as an absentee landlord, had been living in New Zealand for some considerable time, sold the site of the Manor and the land known as Barton Common, to Mr Alexander Paris in August 1903⁽¹⁾.

It was generally accepted that local people had free access for activities, including cutting vegetation, excavating gravel and turning-out livestock either by right or never having been challenged, and the Council had repaired paths and fencing, although where exactly is not known, for the Common was not enclosed.

In 1904 Mr Paris informed Milton Parish Council that he was now, as the new landowner, in a position to "take back control from the Council"⁽²⁾, thereby seeking to prevent activities either by right or properly exercisable, by those people who could show no evidence of a legal claim in the land, claiming that parishioners had no right of free access to the land away from a few well-defined paths. It appears that around this time Milton Parish Council also had some involvement in the Common. At some point, Mr Paris had created an earth bank across one particular track (a route to a gravel pit) preventing pedestrian access and installed posts, curtailing vehicular access to his land. It was reported that his reasons for this action was because the land had been the victim of abuse by "troublesome people of one kind or another"⁽³⁾. The actions of Mr Paris were passed to Milton District Council and a Public Inquiry was held in January 1905 to resolve the issue of a public right of access over the Common or part of the Common. Several elderly local people gave verbal evidence regarding past actions of turning-out grazing animals, cutting vegetation, digging gravel, walking freely and driving vehicles over the land, never having been challenged in their or sometimes, as stated, their parents' lifetimes⁽⁴⁾. After all the evidence had been presented on both sides, the case was considered a Rights of Way issue and the prevention by the landowner of a public right of access was contested by Lymington Rural District Council. The dispute escalated and far from being a local issue, the matter was referred to the High Court in London in 1910. After further evidence and witness statements the case was dismissed in February 1911 and the public were granted the right of access along the contested routes⁽⁵⁾.

Mr Alexander Paris died in January 1925. Thereafter his successor, Mr Leonard Farmer Paris, sold the land to Lymington Borough Council for a fee of £500 on 13 March 1935 to be used in perpetuity for public recreation.

However, there is footnote to this episode in Barton Common's disputed past. On the death of Mrs Wheable, one of the main protagonists in the fight to secure public rights on the Common, Mr Leonard Paris, writing in the New Milton and District Advertiser and Lymington Times in October 1937, not only pays tribute to Mrs Wheable's "pluck and tenacity" but also sets the record straight with regard to blocking access. It appears that Mr Alexander Paris (his father) gained a perpetual injunction against Mrs Wheable in the High Court, restraining her from interfering with his rights as Lord of the Manor over Barton Common by breaking down the bank to which earlier reference is made. He also states that his father never enclosed or attempted to enclose one inch of Barton Common⁽⁶⁾.

Thereafter, in 1970 Barton Common was registered as Common Land under the Commons Registration Act 1965. The land was acquired by New Milton Town Council in 1980 and is now Open Access under the Countryside and Rights of Way Act 2000.

From documents relating to the sale of Barton Farm in September 1895, it is claimed that the farm had Commoning Rights over Barton Common⁽⁷⁾. The sale and subsequent division of the land into building plots may have extinguished those claimed rights. Similarly, during the evidence presented at the Court Case, one lady claimed her property had Rights of Pasturage and Turbary on Barton Common⁽⁴⁾. It is not known if any of these rights remain or are relevant today.

2.2 LAND USE HISTORY

The Tithe map of 1841 and associated inventory shows Barton Common (land parcel 176) as 49 acres (19.8 ha), being in the ownership and occupancy of John Burse Esq (and others).

Today, Barton Common is the larger remaining part of this parcel at 30 acres (12 ha), the other sections (Long Meadow to the west, Barton Common North to the north) having been severed by metalled roads and partly lost under building development.

There appears to be no documentary evidence showing how Barton Common was “managed” in the past. During the early 20th Century anecdotal evidence provided by local people during the disputed Public Rights of Way case, suggested that grazing by livestock (only cattle are mentioned) was commonplace by people living nearby, that cutting of gorse (furze) was a regular event and gravel was extracted from several pits both by locals and the highway authorities for track repairs in the area. When and how often these events took place is not recorded.

The gravel pits are shown on the 1909 map (see **Appendix 1**). The largest lies to the north of Long Meadow and is marked today as a wooded depression of undulating ground. Others are shown in the now wooded area at the western end of Barton Common and in the southern section of Barton Common North.

Further research is ongoing in relation to the role played by Barton Common and the surrounding area during the Second World War (1939-45). With the threat of invasion from Continental Europe at that time, a large proportion of the south coast of England was defended with an array of both simple and more complex fortifications. These ranged, among many, from simply the removal of Guide Posts and camouflaging of buildings to the more substantial construction of concrete pill-boxes and installing large, metal obstacles along the shore. As far as is known there were no defences installed on Barton Common. Only one piece of military equipment remains, in the form of an “out-of-situ” single-person defensive structure, known as an Allan Williams Turret.

The land had been subjected to ad-hoc grazing by all accounts for many years, and historic maps show the area to be open, rough ground until at least the early 1960s and is noticeable on contemporary aerial photographs. Since then, there has been a significant reduction in grazing pressure or a change in the time of year grazing management took place, or both, because woodland, spreading-out from a few once isolated blocks, began to take hold.

Although small parcels of coppice are shown locally on the 1841 Tithe map and on the inventory for the area, no woodland is depicted elsewhere. However, the Ordnance Survey map of 1867 shows woodland present as a thin strip along the eastern boundary of Barton Common on the adjacent landholding (the Ashley Clinton Estate). Evidence on the ground today suggests that this woodland was present within Barton Common but not depicted as such on the map. There is a well-defined, linear, ditch and bank dominated by very old holly and there are also old, regrown stools of previously cut sycamore and hazel. More recent botanical surveys indicate elements of Ancient Semi-natural Woodland in the ground flora associated with this habitat. The old maps also indicate that this linear boundary was a “3ft R.H. (“3ft Root of Hedge”) and may refer to the height of the bank which supported the old hedgerow trees and bushes rather than its width. The holly here has been repeatedly cut in the past and more than likely “managed” by the neighbouring Ashley Clinton Estate tenants over time.

It is interesting to note that also on the September 1963 aerial photograph of the site, there appears to be a number of artificial circular features. It is entirely likely that these were formed by the action of tethered animals.

In 1991 there was an agreement between Southern Water and New Milton Town Council for a 6m easement over a main sewer which runs north-east to south-west, parallel to Barton Common Road on Town Council land. A large 2m diameter covered, concrete inspection chamber exists close the northern fence-line (see map **Appendix 1**).

A local community group (Long Meadow Community Group) was established in late 2012 encouraged by the New Forest Land Advice Service (NFLAS) and NMTC. This introduced the local community to wildlife surveys, open days, talks and volunteer conservation management tasks on Town Council land in the area focusing their attention initially on Long Meadow. This group later transformed into the Long Meadow and Barton Common Group and became more involved in Barton Common.

In 2013, NMTC successfully applied for funding to assist management, through Natural England's Higher Level Stewardship Scheme (HLS). The scheme funded capital works comprising the installation of a water trough, stockproof fencing, vehicle and pedestrian access gates, and pedestrian and animal bridges in 2014. Also, in conjunction with Natural England and the NFLAS, NMTC appointed an HLS Project Officer. A small team from Community Payback was also engaged to help with small-scale management tasks.

Restoration took a step forward in August 2014 when six New Forest ponies were introduced. With the funding provided through HLS, in 2016 large areas were cut using heavy-duty contract machinery removing scrub and trees which were burnt on-site. This work exposed more of the heath/dry grassland element as well as the remaining smaller, wet heath/valley mire components. The introduction of a more structured grazing regime after several years of neglect, complemented the management work, fully in-line with the general prescriptions set-out by Natural England⁽⁸⁾.

Since early 2017, volunteer groups and major clearance work seemed to peter-out, for a variety of reasons, with little activity from this time. However, mowing large sections of the heath/dry grassland areas has taken place each autumn and grazing, with numbers of animals and timing varying annually, has also continued. More "heavy-duty" habitat management work was re-introduced in December 2021 when two small areas of birch, willow and oak woodland to the east of the stream were cut and cleared. More is planned.

2.3 GEOLOGY AND SOILS

Barton Common lies on the late Eocene deposits of the New Forest (Barton and Headon beds), comprising sand and clay layers, overlain by more recent fluvio-glacial Pleistocene terraced gravels. These gravel layers lie close to the surface over much of the site, supporting thinner, free draining soils. Elsewhere, particularly beside the stream in the valley, deeper soil layers retain more moisture resulting in ground conditions which are damp throughout the year.

Rainwater percolating through the gravel layers is impeded on meeting clay layers and water moves laterally. In places, ground-water seepage points exist, likened to springs, where thinner gravels overly these impervious clay layers and is most noticeable on the valley sides.

2.4 BIOLOGICAL INFORMATION

Following-on from initial surveys undertaken by amateur naturalists and the Hampshire Biodiversity Information Centre (HBIC) ecologists in the 1980s, the Barton Common complex was classified as a Site of Importance for Nature Conservation. The initial HBIC survey was carried out in 1984 and repeated in 2000 and 2011⁽⁹⁾.

