# WARSASH COMMON

MANAGEMENT PLAN 2020 - 2025





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# PREAMBLE

Fareham Borough Council is a local authority located in the South of Hampshire and has a population of approximately 113,600. The majority of the Council's business is directed by a number of Committees of elected Members. This includes the Executive, six committees, nine Policy Development and Review Panels as well as the Licensing and Regulatory Affairs Panel. There are ten departments within the Council providing all its local authority services and additional facilities.

Fareham Borough Council is committed to securing continuous improvement through the policies it pursues the high standard of services it provides and its contribution towards making Fareham a cleaner, safer, more attractive place to live, work and do business. This commitment is emphasised by the Council's vision, which clearly demonstrates its overall ambition.

The Council's Corporate Vision is:

# Fareham - the prosperous, safe and attractive place to be

The Council has identified seven corporate aims arising out of its Corporate Vision Statement. These are as follows:-

- o Protecting and enhancing our environment
- Maintaining and extending prosperity
- Remain a safe and healthy place to live and work
- Provide a reasonable range of leisure opportunities for health and fun
- Work with key partners to enable and support a balanced housing market
- Provide strong and inclusive communities

The Countryside Service, within the Street Scene section, are responsible for the protection and conservation of Fareham's green spaces amounting to approximately 336 hectares including Holly Hill Woodland Park, Coldeast, Titchfield Country Park, Warsash Common, Seafield Park, Tips Copse, Whiteley Woods, Portchester Common and Anson Grove.

The Council's strategic aims have formed the basis of the work of the Countryside Ranger Service. Specific aims include the following:

- o Protecting and enhancing our environment
- Leisure for health and for fun

# Purpose of the Warsash Common Management Plan 2020-2025

Warsash Common management plan provides the essential information needed to understand site management requirements for the period 2020 – 2025. This plan outlines the management objectives for conservation, access and education and the prescriptions which require implementation to achieve identified objectives. It is intended as a guideline for the current Countryside Service and a reference point for future managers.

It is our Vision that:

'Warsash Common' should be enhanced, conserved and protected as a sustainable, outstanding public open space, 'Site of Importance for Nature Conservation' and a 'Local Nature Reserve'.

The detailed work programme contained within this document clearly sets out the variety of tasks required to achieve the objectives of the management plan. The work programme reflects the complex relationship between recreation and conservation and the many challenges this creates. The plan also considers the resources required to achieve the work programme and highlights shortfalls in revenue and potential sources of future income.

#### SUMMARY OF MANAGEMENT PLAN

Site:	Warsash Common
Grid reference:	SU504056
Locality:	Fareham, South Hampshire
Status:	Site of Importance for Nature Conservation and Local Nature Reserve.
Owned/Managed by:	Fareham Borough Council, Civic Offices, Civic Way, Fareham PO16 7PU. Head of Street Scene – Mark Bowler, Countryside Service - Mark Trigwell, Mark Harrison – Jones and Helen Sosnowski
Contact details:	Tel: 01329 236100 Fax: 01329 821546
Area:	25 hectares
OS Maps:	1:50 000 Sheet 196 (Landranger series) 1:25 000 Sheet 119

#### **Description:**

As a result of past land use Warsash Common comprises a variety of habitats which support a rich array of wildlife and provide an interesting place for people to come a visit. On the former gravel works the habitat is a mixture of rough grassland, scrub and dense secondary woodland.

Semi-natural ancient woodland can be found in the stream valleys to the south of the site providing a valuable wet woodland habitat. There is one permanent pond (Dibles pond) and a series of seasonal ponds of high conservation value.

# **Objective:**

To conserve and enhance Warsash Common as a sustainable and valuable public open space, educational resource, Site of Importance for Nature Conservation (SINC) and a Local Nature Reserve (LNR).

#### **Prescriptions:**

To manage the semi-natural woodlands, grasslands and aquatic habitats in a responsible and sustainable manner and to actively encourage public access and involvement whilst seeking to foster a greater awareness and understanding of the sites importance for both people and wildlife.

Plan prepared by: Mark Harrison - Jones (Countryside Ranger)

#### Achievements during 2009 - 2019

Compartment 1a and b

Much of the chicken wire on the boardwalk has been replaced with glass reinforced fibre (grp) anti-slip slats and rotten slats on the narrow bridge are being replaced with recycled plastic board-walk slats as and when necessary.

GRF anti-slip slats have also been added to one side of the horse bridge to reduce the risk of pedestrians slipping on a surface which is losing the machined grip channels.

The Japanese Knotweed has been brought under control in these areas but not eradicated. The plant still has a hold on the top of the bank adjacent to the Warsash Wasps sports pitches and despite spraying twice a year for five years it remains persistent although manageable.

The other invasive species (laurel and rhododendron), have both been reduced significantly in terms of the area they cover but do continue to persist despite applying herbicide to the exposed stumps. Part of the issue is associated with activating the existing seed bank whilst working to remove the scrub. It is not practicable to spray the vegetation because of the moist, swamp like conditions in this area which reduces the effectiveness of the herbicide. There is also a high risk of killing other plants and contaminating the water courses.

A significant landslip in December 2012 at the eastern end of compartment 1a affected pedestrian safety through the wet woodlands. A section of 1a had to be closed for quite some time while a solution was sought and a monitoring programme regarding the stability of the soil bank was initiated.

After twelve months, the path which separates compartments 1a and 1b was cleared of all soil and other debris and it was reopened although it is not now a path which is not advertised in either the site leaflet or on the interpretation panels.

It was decided not to install the two benches proposed in the 2009-2019 management plan. Experience to date has shown that benches in less obvious places like this attract anti-social behaviour. Experience of damage to the existing infrastructure in these compartments is sporadic but nonetheless it continues to persist.

The wet woodland interpretation panel was installed at the southern end of this compartment. However, it had to be moved to the other end after the landslip. The panel has since been updated to reflect a change in the corporate logo and small errors in the text.

Re-coppicing of a small area of Alder and Willow stools was not investigated and an entomology survey was only undertaken once (2013). See Appendix E for results across the site. A vascular plant survey for the site was carried out in 2011 (see Appendix C).

A safety rail alongside a steep flight of steps in both 1a and 1b was installed to make it easier for users to climb and descend the steep banks in these sections. In addition, a series of long shallow steps was installed down a path between compartments 1b and 3. The tree roots had become overly exposed and represented a trip hazard. Moreover, the natural soil surface became slippery when wet and it was felt that creating a new flight of steps and the safety rail would reduce associated health and safety risks.

# Compartment 2a and b

Both compartments have received little in the way of attention over the last 10 years primarily due to a lack of resources. The cost of creating a boardwalk/ footpath, as suggested in the previous management plan, would have proved too expensive and difficult to maintain in the long term given the natural swamp like conditions.

The path commonly known as the 'school run' was first constructed in 1995 and has required quite extensive repair work in the last two years. Much of the suspended boardwalk has been replaced and a new safety rail has been installed.

The erosion of the bank along the stream is of some concern and long-term measures have been installed to reduce the bank subsiding.

# Compartment 3

A number of the prescribed actions were implemented which included the following:

- eradication of the Japanese Knotweed
- installation of extra benches
- improvements to the path around the edge of this compartment
- continuation of the annual foraging programme
- some scrub clearance on the woodland margins and other sections of this compartment has been done but there are currently no plans to develop a rotational cutting regime as suggested in the previous management plan.

The costs associated with employing a contractor would be prohibitive unless external funding could be secured.

It was decided not to install the picnic area. The high levels of litter experienced around picnic benches on other sites and periodic vandalism of the benches were significant factors in this decision.