Up to this point, habitat management took the form of both irregular grazing and regularly mowing large areas of easily accessible and flatter (plateau) areas of dry grassland/heath to the east and west of the stream. No cuttings were removed. Surrounding the mown areas, mature scrub and older gorse stands were evident and the woodland developed over former, open heath/grassland. The small seepage and valley mire communities were being significantly reduced in both area and species variety. The site summaries from the HBIC ecologists undertaking surveys stated:

"A complex site which consists of a mosaic of habitats including Gorse, Bracken and Birch/Sallow scrub, Bristle Bent and Purple Moor-grass heath, Heather/Gorse mosaic, Bog Myrtle/Purple Moor-grass mire and Cross-leaved Heath and Heather/Purple Moor-grass wet heath. A very rich site." (2000).

"The remaining 13ha of Barton Common (this figure includes the HCC pit and woodland at the western end – outside the fenced area) is much used for public recreation. It is bisected by a small stream that runs from the north-east to south-west in a valley with gently sloping sides.

It is probable that the Common would formerly have been a mosaic of heathland, dry acid grassland and Purple Moor-grass (Molinia caerulea) dominated mire, but in the absence of recent grazing, approximately 50% of the site is now recently-developed scrub, woodland and Bracken (Pteridium aquilinum) with very small areas of heath, and larger areas of acid grassland. Very little mire vegetation remains." (2011).

This information clearly indicates habitat changes were progressing at a rapid pace. Information on other surveys undertaken at Barton Common is as follows:

2.4.1 Habitats and Flora

Phase II habitat surveys Sep 1984, Oct 2000, Sep 2011 (kindly supplied by HBIC)
Detailed species list of fungi, ferns and allies and flowering plants 2020 and 2021 (kindly supplied by Phil Collier)
Fungi 2012 (kindly supplied by Gary Palmer)
Ferns and flowering plants 2012 (kindly supplied by Robin Harley)

2.4.2 Invertebrates

Spiders, casual butterfly and moth records and other insects 2005-2012 (kindly supplied by Gary Palmer)
Butterfly Transect data⁽¹⁰⁾ as part of the UK Butterfly Monitoring Scheme (kindly supplied by Trevor Bumfrey) and is ongoing.

2.4.3 Vertebrates

Herptiles – casual records – undated (kindly supplied by Kevin Hughes/HBIC) and 2005-2012 (kindly supplied by Gary Palmer)
Adder Survey of Barton Common 2016⁽¹¹⁾ – (kindly supplied by NMTC/Trevor Bumfrey)
Birds – breeding birds – survey undated (kindly supplied by K Hughes/HBIC), casual records on one day in 1984 (K Douglas/HBIC), undated/unnamed (supplied by HBIC) and 2005-2012 (kindly supplied by Robin Harley/Gary Palmer). Casual bird recording is on-going.

This data is by no means exhaustive. Intensive surveys were undertaken looking at invertebrates in 2011/12⁽¹²⁾ and flora in 2020/21⁽¹³⁾ (ongoing) but apart from the longer-running Butterfly Transect which began in 2013, no other long-term habitat or wildlife monitoring is known to have been undertaken.

The HBIC survey teams recorded a number of notable heathland/acid grassland species (see full list at Appendix 2). Part of the woodland displays an Ancient Semi-Natural Woodland (ASNW) character with records of a few notable ancient woodland indicator species. From the available habitat data gathered to date, this shows that there has been a significant reduction in the extent of the more vulnerable seepage mire, valley mire and wet heath communities. To the west of the stream, a small patch of seepage mire/wet heath community has almost been lost. This was recorded extending over a wide area in 1984.

However, seepage still occurs in winter, but the area of wet heath community is now very small. This is almost certainly as a result of birch and willow scrub, bramble and bracken encroachment close by and by less intensive grazing management.

For the more mobile wildlife species, evidence from previous surveys shows that at least one butterfly, the Grayling *Hipparchia semele* has been lost and four former breeding bird species, Whitethroat *Sylvia communis*, Dartford Warbler *Sylvia undata*, Stonechat *Saxicola torquata* and Yellowhammer *Emberiza citrinella*. There remain only very small populations of both Common Lizard (*Zootaca vivipara*) and Adder (*Vipera berus*) both of which were found in a survey of 2016. For the Grayling, many other invertebrates and other wildlife species generally, losses here are following a worrying national trend. A full list of species is shown in **Appendix 3**.

Balancing the habitat management needed to encourage the return of previously recorded species, whilst ensuring no further losses of vulnerable habitats, is key to the survival of Barton Common as a complex and varied wildlife Site of Importance for Nature Conservation.

2.5 FURTHER SURVEY AND MONITORING

Annual surveys and monitoring of individual species, wildlife groups and their habitats is essential for the future management on any site. Although this annual frequency is ideal, clearly this is dependent on resource constraints. With good fortune, a number of local, enthusiastic amateur or ex-professional wildlife surveyors can help supply this information and fill the gaps. A keen local naturalist is undertaking a stream survey and involves monthly chemical analysis of the water (phosphate and nitrate concentrations) as well as the macro-invertebrates present. More often though, specialist surveys, particularly of the lower orders of plants and invertebrates, will have to be contracted-out. To this end, NMTC has funded an insect survey in 2022.

Decisions have to be made on whether to record groups/habitats annually or at less regular intervals. What is paramount, is to plan ahead in order for resources to be made available for such activities.

The Butterfly Transect around Barton Common includes sections outside the fenced area. Only data from within the fenced section is used in this Plan. The transect was established in 2013 and is ongoing, undertaken by a small group of volunteers. All information is fed into the UK Butterfly Monitoring Scheme.

One omission from the surveys to date is a sustained record of the breeding birds. This can be easily remedied by undertaking a Common Bird Census. It requires no specialist equipment and involves walking the same route around the site, encountering all habitats present and recording the presence of birds during the period March to June. This will give an indication of territories of likely breeding birds, based on song, alarm calls and/or behaviour indicating breeding (eg carrying nest material). It is recognised that this site is heavily used by the public and it is expected that the results will be less diverse than on similar habitat sites which are less well-used. This has now been implemented.

Another survey that can be undertaken relatively easily to provide a wealth of information with little effort, is a moth survey using a light-trap on just a few suitable nights in the year. Also, from visual observation walking around the site, herptile records of both amphibians and reptiles can easily be gained. All casual sightings (butterflies, for example), add to the records and encouragement should be given for all casual observations from the public or more expert amateurs to be sent to a central database.

With advances in aerial photography technology, a useful tool now available to site managers is the "drone". This relatively inexpensive technique can map sites and accurately pinpoint

features of interest. On wildlife sites, habitats can be clearly shown and any subtle changes over time noted. Not only that, baseline maps can be overlain with locations of notable species, events and recent management intervention. By taking images in February (subject to weather conditions) when all the tree canopy is bare, locations of, for example evergreen non-natives will be apparent and future habitat management can be plotted. This may involve the use of companies specialising in this facility, and forward planning for budgetary purposes is therefore necessary.

2.6 HABITATS

This is an entirely arbitrary separation, but is based on the habitat surveys that have been carried out, old photographs and data received from both amateur and professional naturalists. The site has been apportioned three, very broad habitat types based on this information; watercourses and associated wetland areas, main woodland block and isolated units, and plateau heath/dry grassland. These can be further sub-divided and each is described below.

2.6.1 WATERCOURSES/WATERLOGGED AREAS/PONDS

2.6.1.1 Main Water Course (the Barton Common Stream)

- This stream flows north-east to south-west along a shallow, incised valley. Throughout the late-autumn and winter there is a flow, but is often dry during late summer. Frequent, naturally occurring falling debris creates temporary dams, causing some minor ponding, especially along the south-east side where the valley floor is wider, before the ground rises more steeply.
- The stream is heavily shaded by the dense woodland canopy of oak, willow and birch along most of its length. This cover thins slightly towards the south western end, and two small areas on both banks of the stream were cut and cleared in December 2021.
- Some trees and shrub cover were selected to remain (oak, yew, evergreen oak, *Rhododendron sp*). All arisings were cleared from the site, leaving little or no deadwood. Some stumps were cut above ground-level, presumably to allow for re-growth.
- There is a higher proportion of *Rhododendron sp* at the north-eastern end, closest to the road.

2.6.1.2 Tributary Stream and Associated Waterlogged Areas

- This rises in the narrow strip of relatively waterlogged mature oak, hazel, sycamore and holly woodland within the eastern boundary to the west of the Golf Course buildings.
- The flushed areas where drainage is impeded coalesce into a narrow tributary stream which flows east to west during the late-autumn and winter. Further downhill this joins the main watercourse in the northernmost area of cleared woodland in December 2021 (upper clearing).
- Little flows in late summer, but the ground remains very damp throughout the year. Falling debris frequently causes minor deviations in the direction of flow of the tributary stream creating wider, wetter areas along its length.
- Early surveys show this area to support mire communities of heather, bog myrtle and purple moor-grass. All appears lost through successional change to woodland.
- The vegetation along the length of this waterlogged area now comprises: willow, oak birch, bramble, some soft rush, remote sedge and broad buckler fern.

2.6.1.3 Relict Seepage Mire/Open Flush Area/Wet Heath

- To the east of the stream there is a small area of seepage mire (flushed wet heath), formed along and below a seepage or spring-line. This is the remaining area of a once more extensive mire community. There is surface water in winter, but most times of the year is only damp or wet underfoot. Examples of plants present here include bog myrtle, gypsy wort, bog pimpernel, heather, purple moor-grass and *Sphagnum sp.*
- Areas cleared of encroaching woody vegetation in 2016 are now being re-colonised by birch, willow and gorse.
- A narrower, more incised flushed area occurs further to the south but contains none of the characteristic species above.
- To the west of the stream early HBIC surveys show a small area containing characteristic wet heath species in a shallow depression aligned north-west to south-east. Little now remains.

2.6.1.4 Ponds

- Minor, temporary ponds occur along the main stream where debris blocks the water course, often most noticeable upstream of the footbridges where flow has been artificially narrowed.
- One larger pond exists and holds water for longer in the spring/summer. This contains soft rush and hemlock water dropwort.

2.6.2 MAIN WOODLAND BLOCK/SCATTERED SMALL, MATURE AND SEMI-MATURE TREE STANDS/SITE BOUNDARIES

2.6.2.1 Main Woodland Block

- This lies to the east of the main stream and occupies the valley floor, rising towards the eastern boundary of the site. More mature and drier oak/hazel/holly dominated woodland occurs higher up away from the lower, wetter and waterlogged sections. Some of the hazel and sycamore has been cut in the last 10-20 years.
- A significant proportion of this woodland has developed on former heath/dry grassland. The dominant tree species comprise birch, oak and willow. Scattered within this stand are sapling yew trees and alder buckthorn.
- Alongside the stream the woodland comprises oak, birch and willow and may well have developed on former valley mire communities.
- There is evidence of ivy being cut from trees.
- Little lying deadwood is present.
- Scattered throughout the woodland are non-native shrub and tree species, in particular *Rhododendron sp.*, a few evergreen oak and cherry laurel.
- There are a number of mature sycamores growing from stools cut in the past.
- In the glades cleared in December 2021, individual trees have been singled-out to grow-on to maturity.

2.6.2.2 Scattered Small, Mature and Semi-mature Tree Stands

- There are several individual, mature and immature trees within the former open heath/dry grassland sections. Often surrounded by dense bracken and bramble, these are usually untouched by annual mowing or grazing.
- A few blocks comprise several trees, usually oak and birch (the latter showing signs of re-growth from previous cutting) and cover a larger area. Some include mature gorse and *Rhododendron sp.* as well as evergreen oak and single pine trees.
- One or two blocks are single trees with large, spreading low branches covering a significant area of potential heath/grassland.

- Mowing between blocks of mature trees has isolated these, removing the connections, or corridors, between blocks.

2.6.2.3 Site Boundaries

- To the south and east of Barton Common along the fence lines that border the Golf Course, are stands of mature oak and birch which end abruptly adjacent to tightly mown, herbicide sprayed and manicured ground. On the Common side of these fences, are swathes of dense bracken and bramble dominated undergrowth up to 30m wide in places. One or two more mature blocks of well-developed gorse occur at intervals.
- The eastern boundary is of considerable age and contains many wind-sculptured holly in a dense, narrow strip, formed on a low earth bank. Some oak, birch, blackthorn, hawthorn and elder is present.
- The northern fenced boundary separates Barton Common from Barton Common Road and comprises dense stands of bramble and bracken approximately 10-15m wide, interspersed with a few taller, mature blocks of gorse and pockets of species-rich grassland. Some small maturing oak trees have become established in a short section along its length. Photographic evidence from 2016⁽⁷⁾ shows that a considerable area was mown tight to this fence-line.

2.6.3 PLATEAU HEATH/DRY GRASSLAND

2.6.3.1 West of the Stream

- This large section covers approximately half the fenced area of Barton Common. Surveys reveal this habitat to be relatively species poor, dominated by bristle bent although small patches of heather are present.
- Single oak and willow trees have been left to mature, as well as small clumps of re-growing birch with their associated margins of bracken and bramble, some young and more mature gorse.
- Many paths cross this section and there are a number of bench seats mounted on concrete bases.
- This grassland grades into bracken, bramble and gorse margins to the north and south, and down a shallow slope adjacent to the stream at the eastern side.
- Small shallow depressions are present at the eastern end, one of which was formerly an extensive wet heath habitat.
- More than half of this large area was cut in October 2021, including stands of maturing gorse and only a proportion of the cuttings were removed.

2.6.3.2 East of the Stream (excluding the Seepage Mire/flushed slope)

- This is a smaller section of heath/dry grassland compared to the area west of the stream.
- Previous surveys show the area to contain more in the way of heather and stands of mature gorse.
- A large block of mature scrub was cleared from this section in 2016, concentrated towards the southern end and around the seepage mire.
- About half this section was cut in October 2021 and all cuttings were left on-site.

2.6.3.3 Isolated Northern Block

- An outlying section of dry grassland, accounting for around 5% of the site, is separated from the main part of the Common by mature and developing secondary woodland. This is a level area and early surveys show the heath/dry grassland extending much further south and east than today. Current vegetation comprises bristle bent/Yorkshire

Fog grassland with some heather and purple moor-grass with associated young gorse. Currently, little birch seedling colonisation or re-growth is evident.

- A significant area of the former heath/dry grassland has been lost under encroaching scrub woodland of birch and oak which now covers around 50% of this former habitat.
- The mature gorse and margin of bracken adjacent to Barton Common Road held Adder repeatedly during the survey period in 2016.
- The northern half of this outlying area was cut in October 2021 along with the mature gorse Adder habitat adjacent to the fence-line. Cuttings were not removed and left as mulch. The southern half of the area was left uncut.

3. IDEAL MANAGEMENT OBJECTIVES

Previous historical and biological survey information is not always used or is often unavailable to site managers, when assessing priorities for management. Barton Common has some historical data, useful in planning future management. For example, HLS prescriptions highlight both Whitethroat and Yellowhammer as the two species where the recovery of breeding on-site would indicate successful management. There is no mention in these prescriptions of Dartford Warbler or Stonechat – both former breeding species, which are now only seen regularly during autumn and winter. Perhaps it is only a small step to adjust the management to provide the required habitat for these species to breed once again as well as the others mentioned?

In the absence of a detailed Management Plan specific to the site, the generic recommendations provided by HLS are being used as the basis for both habitat and species management. There are available prescriptions for "Restoration of Species-rich, Semi-natural Grassland" and "Scrub Management". These typically, are broad suggestions and give no indication of site-specific conditions, grazing levels and timing or which areas should be cut (or if at all), whether on rotation or the times of year this is required to fulfil the objectives i.e. the HLS Indicators of Success. There are however, one or two suggested management techniques (for example, cutting vegetation and dealing with arisings either by burning or leaving as habitat piles) which can be used to direct future management.

In order to adjust the management prescriptions specific to the site, to encourage the re-creation (restoration) and spread of diminished habitats and to attract those species that were once present, examination of the existing wildlife record data base becomes a high priority. Management has to ensure that there are no further losses of threatened, vulnerable or nationally or locally important species, populations or their habitats.

For such a complex, rich and varied wildlife site, future management has to be designed to:

- encourage the extension of now diminished rare mire/wet heath habitat, and the return of former species that have recently disappeared from the site
- ensure no further loss of more vulnerable habitats
- create conditions essential for successful breeding of now rare or unusual species
- take account of recommendations already provided by specialist ecologists and wildlife surveyors
- change and adapt management techniques in the light of experience gained, by more frequent, systematic recording of both habitats and their associated species
- reduce areas mechanically cut, ensuring those that remain are done sympathetically and efficiently (for example, all arisings to be removed)
- change livestock type from horses to cattle (ideally Ivermectin-free) and balance numbers for maintenance grazing rather than continued restoration
- ideally change the timing of grazing to spring (end of May) through to late-autumn (end of October) with a maximum of 4 cows. Alternatively, 6-9 cows for the period mid-September to the end of February (ground conditions dependent), and

- establish a long-term programme of rotational intervention (woodland clearance, scrub control and with mowing if necessary etc).

4. HABITAT MANAGEMENT PRESCRIPTIONS AND RATIONALE

Refer to Map 7.2 – Compartments for Management Planning

4.1 WATERCOURSES/WATERLOGGED AREAS/PONDS

4.1.1 Main Water Course (the Barton Common Stream) – Compartment 7

4.1.1.1 Proposal/Prescription:

- Remove almost all trees on each side up to 10m, between the upper footbridge (adjacent to the road) and about 25-30m upstream of the lower footbridge (nearest the Golf Course).
- Some larger oak boles to be left in-situ after crown removal.
- All other tree stumps to be cut to ground level except some willow (coppicing and pollarding).
- Some of the larger cut material (down to 75mm diameter) should be sectioned into 1m lengths and stacked in tight piles, randomly scattered.