The GMX bike area was allowed to 'scrub up' as it too was encouraging misuse, anti-social behaviour and increased levels of litter which included users smashing glass in areas used frequently by dog walkers.

One of the scrub sections near the entrance to this compartment was cleared and replanted as a wild flower meadow in 2015. A mixture of 10% wild flower seed and 90% grass seed was applied. Initially, the low ratio of wild flower mix to grass seed has not proved too successful but the nectar rich wild flowers planted are now becoming established.

Between 2017 and 2019 selected sections of the long, dense blackthorn and willow thicket which separates this compartment from New Road unofficial bridleway, were cleared in an effort to reintroduce better light conditions. The south facing section of the track provided good adder basking sites and it is hoped to encourage them back.

A network of dead hedges have been constructed from the cut debris, some of which are interlinked to an extensive above and below ground hibernaculum. This was built in 2018. It was soon adopted and grass snake, slow worm and common lizard are believed to be making good use of it.

The Japanese Knotweed has persisted on the boundaries between this compartment and 1b. It has been necessary to spray the shoots twice a year for four consecutive years but it still returns in much reduced quantities and size.

Lastly, Curled Leaf Dock and Ragwort had become well established to the point of being invasive. Goat's rue had also spread from compartment 4 and in 2018 the main meadow was sprayed with Headland Polo. This herbicide is designed to eliminate these species swiftly and effectively. Unfortunately, it has had a negative effect on some of the other species like vetch and the clovers. However, the manufacturers note that this is temporary and they will recover over time.

#### Compartment 4

Much of the work prescribed in the previous management plan has been undertaken. Some, like the mowing regime for scallops and the expansion of the grassland were started in late 2018 and continued through 2019.

The Goat's Rue still exists despite spot spraying with Glyphosate but other invasive species like the Ragwort have been cleared. The bramble and the willow on the meadow margins has been cut back on more than one occasion to allow more light

into this area. The south facing fringes of the meadow still prove to be a popular area for breeding grass snakes as regular reptile surveys have shown.

The creation of a ride linking compartments 4 and 8 was not followed through. Instead, work was started in 2016/17 to thin out the secondary woodlands on the southern edge of this compartment. Many of the young oak, birch, and sycamore have been felled and this project is ongoing with the aim of encouraging the grassland to spread deeper into the existing woodland.

Holm oak has appeared in the woodland fringes and action is being taken to control its rapid spread. Laurel was also a dominant species in this compartment and has now been eradicated.

#### Compartment 5

All the work planned in the previous management plan has been undertaken to a lesser or greater degree.

The gravel path which once only ran along the eastern side of the meadow, has been extended and now runs around all but the southern fringe. This has helped considerably as the existing grass path would often become very difficult to walk after any heavy or prolonged periods of rain.

The variety and quantity of wild flower species in this meadow was not high and was, until recently, predominated by Goat's Rue and Dock. In the spring of 2018 the meadow was sprayed with Headland Polo which killed the dock. The Goat's Rue did die back but can be seen to be returning across the meadow.

The clay cap covering the old landfill pit has worn thin in more than one place and it may become necessary to think about putting another layer of soil on it.

In 2012 the Woodland Trust donated a pack of 100 hedge saplings and a 'Royal Oak' sapling as part of the Queen's Jubilee celebrations. A special planting event was organised and on the morning of the 12<sup>th</sup> November 2012, employees from the Hants Constabulary Criminal Records Office (CRO), were trained to prepare soil for planting and to plant hedge saplings. They made good a section of verge on the boundary of the Common in the morning and in the afternoon, they passed on their new-found planting skills to fifteen six and seven year olds from Locks Heath Junior School.

The Royal Oak was planted by the Ward Councillors on the same day and all those saplings planted are growing very well despite the very dry summers we have been experiencing of late. A special plaque commemorating the event was made and fixed in position alongside the hedge.

Lastly, the adder population appears to be less obvious with only one siting reported in the last eight years. It may be that the population has moved to a less obvious area of the compartment particularly since the site is considerably busier than it used to be.

#### Compartment 6

This compartment has received no active management since the previous management plan was initiated primarily because the amount of work required to implement the suggested work would have been too time consuming and or too expensive if contractors had been appointed.

The woodland is certainly maturing as a result of non-intervention but the invasive laurel now predominates and funding would need to be sought if it is to be brought back under control.

#### Compartment 7

This compartment underwent a significant change in the early autumn of 2011 when the dense willow carr was cleared. However, the stumps were not poisoned to prevent regrowth.

This area was allowed to regenerate naturally over the next eighteen months. Initially hard rush flourished across the low lying seasonal ponds and areas of sedges and reedmace also developed.

There is a ridge of slightly higher ground which separates the seasonal ponds and gorse, holly and silver birch which must have been in the seed bank, started to grow back veraciously. Moreover, the willow stumps created new growth and they were all coppiced and some stumps poisoned. Much of the cut willow made good hedge binders and was used in other parts of the site when building dead hedges.

# Compartment 8

Dibles pond has seen a number of improvements over the last ten years. The Parrot's Feather (*Myriophyllum aquaticum*), was 'pulled' on an annual basis for the first seven years and left on the banks of the pond to drain, die and rot. This reduced the level of regrowth significantly to the point where it is now seen only in odd spots around the periphery of the pond. Over the last three years, this very fast-growing weed was pulled as and when it became visible to try and prevent it spreading again. This too has proved effective, but it is felt that it is not possible to completely eradicate it and this section of the site will need regular monitoring throughout the year.

A number of willow and silver birch trees have fallen into the pond at various times over the last ten years. Some, where possible, have been winched out and left to decay naturally on the edge of the pond. Two others were too large to winch out and it was necessary to use a small boat to get across the pond and cut out the canopy. The roots of the fallen trees still allow growth and the heavier submerged limbs may have taken root thus allowing new growth. Ring barking the main trunk has not proved successful and it is felt that the new growth will have to be coppiced regularly in the future.

Other trees close to the rim of the pond have been felled on request but further time and money needs to be put into this compartment to remove more trees and to reduce the amount of leaf litter accumulating in the pond.

The viewing platform was not built after Hook with Warsash CofE Academy built one on the edge of their own pond and Locks Heath Junior School is finding it increasingly difficult to find enough time and parent/ teacher support to make use of this area.

In 2018, the local angling society undertook a survey of the fish life in the pond with a view to relocating the stock. They concluded that the pond is not heavily stocked and given the small sizes of the fish caught, it may be possible the pond is being predated by cormorants. There is now a resident heron which comes to fish on a daily basis. The fish caught were mostly in good condition. A couple had superficial damage and some were bloated. This could be as a result of tapeworm.

It was noted that "the water was very coloured and probably of a low quality. This may be in part due to the fish stocking but is just as likely to be from a number of other factors, perhaps run off, tree litter, poor light and the number of dogs running into the water". In addition, it was felt that "the setting was very nice, there was a fair bit of wildlife present including a deer close by and some excellent dragonflies who seemed intent on sitting with us. We also thought the pond would be nice for children to fish in. So, the pond appears to offer a lot of value to the community".

As a result of the findings and comments at the end of the report, none of the fish stock will be moved.

#### Compartment 9

A botanical survey was carried out in 2011 and 2019 found that the existing national vegetation classification is accurate and that there were no unusual vegetative species in the compartment.

A small mammal survey was also undertaken in 2016 and this identified a healthy population of wood mice and bank vole. An invertebrate survey has yet to be carried out.