4.1.1.2 Rationale:

- The valley floor is flatter and wider in places. Trees and shrubs here are relatively recent (save for one or two mature specimens) and most likely have developed over previous valley mire communities. Clearing trees and shrubs will open the area to potentially more grazing and reduce transpiration, providing conditions for valley mire communities to develop slowly over time.
- Retaining tree boles will create standing dead-wood habitat which, in recently colonised woodland is in short supply.
- Cut some willow stumps higher. Some re-growth is desirable as this provides an early nectar source and is a food-plant for many invertebrates. Regular cutting of one or two each year on a 10-year rotation will maintain these in a healthy condition.
- If, as predicted, summer temperatures are set to increase, there is always a risk of fire on drier, heathland/grassland sites. Wider, open areas create fire-breaks and may control spread in the event of fires elsewhere on-site.
- Tightly stacked, short-length wood piles provide humid, slowly rotting habitat for invertebrates and may assist overwintering herptiles.

4.1.2 Tributary Stream and Associated Waterlogged Areas – Compartment 7

4.1.2.1 Proposal/Prescription:

- Over time, extend the tree and shrub clearance from the upper glade (created in December 2021), upstream to the oak/hazel woodland near to the site boundary adjacent to the Golf Course storage area. This is to be a wide, 20-30m swathe, keeping the stream/flush on the north-west side acting as a “boundary”.
- The boles of a few larger oaks to be left in-situ after crown removal.
- All other stumps to be cut to ground level, except for a few willows which should be allowed to re-grow as either coppice or pollard.
- Some of the larger cut material should be sectioned into 1m lengths and stacked (see above).
- Allow natural debris dams to create ponded areas upstream.

4.1.2.2 Rationale:

- Removing shade and opening-up this flushed area will encourage conditions assisting in the development of a mire community, thereby extending this currently under-represented and threatened habitat on this site.
- Retaining boles will create standing dead-wood habitat which, in recently colonised woodland is in short supply.
- Retention of water in a flushed area from natural dams will maintain a high water-table necessary for wetland habitat development. In this location the absence of footbridges will cause no inconvenience or harm to the visiting public.
- This will create a ride/fire-break through the woodland and may help control spread in the event of an adjacent heath/dry grassland fire.
- A wider, open swathe through the woodland will encourage a greater diversity of plant species and may lead to an increase in the numbers of woodland edge or heath/dry grassland butterflies and other invertebrates.
- Tightly stacked, short-length wood piles provide humid, rotting habitat for invertebrates and may assist overwintering herptiles.

4.1.3 Relict Seepage Mire/Open Flush Areas/Wet Heath – Compartments 6 and 9

4.1.3.1 Proposal/Prescription

- The small seepage mire area to the east of the stream (Compartment 6) should be extended slightly further to the south, around the slope, by removal of more aggressive, woody encroaching vegetation, particularly birch, willow and gorse re-growth. Some alder buckthorn should remain.
- To the west of the stream (Compartment 9) encroaching scrub should be controlled over the former wet heath to expose the spring line. Refrain from regular mowing.

4.1.3.2 Rationale:

- For the open, flushed area cutting back woody vegetation not only extends available ground for re-colonisation by valley mire community species, but reduces transpiration, thereby helping to raise the water table.
- Opening-up and/or removing more woody vegetation along the spring lines provides conditions which allows the rare wet heath/mire community species to re-colonise the wetter ground. Grazing only will aid re-colonisation.

4.1.4 Ponds – Compartment 7

4.1.4.1 Proposal/Prescription:

- Temporary ponding along the main stream is to be encouraged, unless footbridges and public safety are compromised. Any debris causing dangerous ponding can be removed to alleviate the immediate danger. At other times and in other locations, all debris should be left until the stream has dried in late summer and then removed as appropriate.
- The larger, permanent pond should have the majority of tree cover removed on the north, east and west sides. The pond area should be extended and deepened over one half to two-thirds on the southern side.
- Alternate halves of the pond should be cleaned-out (scraped) every 10 years.

4.1.4.2 Rationale:

- Debris dams can be temporary. Flooding upstream is useful to wildlife to retain a high water-table or a pond in a developing valley mire system and may encourage many species, particularly invertebrates and herptiles associated with temporary high water-tables, to feed and breed successfully.
- Clearing most of the tree cover will reduce leaf fall into the pond and thereby maintain low-nutrient status. Leaving some taller cover to the south will create some shade and may reduce proliferation of filamentous algae.
- A larger, deeper pond will maintain a depth of water in late-winter and early spring for a range of amphibians and many invertebrates to breed successfully.
- Deepening the pond to the north, away from the outfall ensures some retained water at all times.
- Excavated material when initially deepened, should be spread on the "higher" side and excess water, seeds and wildlife be allowed to drain into the pond for re-colonisation.
- Maintenance scraping is essential to retain a depth of water and remove the source of nutrient build-up (leaves, debris etc). Material excavated should be minimal and can be spread around the margins and pulled-back by the digger bucket into a thin layer.
- Cleaning out a pond is a major and potentially wildlife disruptive intervention. By clearing-out only half the pond at a time, this helps to retain at least some of the wildlife to enable more rapid re-colonisation of the cleared section.

4.2 MAIN WOODLAND BLOCK/SCATTERED SMALL, MATURE AND SEMI-MATURE TREE STANDS/SITE BOUNDARIES

4.2.1 Main Woodland Block – Compartments 2 and 3

4.2.1.1 Proposal/Prescription:

- Re-work the hazel coppice along the narrow strip adjacent to the eastern fence line (see **Appendix 2** – Compartment 2). There is evidence of previous coppicing and is ready for re-cutting. Divide this section into a few smaller "sub-compartments" and cut a section on rotation. Temporary chestnut-paling fencing (to be removed at the end of the growing season) may be necessary to protect re-growth from browsing livestock.
- Create a north-east south-west ride from somewhere near the Golf Course storage area on the eastern boundary through the central part of the woodland, using the tributary stream and waterlogged areas as the north-west boundary.
- On the southern and eastern side of the isolated heath/dry grassland to the north of the site, cut back and clear a significant proportion of the thinly growing birch and oak.
- Remove all non-native species.
- Gradually remove older, more mature sycamore.
- Leave ivy and other climbers to grow.
- Leave all windthrown trees in-situ except where blocking main paths.
- Leave tightly packed random piles of 1m deadwood lengths on the woodland/grassland margin.

4.2.1.2 Rationale:

- Hazel has a limited life as a shrub species. Regular cutting (minimum 7 years) of the "stools" promotes active re-growth and ensures longevity of the plant. The fruits (nuts) are an essential part of the diet of some small mammals (for example, Common Dormouse). The fleshy leaves are attractive as food to many invertebrate larvae.
- Replanting with new saplings increases the density, and therefore greater cover and potential feeding for birds and small mammals.

- A wide grassy, woodland flora dominated ride will allow light and air to the woodland floor. It will provide a corridor and connectivity for the movement of wildlife between the isolated heath/dry grassland blocks; particularly flying insects which will in turn attract bats to feed. This will also act as a firebreak in the event of a fire elsewhere on-site.
- Small numbers of Silver-washed Fritillary butterfly are recorded each year. These are mostly recorded along the woodland margins and boundary features. Open areas in woodland may provide conditions for the foodplant (Violets *Viola sp*) to colonise.
- Reducing the cover of semi-mature woodland on the southern side of the isolated heath/dry grassland will provide conditions for this habitat to extend southwards. Older aerial photos show this habitat once extended further south than it does today. Connecting to the ride will assist movement of wildlife around the site.
- Ivy and honeysuckle are extremely valuable habitat, particularly when densely clothing a tree trunk. It provides sheltered overwintering places for invertebrates and nesting sites for Wren and Treecreeper for example, both of which are present, in spring.
- Removal of sycamore reduces the amount of seed cast, thereby slowing proliferation in the woodland block.
- Any windthrown trees should be left in-situ to gradually decompose. Any top/trunk lying a cross an established path should be removed for access and cut material stacked close-by.
- Tightly stacked, short-length wood piles provide humid, rotting habitat for invertebrates and may assist overwintering herptiles.

4.2.2 Scattered Small Mature and Semi-mature Tree Stands – Compartments 5, 6 and 9

4.2.2.1 Proposal/Prescription:

- Remove isolated, individual, immature trees, particularly in the vicinity of seepages.
- Remove non-native species from within larger, more mature blocks.
- Ensure margins of bracken and immature gorse are retained especially on south-facing sides of more mature blocks. Place a few random piles of tightly packed deadwood and heaps of cut vegetation at the margin of the block/bracken margin.
- Margins should be carefully cut on rotation so not all are cut at once.
- All tree stands should be connected by taller, more mature heath/grassland and a plan of management devised to ensure these blocks are not isolated.
- Retained mature tree blocks should have piles of deadwood within them.
- Crown-lift some of the more spreading or collapsed specimens.

4.2.2.2 Rationale:

- Singled trees within the open flushed areas and heath/grassland are of little value when management favours other less common habitat. Trees in wetter areas assist in their drying-out and should be removed thereby raising the water table which helps sustain priority habitats.
- Southern facing boundaries should be carefully managed to retain dense bracken (both standing and lying), bramble and immature gorse. This ecotone is ideal for reptiles.
- Connectivity is key to ensure safe movement of invertebrates, reptiles and small mammals especially on sites heavily used for public recreation.
- Tightly stacked, short-length wood piles provide humid, rotting habitat for invertebrates and may assist overwintering herptiles. Heaps of vegetation act likewise.
- By crown-lifting, this reduces the amount of shade cast and opens-up the understorey for gorse, bramble and bracken colonisation, creating conditions for some breeding birds (particularly scrub and leaf warblers).

4.2.3 Site Boundaries – Compartments 1, 4, 8 and 10

4.2.3.1 Proposal/Prescription:

- The southern boundary line and eastern line (outside the woodland block and away from the historical feature) should be exposed by removing about 30% of the oak and/or birch trees. Where these are removed, the dense bramble and bracken should be cleared to create south-facing “bays”, between blocks of oak/bramble/bracken which should be allowed to mature.
- Along the eastern boundary, thin the more mature holly creating “gaps” which can be re-planted with a mixture of native hedgerow species (hazel, wild rose, hawthorn and blackthorn, for example).
- The northern boundary species composition should be retained and small blocks of gorse and oak encouraged to mature.
- Should mowing be the preferred management tool, the margin against the grassland/heath should not be straight. This edge should be scalloped, connecting the pockets of species-rich grassland to the main heath/dry grassland community.
- Cut material should be piled in the smaller stands left to mature, in line with HLS recommendations

4.2.3.2 Rationale:

- To allow small sections to mature, particularly those already containing gorse, scrub warblers (especially Dartford Warbler) may find it attractive and dense enough to breed.
- On the southern and eastern boundaries, the bays will provide conditions for more species-rich grassland to develop. On the southern boundary, HBIC surveyors recorded devil’s-bit scabious here, but has not been seen for some time.
- On the northern boundary, being south facing this creates a longer, grassland/tall herb/scrub margin (ecotone) and will be ideal for Adders which have in the past been recorded here.
- By thinning the existing holly along the eastern margin and re-planting with native hedgerow species, this will increase the density and variety of species which in turn will support more wildlife, particularly breeding birds.
- Small blocks of gorse should be allowed to mature for up to 15 years. Dartford Warblers favour more mature growth to nest (as do other target species). A rotational cutting programme should therefore be established and implemented.
- Piles of decomposing cut material provide safe and undisturbed overwintering sites for a whole range of wildlife, particularly herptiles, and especially on sites heavily used for public recreation.
- The developing more species-rich grassland will also attract livestock (especially where cattle are used) to graze and is preferable to keeping the vegetation in check compared to frequent mowing.

4.3 PLATEAU HEATH/DRY GRASSLAND

4.3.1 West of the Stream – Compartment 9

4.3.1.1 Proposal/Prescription:

- By changing the timing of grazing and adjusting the number of livestock it should be possible to limit the amount of cutting/collecting in future.
- Should cutting/collecting still be necessary in the early years of the Plan, split the area into smaller units and seek to cut/collect less often, allowing the heathland to recover. Where practical, use hand-powered machinery.

- Allow some of the blocks to mature, especially gorse, the remainder begin a rotational 3-year cutting programme of just a few small areas at a time.
- Keep any regular mowing (if needed) to a minimum width along the main paths.

4.3.1.2 Rationale

- The correct timing and levels of grazing livestock should be sufficient to maintain all representative habitats, without annual intervention (mowing) on such a large scale.
- By dividing the area into smaller units and instigating a less invasive 3-year rotation cutting/collecting programme, this allows the development of heathland in favour of current grass-dominated and species-poor swards. Sections left undisturbed by drastic cutting/clearing enable invertebrates and herptiles a minimum of three years to breed and spread-out.
- Cutting late in the year with few livestock on-site can be counter-productive. Cutting in a mild and wet autumn promotes new grass growth (the aftermath). Grazing animals will favour the new growth and reject the taller, more rank and possibly flower rich sections. With fewer cuts and less new growth, animals are "forced" to seek out poorer quality grassland, the grazing of which is the main reason for having livestock on-site.
- The public will stick to the paths they know, or can be directed along the mown tracks, keeping disturbance to a minimum elsewhere. On currently less well-used tracks allow sections of vegetation to "connect" across a narrow length of path leaving a short section unmown across the full width.

4.3.2 East of the Stream (excluding the Seepage Mire/flushed slope) – Compartment 5

4.3.2.1 Proposal/Prescription

- By changing the timing of grazing and adjusting the number of livestock it should be possible to limit the amount of cutting/collecting in future.
- Should cutting/collecting still be necessary in the early years of the Plan, split the area into smaller units and seek to cut/collect less often, allowing the heathland to recover.
- Allow some of the blocks to mature, especially gorse, the remainder begin a rotational 3-year cutting programme of just a few small areas at a time.
- Keep any regular mowing (if needed) to a minimum width along the main paths.

4.3.2.2 Rationale

- The correct timing and levels of grazing livestock should be sufficient to maintain all representative habitats, without annual intervention on such a large scale.
- By dividing the area into smaller units and instigating a less invasive 3-year rotation cutting/collecting programme, this allows the development of heathland in favour of current grass-dominated and species-poor swards. Sections left undisturbed by drastic cutting/clearing enables invertebrates and herptiles a minimum of three years to breed and spread-out.
- Cutting late in the year with few livestock on-site can be counter-productive. Cutting in a mild and wet autumn promotes new grass growth (the aftermath). Grazing animals will favour the new growth and reject the taller, rank and possibly flower rich sections. With fewer cuts and less new growth, animals are "forced" to seek out poorer quality grassland, the grazing of which is the main reason for having livestock on-site.
- The public will stick to the paths they know, or can be directed along the mown tracks, keeping disturbance to a minimum elsewhere. On currently less well-used tracks allow sections of vegetation to "connect" across a narrow length of path leaving a short section unmown across the full width.

4.3.3 Isolated Northern Block – Compartment 11

4.3.3.1 Proposal/Prescription

- Records show that until recently the area of heath/dry grassland extended further east and south and to ensure its long-term productivity for wildlife, this habitat should be extended to cover at least the area recorded in the past. This will involve the removal of a significant amount of secondary woodland growth of birch, oak, holly and willow.
- Reduce the amount of widespread mowing, to favour more dense stands of gorse and bracken at the margins. Any cutting should be by hand-powered tools.
- Some timber from the cutting should be stacked in tight piles around the margins.
- Should it prove necessary to manage this area by mechanical cutting, then a 3-year cutting cycle should be implemented.

4.3.3.2 Rationale

- Woodland creates shade, favouring growth of bracken and bramble. Removal of trees exposes the more level areas of ground to light and heat, necessary for the heathland/dry grassland community to re-establish. This also lowers transpiration rates and helps maintain a higher water table where ground slopes-away merging into more waterlogged ground. Reduction of leaf litter maintains a nutrient poor soil type, necessary for heath/dry grassland establishment.
- By extending the habitat eastwards, this will merge into the waterlogged area in the woodland, enabling the possible regeneration of former dry grassland/wet heath community ecotone and with the view to re-creating valley mire.
- Retaining more dense growth around the margins of this block will provide more stable conditions for herptiles (especially Adders).
- The provision of tightly-stacked timber from the tree cutting will give opportunity for undisturbed over-wintering sites.
- In the absence of suitable grazing or where cutting is preferred, dividing this block into three sub-units ensures that only a small proportion of the total area is cut at any one time, thus controlling the establishment of woody vegetation and giving wildlife at least two years of undisturbed breeding.

5. PHASED HABITAT MANAGEMENT WORK PLAN 2022-2032

5.1 PHASE 1 Years 1 and 2: January/February 2022 – March 2024

Phase 1: Main Priorities

- Write a Management Plan
- Establish a programme of regular, repeated and new surveys and monitoring of habitats and their associated wildlife
- Document all activities as an Event Record detailing habitat management and events which may impact the site integrity, livestock or wildlife as well as the effort (in man-hours) undertaken by volunteers or contractors.
- Introduce cattle as the preferred grazing animal as soon as possible. Adjust grazing levels and timing, in line with other heathland sites, so as to reduce the requirement of more damaging extensive mowing as a management technique.
- Begin removal of all non-native and other undesirable species.

- Cut/clear seedling and re-growth birch/willow by hand from seepage mire and uncut heath/dry grassland sections (Compartments 6 and 9).
- Extend heath/dry grassland plateau communities along northern boundary by reducing the depth/width of the bracken/bramble margin, creating a series of bays/scallops to increase this ecotone (Compartments 9 and 10).
- Select sacrificial areas to be used long-term for piling brash, cuttings, logs etc and as fire-sites.

Phase 1: Secondary Objectives

- Ensure all survey information collected is disseminated widely.
- Create a coppice rotation cutting plan. Cut/coppice smaller, invasive sycamore and begin to restore hazel stools (Compartment 2).
- Purchase and plant hazel saplings in coppiced area to increase stool density over time.
- Select some older holly in eastern hedgerow, cut back to create gaps and begin native hedgerow species planting programme. Acquire hedgerow plants in small numbers annually from the Woodland Trust (Compartment 1).
- Reduce the area of heath/dry grassland plateau communities mown each year to a minimum to meet objectives and ensure any areas that are mown have all cuttings removed (Compartments 5, 9 and 11).
- Set long rotation scrub control programme (up to 15 years for some gorse blocks) and, if needed, a grassland cutting programme (minimum 3-year rotation).