A glade was cut into the birch trees but the connecting ride was not created between compartments 9 and 4. Instead, time was spent on thinning the woodlands on the southern boundary of compartment 4 as many of the trees in this section were small enough for the volunteers to cut by hand. Cutting the ride would have involved a considerable amount of chain saw work which would have been difficult to do given the human and financial resources available.

A significant effort to reduce the very dense Cherry Laurel (*Prunus laurocerasus*), and the number of Willow (*Salix cinereal*) on the southern edge of this compartment was started in 2015 and proved very positive. The amount of light reaching the ground increased significantly and whilst the ground flora is slow to develop, there are encouraging signs.

The increase in light enabled the planting of 15 nectar rich saplings. Saplings including Crab Apple (*Malus sylvestris*), Wild Cherry (*Prunus avium*), Blackthorn (*Punus spinosa*), Hawthorn (*Crataegus monogyna*), Tulip Tree (*Liriodendron tulipifera*) and Black Mulberry (*Morus nigra*) were planted in December 2016 by each of the members of the Fareham Conservation Volunteers. They were planted in two concentric circles and quickly became known as the 'circle of friends'. The Mulberry was planted in the middle as a reference to the nursery rhyme 'here we go round the Mulberry bush'.

The rather ugly sewage pipe which runs through the site became more obvious in this compartment after the removal of the laurel. The Friends of Warsash Common conservation volunteers planted fifteen Wych Hazel (*Hamamelis mollis*) stools along the line of the sewage pipe with the long term aim of coppicing it often enough to thicken it up and soften the visual impact of the pipe. These species offer a source of nectar and pollen during the early autumn for some of the more persistent butterflies and bees.

A disc of wood was given to each of the participating volunteers and they were encouraged to put their name and the tree species on it. These were then mounted on one of the rods providing support for each of the trees.

#### Compartment 10a and b

Whilst the botanical survey was carried out in 2011 (see Appendix C), there has been little other work done in these compartments on any great scale. The time necessary to maintain and improve the other compartments has proved exhaustive. Some effort has been undertaken to keep the laurel and sycamore shoots from spreading and no Japanese knotweed has been found to have migrated out of compartment 3.

Further work through this valley has been included in the action plan over the next five years.

#### Compartment 11a and b

There has been much work carried out in these compartments as a result of its inclusion in a 10 year Higher Level Stewardship Agreement. Restoration began in 2013 with a view to extend the grassland, reduce the amount of Yorkshire Fog *(Holcus lanatus),* within the grassland, eliminate the Silver Birch and reduce the amount of gorse and broom.

In addition, Natural England agreed to the idea of creating a woodland pasture around the edges of the existing grassland.

The grassland is grazed twice a year by two ponies provided by a local resident to help reduce scrub regrowth and encourage a greater density of the sward. Dead hedges, live hedges and stock fencing were installed to create a secure boundary. The conservation volunteers made all this possible.

Initial thinning of the woodland proved fruitful with grasses returning. A more concerted effort to reduce the canopy was carried out between 2017 and 2019. Some trees were felled, some pollarded and some ring barked in an effort to provide more light at ground level, standing dead wood to increase biodiversity and nesting opportunities for the local woodpecker population.

The canopy was shredded and the chippings left on site. A reptile hibernaculum was constructed (see below) and some of the wood chippings were used to provide insulation. The larger limbs and trunks were cut to a uniform length and a series of wood stacks created using the Waterhouse design. In 2016 a project was created based on several scientific monitoring projects carried out in Scandinavia. In brief, the aim of this project was to identify what kind of invertebrates exist within the woodlands and to see if there are any invertebrates which migrate toward specific types of timber within the stacks. Whilst the stacks were built to a specific design, the timber used was selected to suite. One stack is constructed from silver birch, one is all oak and one a mixture of oak, hazel, and hawthorn. A paper explaining this project in greater detail is available.

Some of the limbs cut when the trees were thinned or pollarded were too small to be used in the stacks but big enough to make charcoal. Consequently, the conservation volunteers have made a batch of charcoal from silver birch and another using oak.

The increased light levels have ensured that grasses grow and seed associated with acid grassland communities was sown in 2018. This has since germinated and there is now a good grass cover under the woodland canopy. It also connects with the existing grassland.

A small domestic size pond was created and lined with clay but the local deer population drank it dry during the long hot summers recently experienced. Evaporation during the summer also exacerbated the problem and there are no plans to follow this idea up.

The reptiles are monitored annually across the site and data shows a healthy population of slow worms and a very sporadic occurrence of grass snake. The slow worm population has been augmented following the translocation of this species from development sites within the Borough. Two above and below ground hibernaculum have been built to accommodate the increase in population.

The problems associated with Japanese Knotweed do appear to have been eliminated.

Lastly, in November 2011 it was decided to develop a wildlife garden on the edge of compartment 11b instead of increasing the size of the car park. The garden includes a wildflower meadow (22 species planted, 16 species currently flourish), a pond, a boundary hedge and a series of log and habitat stacks. The top of the habitat stacks include an individual 'roof garden' and they were planted with herbs. This is used as an educational tool for the local schools. It also provides inspiration for visitors.

The reptile, small mammal and invertebrate populations are well established but not necessarily wide ranging.

General.

• Tree Trail – educational

The tree trail was launched in March 2015 and was designed to encourage people of all ages to take more advantage of the local natural environment. There are twelve native trees within the trail. Information sheets offer everyone the opportunity to learn which tree is which, facts about ecology and botanical features, man's uses of the wood and some of the folklore associated with each species.

Hook with Warsash CofE Academy use the Tree Trail to help year 6 pupils learn which tree is which and they visit the site during the summer and winter.

A special booklet was designed and includes a map of the site along with the information sheets and a special quiz using haiku poems. This can be downloaded from the Council's website and on average 700 people do just that every year. There is also an abridged version which can be downloaded onto a phone or tablet using a QR code. This has been downloaded by some 400 users a year since the launch of this facility.

Lastly, in 2016 an audio version was created. This can be downloaded onto a phone or other suitable device. This has been downloaded a total of 359 times between 2016 and 2019.

• Poetry Path - community engagement

The poetry path follows the same route as the Tree Trail and was introduced at the same time. Local schools and a local writers group provide poems which are then laminated and put on display. The schools and writers group are informed that the poems are on display but they are not told where on the site they can be found. This encourages the authors to visit the site and search for their work. Four posts were attached to benches around the site, two display boards were added to two bridges and four suspended display units were added to the limbs of two trees in very different parts of the site. The poems are changed four times a year and notices informing the general public of changes are attached to the main entry points.

Plant of the month – educational & interpretation
 Each month a seasonal plant was selected and an information sheet created.
 Readers were able to learn about the origins of the common name, the botanical and ecological facts, associated folklore and its uses in early medicine. The fact sheets were displayed in the notice board alongside the main entrance and this project was carried through 2017 and 2018.

The fact sheets were also added to the Council's website and advertised on social media. On average, 600 people were reading and/ or downloading the fact sheets every month.

- Redesign of site leaflet education & interpretation
   The leaflet for Warsash Common has been redesigned twice in the last ten
   years. The more recent edition provides updates associated with the
   introduction of the Tree Trail, the Poetry Path and changes in the footpath
   network.
- Reintroduction of waymarking signs education & interpretation
   In 2011 the path network was colour coded offering visitors the chance to
   follow three different routes. The routes vary in length and difficulty but all
   interconnect making it possible to see all the different habitats across the site.

A new waymarking sign providing direction for the Tree Trail route was added to the existing waymarking posts in 2015.