5.1 Phase 1 Years 1 and 2: January/February 2022 – March 2024

Timing	Task	Target	Desired Outcome(s)
Feb-Oct	Surveys and Census	Adder and Breeding Birds	Re-survey to check current status/preferred locations of Adders last done in 2016. Record casual observations of other herptiles. Begin annual breeding bird census to establish numbers of species and territories present across the range of habitats.
Feb	Cut seedlings/re-growth	Birch/willow in seepage mire and uncut heath/dry grassland	Remove new seedlings and any re-growth from seepage mire east of the stream and from uncut heath/dry grassland plateau to the west.
May-Oct	Grazing management	Remove horses and introduce cattle	Cattle are less selective than horses therefore more areas of less palatable vegetation will be grazed shorter over time.
Sep-Mar	Cut and collect all arisings from selected areas of bramble and bracken dominated sections	Create bays/scallops in bramble and bracken margins along north and south site boundaries	Extend the heath/dry grassland into the wider margins, exposing ground flora to grazing livestock to promote species diversity. Collecting arisings reduces nutrient input and is more beneficial for ground flora. Scalloped edges are longer than straight ones, thereby increasing the length of the grass/tall herb ecotone. Heap cut material in permanent locations in areas planned for retention and allow to rot down to provide over wintering sites for invertebrates and herptiles.
	Cut and collect all arisings	Small pre-marked sections of heath/dry grassland	In the long-term create a mosaic of uneven aged heath/dry grassland habitat by cutting gorse blocks on-rotation up to maximum age of 15 years.
	Remove trees and shrubs with hand tools. Burn-up arisings	Non-native/undesirable species	Eradicate cherry laurel, <i>Rhododendron sp</i> and evergreen oak from the site. Remove the few single pine trees <i>Pinus sp</i> .
	Coppicing with hand tools. Burn-up brash.	Old coppiced woodland	Cut/coppice self-seeded sycamore. Rejuvenate previously cut and now overstood hazel to ensure the long-term health of stools. Open-up shaded woodland floor to promote ground flora. Plant new hazel saplings to increase density. Create a few log piles.

Other tasks (not time/management phase constrained):

1. Visit the site on a weekly basis checking fencing integrity and livestock condition.
2. Report to the Town Clerk any emergency action required, as soon as practicable.
3. Remove litter.
4. Record management, events and activities on-site, monitor impact of management work and report to the Town Clerk on a monthly basis.

5.2 PHASE 2 Years 2-5: April 2024 – March 2027

Phase 2: Main Priorities

- Ensure a programme of regular, repeated and new surveys and monitoring of habitats and their associated wildlife.
- Document all activities as an Event Record detailing habitat management and events which may impact the site integrity, livestock or wildlife as well as the effort (in man-hours) undertaken by volunteers or contractors.
- Create the opportunity for restoration of valley mire communities adjacent to the main stream by widening the stream bed in places (Compartment 7).
- Clear debris and overhanging vegetation in and around the pond. Extend margin, and deepen, away from the outfall end (Compartment 7).
- Extend existing rare, wet heath/seepage mire communities and restore former areas along seepage lines, now covered in scrub or woodland, east and west of the stream, by cutting/clearing tall, woody vegetation, bracken and bramble (Compartments 6, 7 and 9).
- Thin-out birch/oak from western side of the stream to enable access for stream widening (Compartment 7).
- Extend upper clear-fell area (last cut in December 2021) along tributary stream and waterlogged ground in woodland to provide conditions to re-establish wet heath/valley mire communities. Create a few tightly-packed log piles (Compartment 7).
- Extend existing and restore former heath/dry grassland plateau habitat by clearing encroaching scrub and woodland in the northern outlying sector (Compartment 11).
- Cut/clear seedling and re-growth birch/willow from heath/dry grassland plateau areas (Compartments 5 and 9).

Phase 2: Secondary Objectives

- Ensure all survey information collected is disseminated widely.
- Cut/coppice smaller, invasive sycamore and begin to restore hazel stools (Compartment 2).
- Purchase and plant hazel in coppiced area to increase stool density over time.
- Select some older holly in eastern hedgerow, cut back to create gaps and begin native hedgerow species planting programme. Acquire hedgerow plants in small numbers annually from the Woodland Trust (Compartment 1).
- Cut one or two older gorse stands to start a 15-year cutting cycle.
- Establish a 3-year rotational cutting programme for the heath/dry grassland plateau areas.

5.2 Phase 2 Years 2-5: April 2024 – March 2027

Timing	Task	Target	Desired Outcome(s)
Feb-Oct	Surveys and Census	Adder and Breeding Birds	Re-survey to check current status of Adders. Repeat annual breeding bird census to establish numbers of species and territories present across the range of habitats. Continue to record herptiles and other wildlife groups.
Oct-Mar	Scrape back stream sides	Create waterlogged ground/pools	Open-up streamside vegetation for valley mire/wet heath communities to develop
	Enlarge and deepen pond	Remove fallen timber/overhang	Larger pond cleared of woody vegetation and deepened on north side away from outflow. More open-water habitat for herptiles
	Cut/clear woody vegetation, bracken and bramble	Seepage mire line along valley sides	Expose seepage lines and create open conditions for establishment and extension of mire community vegetation.
	Cut/clear all secondary growth	Northern outlying heath/dry grassland plateau block	Remove/reduce woodland cover to create conditions for heathland to re-colonise to former extent. Manage as heath/grassland either by controlled grazing or rotational cutting/clearing.
	Clear all woody vegetation	Tributary stream and waterlogged ground	Cut and clear trees/shrubs along tributary stream and into waterlogged area of woodland to create conditions for re-establishment of wet heath/valley mire communities. Create a few tightly-packed log piles.
	Coppice/replant	Restore coppice woodland	Cutting hazel, sycamore and other species, opens up woodland for ground flora to develop.
	Plant native hedgerow species along eastern boundary	Create mixed species-rich hedgerow	Augment existing poorly represented variety of hedgerow species to bulk-up this old boundary feature to encourage a greater variety of breeding birds and invertebrates.
	Select and cut/clear	One or two gorse stands	Begin long-rotation cutting programme (15 years) by selecting some gorse stands to be cut and allowed to re-grow.
	Select, cut and clear	Birch/willow	Cut/clear birch/willow seedling and re-growth from heath/dry grassland plateau areas.

5.3 PHASE 3 Years 5-10: April 2027 – March 2032

Phase 3: Main Priorities

- Cut-back all overhanging, low oak/willow branches on the north side of the trees on the southern boundary (Compartment 8).
- Reduce the amount of low-branch spread on isolated trees/blocks to allow the heath/dry grassland on the plateau areas to spread outwards (Compartments 5 and 9).
- Increase the variety of habitats for wildlife by creating gaps and re-planting/bulking-up the eastern hedgerow boundary with native shrub-species (Compartment 1).
- Open a wide ride through the woodland block running north-east, south-west. Cut larger timber to short lengths and retain some for tightly-packed log piles. Stack beside the ride, just inside the woodland. Manage ride-sides on 2-year rotation, removing all arisings. All arisings to be piled in sacrificial areas for habitat piles and added to at each cutting (Compartment 3).
- Cut/clear seedling and re-growth birch/willow from all areas prone to establishment.
- Create small areas of bare ground for Hymenoptera on the drier plateaus and a more "vertical" face adjacent to the pond (Compartments 7 and 9).

5.3 Phase 3 Years 5-10: April 2027 – March 2032

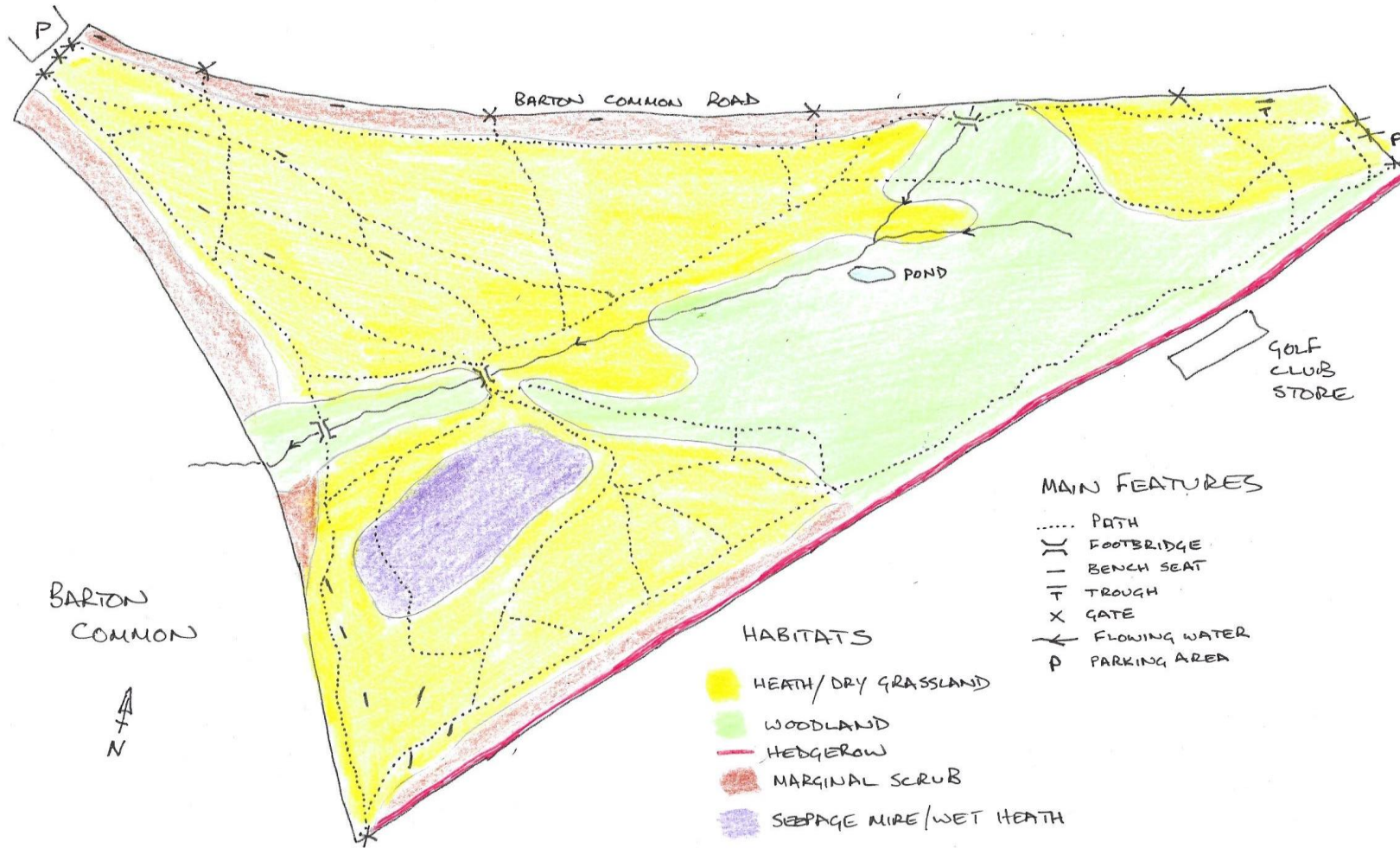
Timing	Task	Target	Desired Outcome(s)
Feb-Jun	Surveys and Census	Adder and Breeding Birds	Re-survey to check current status of Adder population last done in 2016. Repeat annual breeding bird census to establish numbers of species and territories present across the range of habitats.
Oct-Mar	Create new woodland ride	Clear trees/shrubs along a north-east/south-west line through the woodland	New woodland ride with grass margins (each side cut every other year) to create a new habitat particularly for invertebrates and woodland ground flora.
	Reduce width of overhanging boundary trees	Oak/willow along boundaries and isolated clumps	Extend heath/dry grassland plateau communities outwards. Retain some overhang, under which continue to store cuttings/logs to create long-term habitat piles.
	Create species-rich hedgerow	Eastern boundary	Augment existing poorly represented variety of hedgerow species to bulk-up this old boundary feature for a greater variety of breeding birds and invertebrates.
	Create bare ground for insects	Extend the range and variety of Hymenoptera species	Bare ground, both horizontal and vertical is of benefit for Hymenoptera (solitary bees for example).

6. REFERENCES

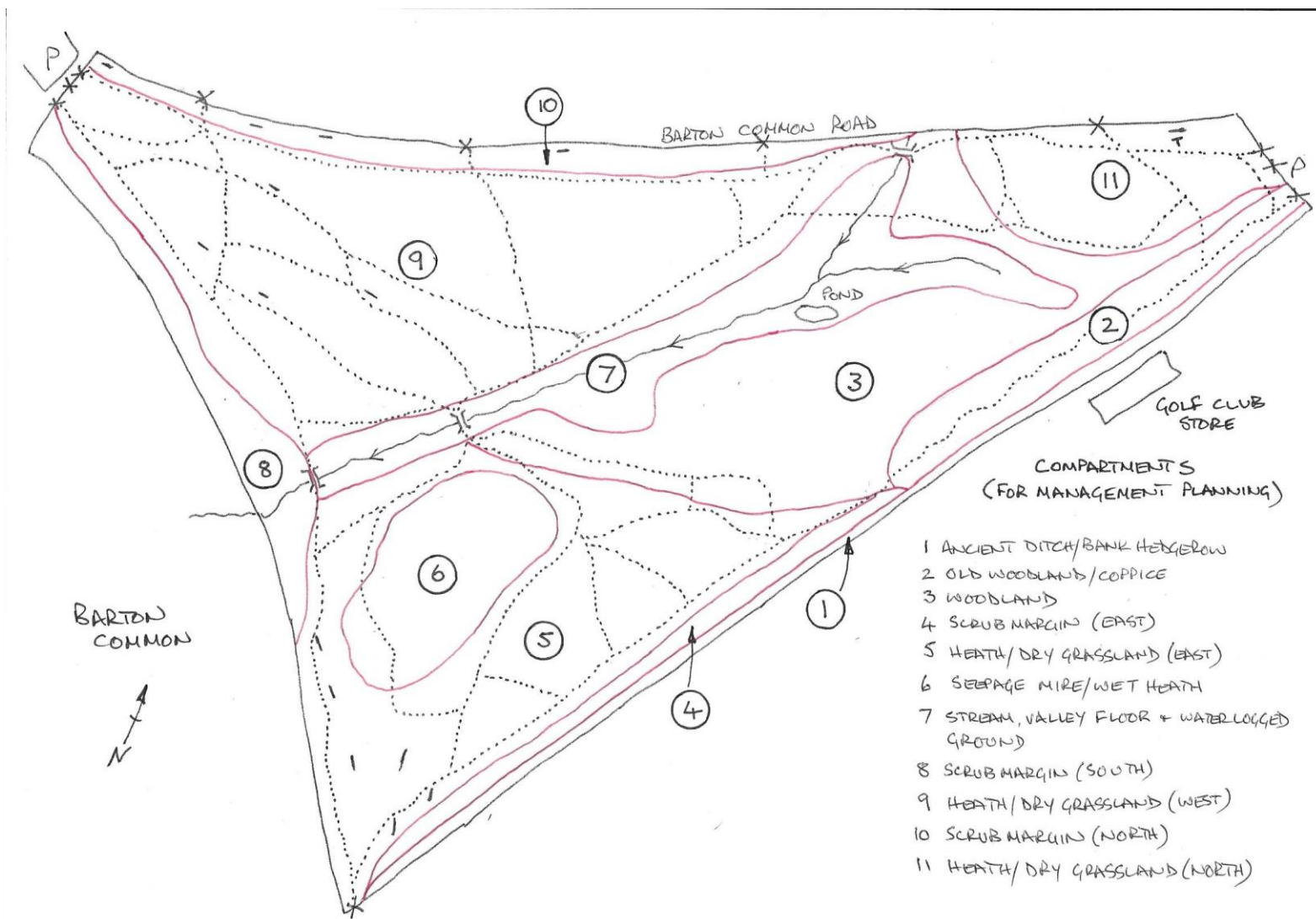
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7. Maps

7.1 Main Features and Habitats



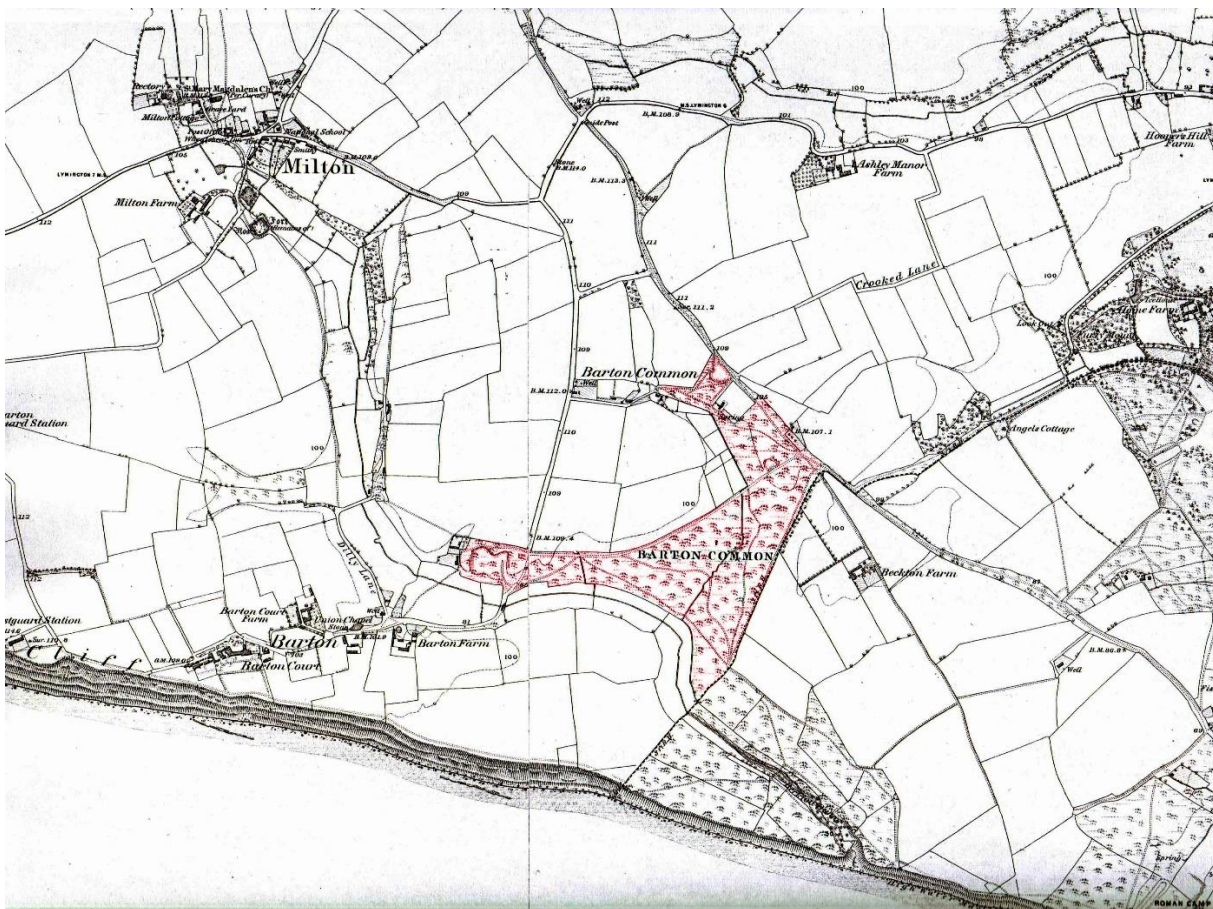
7.2 Compartments (for Management Planning)