- Small mammal survey habitat/ species management
   A small mammal survey was carried out in the autumn/ winter of 2015/16. Ten
   traps were placed in each of the compartments over a period of three weeks
   and results showed a good population of Wood Mice, Bank Voles and Field
   Voles across all compartments. The Common Shrew was only detected in
   compartment 11b. Results are given in Appendix F.
- Reptile surveys habitat/ species management Reptile surveys were carried out by members of the Fareham Conservation Group between May and September annually with work beginning in 2015.

The reptile matts were restricted to compartments 3,4,7,9 and 11. Results identified good populations of slow worms in all compartments, common lizards in 3 and 4, grass snakes in 4,7 and 9 and in 2019 a juvenile Great Crested Newt was found in compartment 7.

Adders do exist on the site and have been reported by members of the public annually since 2011. However, volunteers have not recorded any under the matts during the survey periods.

The site is now very much busier than it was in 2008, the earliest computer record when adders were logged, and it might be that the population has moved into the quieter long grass areas in compartment 3. This needs to be explored further. Results are given in Appendix B.

- Botanical survey habitat/ species management A full botanical survey was carried out in 2011/12, the results are given in the appendices.
- Annual Big Butterfly Count habitat/ species management Members of Fareham Conservation Group and the Friends of Warsash Common volunteer groups have carried out butterfly surveys to coincide with the Butterfly Conservation Trust's Big Butterfly Count project.

Recording started in 2016 and data gathered reflected the national trends.

In 2018, the Fareham Moth Group identified the larvae cases of a very rare moth (*Bankesia conspurcatella*). Known only in one other part of the UK (Wales), the group undertook a survey of a particular section of the site. This moth is only seen during the first two weeks of March and is only active at sunrise. The group were pleasantly surprised to find it active over a greater area than they envisaged. The moth appears to favour laying the eggs on telephone posts and the 6" round post and rail fencing which runs down New Road. Further studies will be carried out in the coming years.

Regular school visits - educational & interpretation
 Prior to 2009, the two local junior schools would take advantage of the
 Countryside Ranger Service and arrange regular pond-dipping sessions on
 the site. However, this stopped in 2011 when Hook with Warsash CofE
 Academy built their own pond and regulations regarding parent/ teacher to
 pupil ratios changed.

Increases in the size of the classes and changes in the parent/ teacher to pupil ratio have made it more difficult for teachers to take advantage of the site and both schools now only use Warsash Common twice a year. Hookwith-Warash CofE Academy carries out its own Tree Trail trips and Locks Heath Junior school works with the Countryside Ranger Service to explore the range of different habitats and work associated with food chains.

 Annual Open Days – community engagement Over the past three years, the site manager and the Fareham Conservation Volunteers organised an annual 'open day' for local community groups and the public. The events included a tour of the site and the chance to get involved in activities like bird box building, charcoal making, making and applying daub, dissecting owl pellets and learning which paw print belongs to which animal.

Numbers of visitors were restricted to 20 per event and divided into four groups of five. Each group spent 30 minutes at each activity point.

Each event was free to attend and all places were reserved. Feedback was always very positive from attendees.

- South & South East In Bloom awards Warsash Common was initially entered in 2012 under the 'small conservation area' category. It has been awarded a gold medal each year since then and was also judged 'best in category' in 2018.
- Lest We Forget memorial 2018 (compartment 3 alongside Poetry Tree 1). In late October the turf was stripped from three parallel lines and prepared for planting. Each line measures approximately 20' x 18".

On the morning of the 11<sup>th</sup> November 2018 the middle stripe was planted with white poppy seeds and the other two lines were planted with red field poppy seeds. The two red stripes now symbolise the first world war trenches and the middle line represents the area of land where soldiers from opposing sides met to talk and play football on Christmas day 1914 during the brief armistice.

The memorial was prepared and seeded by members of the conservation volunteers and close family. Unfortunately, the memorial area has had to be fenced off to prevent people and dogs from walking over it despite notices being posted asking them not to do so.

Each year, after the seed has fallen, the soil will be turned to ensure that the seed continues to germinate. Subsequently, this natural memorial will remain a regular reminder to those who lost their lives because of war – lest we forget.

#### **STAGE 1: DESCRIPTION**

# 1.1 GENERAL INFORMATION Location

Warsash Common is situated between Titchfield and Sarisbury, to the west of Fareham. The main entrance to the site is off New Road, which is off Dibles Road and Fleet End Road in Warsash.

#### **Summary description**

The site covers approximately 25 hectares. It is bounded by urban development on three sides and a small wooded stream valley on the fourth. It is not a 'common' by law but by name only.

The site supports a variety of habitats including wet and dry woodlands, grasslands and ponds (seasonal and permanent).

Map evidence indicates that this site was once part of Titchfield Common. The stream valley of Dibles Bottom on the western side of the site is now the only area that is relatively undisturbed since then. Extensive gravel extraction, which ceased towards the end of the 1940s, has created a varied topography. Infilling with domestic refuse followed by capping and re-seeding has created a relatively flat grassland area in the centre of the site.

The value of the site is in the wide variety of habitats that are found in a relatively small area and the potential for creating new habitats, in particular grassland.

#### Land Tenure

Warsash Common has been fully owned by Fareham Borough Council since 1994 and is managed by the Street Scene Department. New Road, which crosses the site, is a highway that is closed to vehicular traffic.

#### Designations

Warsash Common is currently recognised as a SINC for its wet woodland component. The reptile population also forms part of the designation criteria. The site is also a Local Nature Reserve (LNR). It was designated an LNR in 2010.

#### **Management Infrastructure**

Warsash Common is managed by the Council's Countryside Ranger Service.

A Countryside Ranger has overall responsibility for the administration, management, strategic planning and protection of the site and the activities that are undertaken. The Ranger is also the main point of contact for both the Fareham Conservation Volunteers and the Warsash Conservation Volunteers as well as local residents and visitors to the site.

The volunteers are a valuable asset and contribute around 840 work hours per year and are now very much involved in important aspects of the work undertaken.

Guidance and support are also provided from time to time by the Council's Tree Team.

The Council currently has a net revenue budget of approximately £141,400 for the Countryside Service, which includes the management of Warsash Common. On average approximately 10-12% of this revenue budget funds the management of Warsash Common. In addition, the Higher Level Stewardship scheme provides £3,070 a year. This money is used to fund new projects and maintain or develop further projects implemented over the last five years. This source of general maintenance money is shared with the sister site, Portchester Common. The life of the scheme is limited and there are five years left to run.

#### Map Coverage

Fareham Borough Council has a geographical information system covering the borough based on Ordnance Survey data. Copies of historical maps dated 1826 and 1845 are held by Fareham Borough Council Planning Department, further maps are held in Fareham Library.

#### Photographic Coverage

Aerial photographs dated 1971, 1981 and 1991 at 1:10 000 and 1996 at 1:20 000 are held by Fareham Borough Council.

#### Services

Southern Water has a pumping station on the boundary of compartment 6 to the North West of the site which effects flow of water in the stream running through the site. There is also a large overhead and underground sewerage pipe running through the site out to Dibles Road. There are electricity cables running through compartment 11. Work is undertaken periodically by Southern Electric to cut back vegetation under the cables. This was last carried out in 2008.

#### 1.2 ENVIRONMENTAL INFORMATION 1.2.1 Physical

# Hydrology

The Hydrogeological Map of Hampshire and the Isle of Wight (Institute of Geological Sciences 1979) indicates that the surface gravel deposits are permeable and capable of supplying small amounts of water for local supply. The underlying Bracklesham strata are indicated as having generally low yields. The base of the Tertiary deposits over Chalk is indicated at about -200ft (60m) AOD which is about 75m below the ground surface.