APPENDIX 1 – Old Maps of Barton Common

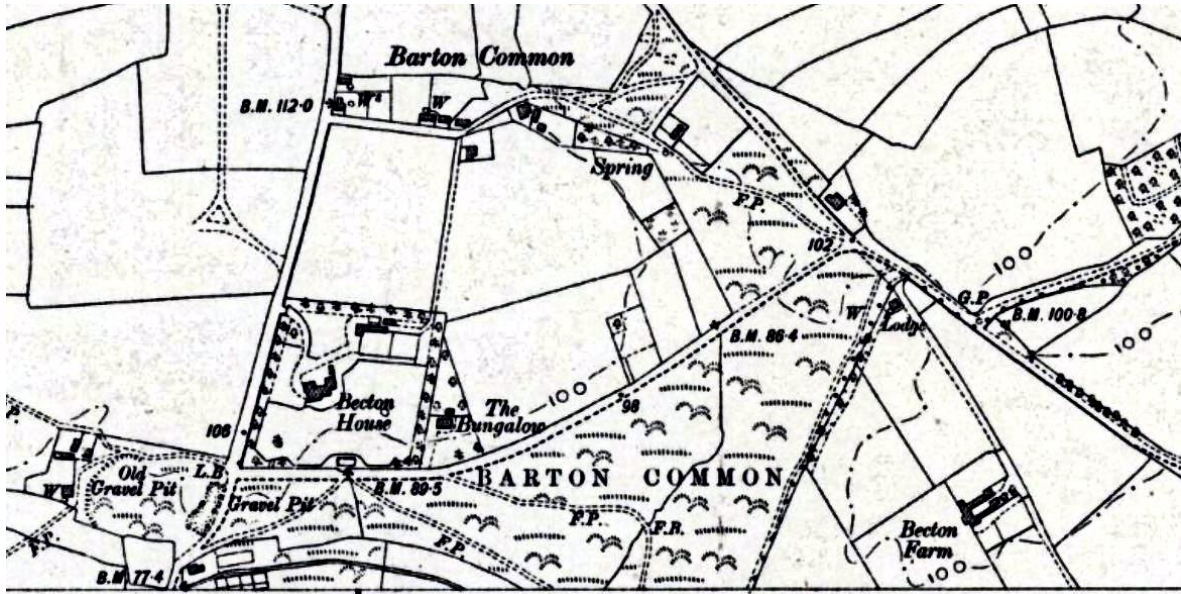


Tithe Map of 1841 (kindly supplied by Nick Saunders – NMHS)

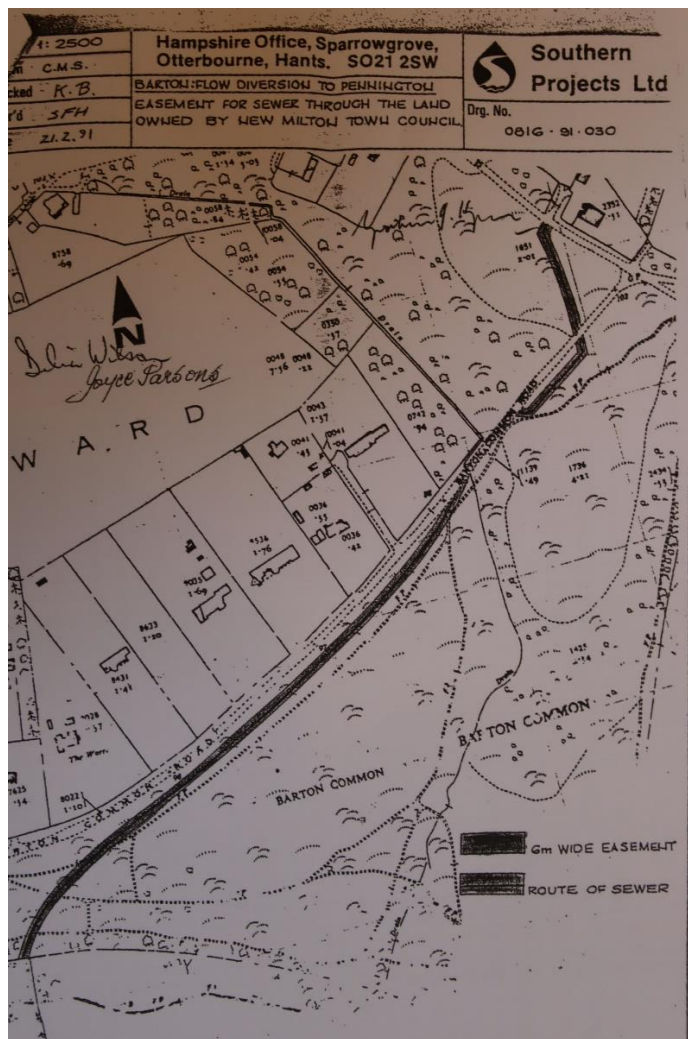


First Ordnance Survey map 1867 (kindly supplied by Nick Saunders – NMHS)

APPENDIX 1 – continued



Ordnance Survey map extract 1909 (kindly supplied by Nick Saunders – NMHS)

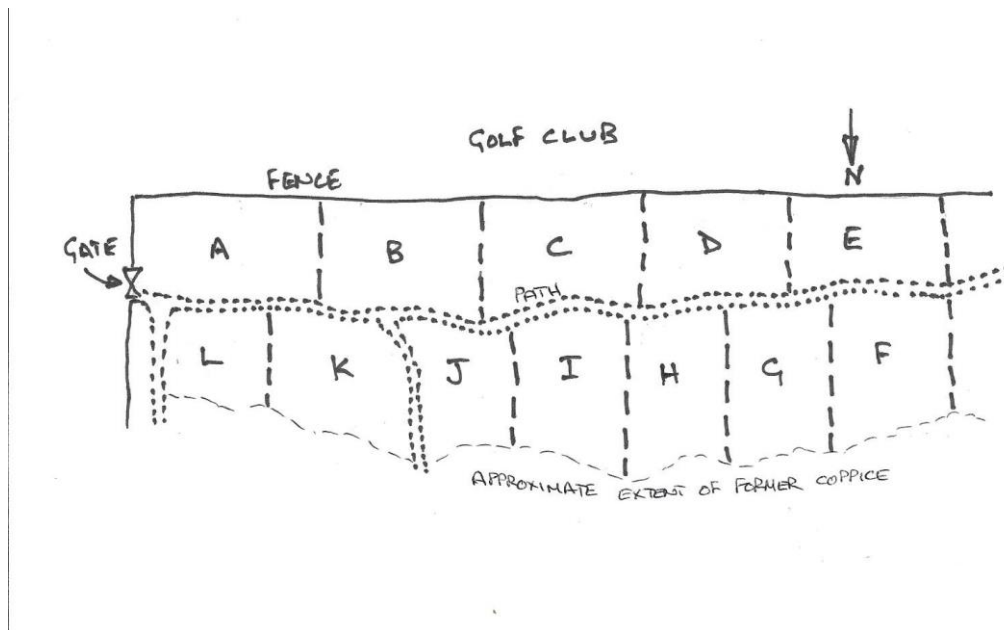


Southern water sewer route and easement

APPENDIX 2 – Compartment 2: Coppice Management Programme

Year	Winter	Sub-compartment
1	2022/23	C
2	2023/24	A
3	2024/25	E
4	2025/26	H
5	2026/27	J
6	2027/28	L
7	2028/29	F
8	2029/30	B
9	2030/31	I
10	2031/32	K
11	2032/33	D
12	2033/34	G

Sub-compartment map:



APPENDIX 3 – Species Lists

See separate document.