Because the Tertiary strata contain thick layers of clay, water held in the surface gravels will not be in hydrological continuity with the Chalk which is a major aquifer. The terrace gravel deposits either side of Warsash Common are permeable and because the general landform slopes to the southeast, groundwater perched within the gravels can be assumed to flow towards the southeast (towards the coast). However this perched water will be intercepted by the Hook Lake stream and its tributaries which will conduct most water direct to the mouth of the Hamble Estuary.

Because the underlying Tertiary Selsey formation is moderately permeable and dips at about *3.5* degrees towards the south-southeast, some water from the Terrace

Deposits is likely to pass down through the floor of the pit and travel by subsurface flow towards the coast, although some of this water will be intercepted by gravel workings down groundwater flow of the site. These assumed groundwater flows are indicated on Drawing 8.

# Surface Drainage

The main feature is the Hook Lake stream which flows in Hook Valley along the southern boundary of the site. This stream is fed by a series of un-named tributaries, including that passing through Dibles Bottom, arising mainly off higher gravel terraces to the north and east. One of these tributaries arises to the southeast from springs at the edge of Hook Lane Landfill Site. Other tributaries from the north flow through wooded valleys. One such wooded valley flows south through the eastern part of the site and another (Dibles Bottom) forms the western boundary. Southwest of the site, beyond Church Road, the Hook Lake stream passes through ancient woodland to flow through the reed beds of Hook Lake. Both the woodland and Hook Lake are contained within the Hook With Warsash Local Nature Reserve and also comprise part of the Lee-on-The Solent to Itchen Estuary Site of Special Scientific Interest.

# Geology

The Solid and Drift Geology of the site is shown on the 1:50 000 scale Southampton Sheet (No 315) of the British Geological Survey (Ordnance Survey 1987) and in more detail in the British Geological Survey 1:10000 scale sheets SU4O SE (1978) and NE (1983) and 5U50 SW and NW (both 1985).

Warsash Common is within the broad geological region known as the Hampshire Tertiary Basin, an area of southern Hampshire underlain by clays, barns and fine sands of the Tertiary Era but which are mostly overlain by thinner (Superficial or Drift) materials, such as Terrace Deposits, Head and Brickearth that were deposited during the later Quaternary Era.

The site is underlain by Tertiary deposits of the Eocene Marsh Farm Formation (laminated clays and sands) and the overlying Selsey Formation (silty sands, sandy silts and sandy clays), both formations being part of the Palaeogene Bracklesham Group. Dip is about *3.5* degrees to the south-southeast. Below these formations are the Earnley Sand formation and Wittering Formation of the lower Bracklesham Group, in turn underlain by the London Clay and Reading Formation before reaching the Upper Chalk. The Upper Chalk is met at about 75m below the ground surface (-60m AOD).

Overlying the Tertiary sequence, the drift geology consists of gravels and sands of the River Terrace Deposits locally overlain by silty Brickearth. Alluvium occurs in the river valley floors and the extensive excavations are partially filled with inert and domestic waste.

#### Geomorphology Soils/substrates

The surface geology was originally glacial sands and gravels resulting in acidic soil conditions, however the high level of ground disturbance caused by gravel extraction and land-fill mean that natural soils are rare. However, land around the site can be inferred from the 1:250 000 scale Soil Map of Southeast England (Ordnance Survey 1983) to have soils of the Hamble 2 Soil Association described on the Map Legend as:

'Deep well drained stoneless silty soils and similar soils affected by groundwater; over gravel locally'.

The depth of silty material varies and the underlying gravel can be near to the surface. In places, and especially in surface layers, the gravels are clay bound and give rise to soils with slightly impeded drainage.

# Climate

Warsash Common has a fairly oceanic climate, with warm summers and mild winters. The proximity of the sea reduces the extremes of temperature and ensures fairly high levels of humidity.

# Landscape type and character

# 1.2.2 Biological

# Habitats

Warsash Common is a complex site with a variety of habitat types including grassland, scrub, semi-natural secondary and ancient woodland, ponds and streams.

An ancient woodland survey undertaken by Hampshire Biodiversity Information Centre in 2004 showed a number of ancient woodland indicator species existing in the valley bottom to the south of the site.

# **NVC Plant Communities**

A National Vegetation Classification Survey of the site was undertaken by the Hampshire Biodiversity Information Centre in 2019 with the following habitats recorded:

# List of NVC Communities

WI Salix cinerea-Galium palustre woodland
W2a Salix cinerea-Betula pubescens-Phragmites australis woodland, Alnus glutinosa-Filipendula ulmaria sub-community
W2b Salix cinerea-Betula pubescens-Phragmites australis woodland, Sphagnum sub- community

W5 Wet Woodland W8 Woodland W10 Open Woodland WI0c Quercus robur-Pteridium aquilinum-Rubus fruticosus woodland, Hedera helix subcommunity

W21 Crataegus monogyna-Hedera helix scrub, Hedera helix-Urtica dioica subcommunity

W22 *Prunus spinosa-Rubus fruticosus scrub*, *Viola riviniana-Veronica chamaedrys* sub- community

W24 Rubus fruticosus-Holcus lanatus underscmb, Arrhenatherum elatius-Heracleum sphondylium sub-community.

MG1a, Arrhenatherum elatius grassland, Urtica dioica sub-community MG6 Bare Ground/ Grassland

#### MG12v

M05a Cynosurus cristatus-Centaurea nigra grassland, Lathyrus pratensis subcommunity.

U1b Festuca ovina-Agrostis capillaris-Rumex acetosella grassland, typical subcommunity

# Animals

#### Amphibians

Both smooth newts and palmate newts were recorded in Dibles Pond and the seasonal pond adjacent to Dibles Meadow during surveys conducted in 2011. Palmate newts were also recorded throughout naturally occurring wet flushes in compartment 8. Great crested newts were found in the seasonal ponds in 2019. Sightings of common frogs at Dibles Pond during 2011 and 2015 confirm presence on site although frogspawn was only found in the seasonal ponds. The large fish and palmate newt populations present at Dibles Pond are likely to account for the absence of frogspawn sightings here. Toads are also present in the wet woodland areas of the site and in compartments 9 and 11.

# Birds

Birds have not been recorded across the Common in a formal way. However, casual observations have proved that the site supports a wide range of species. In part this is due to the diversity of habitats found within the site, most notably that of developed scrub. This habitat along with developed woodland is likely to support a wide range of breeding birds along with spring and autumn passage and overwintering migrants.

The more open areas afford feeding areas both in summer and winter. Again, these depend upon the mosaic of habitats present on the Common, and some of the areas of open water are also important in this regard.

# Fish

There are considerable numbers of introduced fish in Dibles pond which are surviving and breeding including roach, tench, perch and golden orf. See 'Achievements' section for further information.

#### Invertebrates

A specialist entomological survey was commissioned in 2008 to obtain basic background information on the invertebrate fauna of the site, with emphasis on the more open habitats in compartments 3, 4, 5 and 10a. A total of 390 invertebrate species were recorded during this survey. None of these species are listed on the Hampshire Biodiversity Action Plan (BAP) but there were 13 species of national significance including bleeding heart spider and woodland grasshopper. See Appendix E.

Ongoing moth trapping sessions and setting up a regularly walked butterfly transect have helped to build up species data for Lepidoptera. The Countryside Service and the associated volunteer groups take part in the annual Big Butterfly Count and data collected is submitted to the Butterfly Conservation Trust annually.

A detailed survey of freshwater aquatic invertebrate fauna would be useful for assessing impacts of future management of aquatic habitats on the site.

#### Mammals

With numerous sightings by a local enthusiast there is evidence of roe deer spotted across the site.

Both species of pipistrelle bats (BAP species) have been recorded at Warsash Common in 2008 using a bat detector. These sightings have been concentrated in the open areas, along the tree line of New Road and Dibles Pond.

Badger setts exist on a woodland bank in compartments 1b and 6. Observations have shown that the sett is still active and there is evidence of badger activity (summer setts) around the site.

Small mammal species noted by observation include common shrew, bank vole and the ubiquitous wood mouse. A small mammal survey was undertaken in 2016/17. See Appendix G.

# Reptiles

Reptile surveys during 2008 suggested a healthy adder population. Numbers appear to be concentrated along woodland edges as they come to bask in more open grassland areas. Recent surveys have not detected any adder movement and they have only been seen by casual users in compartments 3 and 5. Grass snakes also occur with sightings in the grassland areas of compartments 4 and 5 and Dibles Pond. Slow worms are frequently encountered across the site and recent surveys suggest a healthy population exits. Common lizards have also been observed in compartments 3, 4 and 5.

Regular surveys undertaken between 2015 and 2018 continue to show a healthy population of grass snakes and slow worms across the site. However, the common lizard, whilst still present, appears to have dropped in numbers and has only been observed in compartments 3 and 5.

# 1.2.3 Cultural

#### **Historical and Present Land Use**

The site was formerly part of Titchfield Common, an area of lowland heath, which would have been grazed by cattle and sheep. In the 1860s the land was divided up into a series of enclosures creating a number of small agricultural holdings. Gravel extraction took place from the 1930s to the 1940s. Subsequently the centre of the site was used as a domestic landfill site until the 1960s. The purchase of privately owned sections of the site by Fareham Borough Council, was completed in 1994 and the entire site was designated a public open space.

#### **Recent History**

#### **Public Access**

New Road, which has long been used as a route to St Mary's Church (Church Road) and is the only right of way through the site. It is classified as a Highway that is closed to vehicles. The main entrance points onto the site are either end of New Road and off of Dibles Road into compartment 5. There is unrestricted permissive access across the site, however seasonal flooding in various compartments often dictates the extent of permissive access at any given time. There is an easy access route running from New Road and joining a circular route around the main meadow of compartment 3. Due to the topography of the landscape much of the site is unsuitable for easy access with steep valley slopes.

# **Recreational Activities and Facilities**

Warsash Common is used considerably by local people as an area for informal recreation, in particular dog walking, horse riding, cycling, angling and family walks. The site is also visited by local nature enthusiasts such as bird watchers and those seeking to photograph local wildlife. Although desirable to accommodate all of these recreational activities it is important to avoid conflict between user groups and to minimise disturbance of sensitive nature conservation areas.

Horse riding is restricted to the unofficial bridle way along New Road which dissects the site centrally east to west. This is also advertised as an easy access path and cycle route.

An informal bike track was established in one area of compartment 3. This has not been maintained and has mostly scrubbed over. The bike track created a conflict of interest. Potential health and safety issues arose as a result of ani-social behaviour, vandalism of fencing and creation of large and unsafe jumps. There are no plans to reinstate this facility.

# **Community Involvement and Education**

There is a small (8-10 volunteers), but long-standing 'friends' group at Warsash Common that have historically undertaken various work to assist in the management of the site. The friends group was established in 1992 and has worked in the past with support from the Greenspace Community Environment Project, the Fareport Countryside Project and Fareham Borough Council's Countryside Service. Despite periods of inactivity linked to staffing issues, the group has been actively involved in site management since 2007/2008 including practical tasks such as scrub clearance and pond management, as well as species surveys and monitoring.

There has been input from a local business that has initiatives for teams of employees to become actively involved in community and environmental projects. There is potential for establishing longer term relationships with local businesses with similar initiatives, again strengthening the community involvement in the management of the site and helping to achieve targets.

The site has considerable potential as an educational resource for local schools, providing opportunities for work across a range of subjects within the national curriculum. Locks Heath Infant and Junior schools have been making two trips a year to the site since 2015 with the Countryside Service providing planning and support. Hook with Warsash C of E Academy use the Tree Trail as a point of interest and as an educational tool.

Warsash Common has been used in the past to host family events such as herbal workshops, fungal forays, moth trapping and guided walks. The number of people attending these events has been changeable in the past but changes in the themes and the scope of interest has seen greater attendance numbers.

Countryside staff continue to give talks to the residents' associations regarding the sites conservation and management. Further opportunities to give talks to local interest groups and local schools have payed dividends with regular requests made to the Countryside Service for onsite 'walks and talks'. This includes WI groups, wildlife organisations and local cubs/ scout's groups.

# Marketing and Promotion

A colour leaflet was produced in 1999 and updated in 2015. It provides information about the history and wildlife on the site as well as a basic map showing the main footpath network.

Volunteer newsletters are produced every 12 months and distributed to the volunteers. These newsletters advertise volunteering opportunities on various countryside sites across the Borough, including Warsash Common. Display boards now also provide a means of advertising upcoming events and guided walks or providing seasonal information to site users.

Social media is also used to promote events on the site. It is also used to advertise a change of poems on the poetry path.

#### STAGE 2: EVALUATION 2.1 EVALUATION OF FEATURES 2.1.1 Criteria for site evaluation Size

The site covers 25 hectares but is linked to a wider landscape of natural habitats to the south most notably with the Hook with Warsash complex, managed by Hampshire County Council. The site affords a number of differing habitat types with some ancient woodland remnants with more recent developed open areas. The Common contributes significantly to wildlife habitat provision and is the largest site within the ward of Warsash which Fareham Borough Council currently own and manage.

#### Diversity

Habitat variety on site is in the main uniform but ride and glades link areas effectively and vegetation structure between habitats is good. The Common is particularly important owing to its proximity to the Solent coastline. This factor has contributed to the botanical and entomological interest of the site and high value for migrant birds. Herpetological interest is high owing to its relatively open aspect and topography

#### **Naturalness**

The Common has been greatly affected by human impact particularly in recent times, both from gravel extraction and as a temporary landfill site. However, since this period the site has been allowed to redevelop naturally and exhibits natural gradients between open areas, scrub to woodland. The area which is probably the most 'natural' is the wet woodland valley, aided by its relative inaccessibility.

#### Rarity

Whilst not a rare example of its type, it's principal value of this relatively new site is its size and that since its previous land use it has been allowed to redevelop naturally.

#### Fragility

The site as a whole is not particularly fragile but there are certain areas of concern.

Japanese knotweed invaded a few areas close to boundaries and action to eliminate it has been ongoing. Despite spraying it twice a year for five years, it has not been possible to eradicate it. The amount of Knotweed has been reduced but fresh shoots do occur in inter-related areas.

The common has a few substantial areas of wet woodland in its lower parts which should be monitored for potential pollutants. A reduction in canopy will assist maintaining light and shaded areas within this type of habitat.

Detrimental human activity is considered a medium risk and fire damage is starting to increase. Low levels of rain between 2016 and 2019 have increased this problem.

#### **Recorded History**

Historic knowledge of the sites land use has largely been gathered from local residents and a few photographs exist of the site when gravel extraction was at its peak. Flora and fauna records in recent years have improved greatly with commissioned botanical and entomological surveys in 2008 and 2011. The biological recorded history of the site is patchy and nothing dates back earlier than 1979. Botanical surveys were carried out in 1979, 1984, 1990 and 1994. An entomological survey was carried out in 1999.

A fixed point photography route was established in 2010 and has enabled the Countryside Service to record vegetation changes during the period of the plan. The most notable change was the clearance of the willow carr in compartment 7.

The Ranger has also kept a photographic record of many of the changes associated with significant projects like the wildflower meadow developments, tree trail/ poetry path introduction, the acid grassland restoration and the woodland pasture development. Other photographic 'diaries' include the 'circle of friends' and the 'Lest We Forget' projects.

#### **Ecological Position**

The site is linked in the south with Hook with Warsash LNR. This connectivity makes a significant contribution to the nature conservation value of the local area.

#### **Potential Value**

The Common is a valuable asset in terms of its provision for recreation and a haven for wildlife. There is still good potential for improvement in habitat quality and biodiversity initiatives.

#### **Intrinsic Appeal**

Warsash Common is primarily frequented by local residents and use has grown significantly over the last eight years. The site is far enough away from any major roads which makes it a fairly quiet place and adds to the appeal.

Commercial dog walking has increased significantly over the last five years and the site is used a lot by six to eight local companies. A number of them tend to use the site at the same time which can lead to excessive periods of barking.

# **Public Use**

The site is classified as public open space and is open all year round to members of the public. A comprehensive path network enables access to the majority of the site. Areas sensitive to public pressure such as the wet woodland and the acid grassland areas have limited or no public access. When undertaking improvements to the paths every effort is made to incorporate enhancements to enable access for all i.e. toe rails and hand rails on bridges and steps and levelling gradients.

Visitors to the Common have an area on New Road, off Fleet End Road in which they can park, if travelling by car. There are no toilet facilities close to the site. There are five seating benches located around the site which are well used. Activities undertaken on the site are mainly low impact. Ad hoc cycling does occur but generally does not pose a threat to the site or other users. Dog walking is a very popular activity. The production of a dog policy will be developed for the Common in the future in light of this popular pastime. Proposals include ensuring that all dogs are kept on a lead in all but the Dibles Meadow area.

# **Community Involvement**

The local community are encouraged to participate in the long-term maintenance and development of Warsash Common. This is being achieved in association with two voluntary conservation groups. The Friends of Warsash Common meet once a month and The Fareham Conservation Volunteers work on the site two to three times a month. On average, the volunteers provide 80 hours of their time each month and participate in maintenance work and an assorted range of conservation projects.

The business community also offered help until 2017. However, staff cuts within the public and private sector meant that it was not possible for the relevant organisations to continue offering volunteer time.

#### **Education and Information**

The site is used on occasion for educational purposes by Hook with Warsash C of E Academy and Locks Heath Infant/ Junior schools. It is ideal for curriculum based science and nature studies and the site ranger works alongside the teachers to focus visits which enhance the projects the pupils are studying.

A full colour site leaflet is available; this is designed to give people basic information about the site, its wildlife and history. The most recent copy of the leaflet was updated in 2017. There are also interpretation panels at two of the four entrances and at four other points around the site. These provide maps and information about the habitats.

# 2.2 FACTORS INFLUENCING MANAGEMENT

#### **Natural Trends**

Climate factors such as very high winds can have a potentially devastating impact on the landscape. Similarly, summer droughts can have a detrimental impact on trees and their natural cycles. Climate change may raise new challenges in the future and the increase in the number of diseases affecting native trees (Ash Dieback etc), are already affecting the site.

Management will need to keep abreast of changes and recommendations in nature conservation practice.

# Man Induced Trends (Anthropogenic Factors)

Management of the site is influenced by numbers of visitors (site popularity) and occasional abuse of the sites features. General erosion of paths through regular use is a common factor.

Fly-tipping occurs infrequently and is usually restricted to areas close to the car park.

Other site abuse is usually in the form of vandalism of furniture, signs, and trees. Activities of vandalism are at their worst during the summer months when youngsters frequent the park of an evening. There has also been a notable increase in those using both Class A and B drugs. The local constabulary do try to monitor this issue but staff shortages mean that they are not able to visit the site on a regular basis. Motorcycling has in the past been an issue but appears to have dropped off in the last five years. Prohibitive signs have been placed at some entrance points which may have also contributed.

In recent years dog fouling has become more of a problem. Loose or untrained dogs cause both disturbance to wildlife and a nuisance to other users of the site. The Council have dog wardens who will engage with persistent offenders.

Fire is always a potential threat whether occurring naturally or as a result of arson. However, the site is in the main relatively robust, owing to its proximity to the coastline and its naturally damp conditions. Exceptionally dry summers are when the site is at its most vulnerable.

#### **External Factors**

The Council is under increasing pressure to build houses across the borough and the closure of a local nursery will see 400 new properties built within a mile of the site between 2020 and 2022. This will undoubtedly have a significant effect on the site.

#### Obligations

The successful management and safe guarding of the Common will depend on compliance with the following obligations:

#### Health & Safety at Work Act, 1974 (and amendments)

The council has a duty of care to ensure that, as far as reasonably practical, all employees, volunteers, contractors and visitors to the park are able to visit, work and enjoy the site in a safe and healthy environment. All operations undertaken within the park are done so qualified and trained individuals utilising methods and equipment which conforms to the Health & Safety regulations including the Council's own policies. Site risk assessments are annually reviewed and amended as necessary. Specific tasks on work days are risk assessed for the specific nature of work required in conjunction with site safety considerations. Regular safety inspections of the site are undertaken and recorded.

#### **Disability Discrimination Act, 1998**

Fareham Borough Council are required, where practical, to ensure that members of the public are not discriminated against when visiting or using Warsash Common for recreation. Work will be undertaken where appropriate to tackle those physical elements which preclude access owing to disability. Consultation with Fareham Access Group will be part of any planned access improvement to ensure that the needs of users are being met.

#### Wildlife & Countryside Act, 1981

Requires that that no adverse management should take place which has a detrimental effect on wildlife provision.

Along with wildlife listed under this act, both badgers and bats are resident on the site and are legally protected No management can occur in those areas where a sett or roost is known without consultation with Natural England.

#### Occupiers Liability Act, 1984

As owners of the site the Council has duty to ensure that every reasonable care is taken with regards the safety of persons who visit or come into the park. Regular inspections of the site are undertaken to enable problems or issues to be identified and resolved.

#### Environmental Protection Act

The Council has an obligation to ensure that the Common is free from litter and refuse.

#### The Conservation (Natural Habitats, &c.) Regulations 1994

These regulations require that management of woodlands and forestry operations in areas where protected species are found and which a set of procedures need to be undertaken. There is good practice guidance which assists in habitat management where protected species are both known to occur or have the potential to occur. <u>Safeguarding European Protected Species</u>. In essence it requires preliminary survey to ascertain information and the possible need for licence prior to works.

# Countryside and Rights of Way Act, 2000 (CRoW Act)

These regulations have relevance in relation to appropriate protection and management of habitats deemed of national importance (Section 74). Warsash Common has one such recognised habitat type – wet woodland.

# **Management Constraints**

Warsash Common is currently funded through the Council's revenue budgets which is supplemented by an HLS agreement. This extra source of funding (£1,500), comes to an end in 2025. The revenue budget is spread across a number of countryside sites and there is no specific sum allocated to each site. The budget has not been increased over the last ten years. This management plan will help to identify the necessary funding needed and will help with the budgeting process.

The Council continues to seek financial contributions from developers through Section 106 legal agreements. With the large amount of development currently undertaken within the western wards of the Borough there is scope to tap into this source of funding.

Fareham Borough Council currently employ three countryside staff who manage sixteen sites across the Borough. This is sufficient to provide the minimum amount of land and visitor management. However, there is increased pressure on this resource as the Council adopts more areas of woodland and other sites with important habitat management requirements.

Increasingly, volunteers and friends groups are being used to assist with a variety of tasks. The specialist knowledge of the staff currently employed is a valuable asset especially with regard to managing restoration projects and providing information to visitors.

Foraging and path maintenance contracts were brought 'in-house' at the beginning of 2019 and the Grounds Maintenance Teams play an important role in keeping the paths clear of natural scrub regrowth and emptying the litter bins on a regular basis.

# **STAGE 3: OBJECTIVES**

# **3.1 MANAGEMENT OBJECTIVES**

- 1. To maintain, preserve and enhance wildlife habitats and their associated species
- 2. To engage the community in the management of the site and seek to develop a greater awareness of its' importance for both people and wildlife
- 3. To enhance and promote the site as an educational resource
- 4. To promote the sustainable use of the site for quiet, informal recreation and enjoyment
- 5. To encourage the effective and sustainable use of our resources
- 6. To monitor and review management practices and keep up to date with any advances in best practice guidelines for conservation purposes.

# **3.2 RATIONALE AND OPERATIONAL OBJECTIVES**

#### 3.2.1 Objective 1

# To maintain, preserve and enhance wildlife habitats and their associated species.

The Council will ensure that Warsash Common will continue to play a future part in maintaining the biodiversity on a local, regional and national scale by linking management to relevant legislation and target criteria in regional and local biodiversity plans.

Warsash Common comprises a wide variety of habitats with varying needs for management. The habitats in need of active management as a priority are those most vulnerable to rapid changes, namely the open grassland areas and the ponds.

#### Grasslands

The main open habitats are semi-improved neutral grassland. There is also one area of semi-natural acid grassland (compartment 11). An annual mowing regime is needed to maintain and enhance the rough grassland. The acid grassland will continue to be grazed by ponies one or two times a year. It is important that these open grassland areas are not lost to the encroachment of scrub as they provide important habitat for sun-loving insects, reptiles and birds. It is equally important to leave some areas unmown as a buffer for wildlife, such as skippers that over winter as pupae on grass sheaths.

# Aquatic habitats

There are a number of seasonal ponds, the largest and best known is Dibles Pond, situated to the north of the site (compartment 8). Future management should aim to sustain these ponds and prevent scrub regeneration

There are two small streams running through the site, one which enters the site at the north east corner of compartment 9, flows southwards along the edge of compartment

9 into compartment 10 and eventually joins Hook Lake. The other passes from Dibles Road southwards through compartments 1 and 2. Work should be carried out to reduce the scrub and sycamore saplings in compartments 1 and 2.

#### Scrub

Scrub habitat at Warsash Common is part of a secondary succession on grassland or heathland and is dominated by shrubs and bushes. Principal species include hawthorn, blackthorn, dog rose, bramble, birch and willow. Gorse scrub is present in compartments 5 and 11.

The majority of scrub habitat on the site forms an ephemeral transition between open habitats and woodland as an important part of a habitat mosaic. There are also small isolated pockets of scrub in some of the open areas of the site. This scrub habitat has high conservation value supporting breeding birds such as linnet, bullfinch, whitethroat and long tailed tit. Scrub habitat also provides a warm micro-climate to shelter insects such as butterflies from prevailing winds and serves as a refuge for reptiles and small mammals. With an adder population present on the site, scrub is important as a refuge for adder hibernacula and as a feeding site, providing habitat for prey species.

Ongoing management is vital to retain scrub as an integral part of the habitat mosaic at Warsash Common whilst preventing encroachment onto open grassland. A rotational cutting regime will help to create a diversity of age structures of the species present and should aim to maintain the appropriate extent of scrub. In some areas of the site, scrub has encroached onto open grassland at too great an extent and this should be cut back before being brought into the annual rotational cutting regime.

#### Woodland

The woodland at Warsash Common is a mixture of ancient and secondary seminatural communities. The ancient semi-natural woodland occurs to the south of the site as wet woodland in the valley bottom, dominated by alder, and dry woodland on the valley slopes which is predominantly oak with some aspen, birch, beech, rowan, field maple, cherry, hazel and holly. The younger secondary woodland occurs to the north of the site and has regenerated on disturbed land following the cessation of gravel extraction in the 1950s. The secondary woodland is of two main types: the wetter woodland here consists of grey willow and downy birch and the rest is mainly oak with some aspen, rowan, cherry, holly and sycamore. Much of this habitat is seasonally wet and water levels fluctuate significantly. The seasonal ponds, including Dibles pond, are surrounded by this dense secondary woodland. To improve water quality and biodivesity within the Dibles area, further thinning of woodland should be worked in to the action plan.

Woodland management should aim to encourage diversity of woodland structure, habitats and species of native trees and shrubs. In some areas of the site it is appropriate to thin the canopy, open up existing rides and look to create new rides and glades in the woodland to facilitate species mobility and allow light to penetrate to the ground. Creating and maintaining these variations in micro-climate within the

woodland habitat will serve to increase biodiversity. Other areas of woodland may benefit from non-intervention to achieve desired outcomes.

Fallen timber left in situ is an important part of any woodland as death and decay is essential for recycling nutrients and is part of the natural ecological cycle. Dead wood provides a vital habitat for many wood-boring insects and fungi both of which aid the decomposition process. Once loosened the dead wood will support a variety of invertebrates. Where possible fallen timber should be positioned in a shady area where temperatures are constant and it remains moist, thus providing conditions conducive to the insects, fungi and bacteria that are responsible for the decomposition process.

Standing deadwood often serves as a valuable roost and nesting site for bats and birds such as woodpeckers. Standing deadwood should be retained providing it is a safe distance from any formal paths in the interest of public safety.

There is a substantial amount of rhododendron and laurel throughout areas of the woodland, particularly to the north of the site but also invading the valley slopes to the south. Active management to tackle the encroachment of such invasive, exotic species is essential to avoid detrimental loss of natural habitat and the consequent negative effects on the biodiversity and conservation value of the site.

Warsash Common is a public open space and consequently management of the woodland habitat throughout the site has to address Health & Safety issues. Thus in some circumstances management objectives are overridden in the interest of public safety; however this is only likely to be relevant to woodland adjacent to formal paths and open areas.

Climate change and fungal disease (ash dieback etc), may present a future need to re-evaluate woodland management techniques and will need to be addressed when the situation arises.

#### Wet woodland

Wet woodland is a national priority habitat and has a national Habitat Action Plan (HAP). It is important that management prescriptions seek to maintain the current area of ancient semi-natural wet woodland and achieve favourable conditions throughout.

The ancient semi-natural wet woodland is located to the south of the site in the valley bottom either side of the two streams running through the site. This wet woodland habitat is dominated by alder with occasional grey willow and downy birch. There is evidence of past management indicated by the fact that some of the alder and willow grow from coppice stools. However, the alder has not been coppiced for some time and has now formed a dense, high canopy over the majority of the wet woodland. It is advisable that much of this wet woodland habitat should be left as a non-intervention area. However; it is worth investigating whether future coppice management is possible in some areas or whether the alder is too mature to regenerate successfully. Coppicing a small block of alder close to the stream would provide sufficient evidence to determine if future management is possible. If so future management could include a rotational small block coppice cycle in parts of the wet woodland to provide diversity of age structure and light penetration, thus achieving more favourable conditions for biodiversity.

Wet woodland habitat is important for many national priority species. Future surveys should be carried out to ascertain species composition within the wet woodland habitat of this site as detection of priority species may influence future management.

# **Key Projects**

- Maintain and enhance open grassland areas to prevent encroachment of scrub and secondary woodland and improve biodiversity throughout
- Sustain the restoration of acid grassland habitat in compartment 11
- Continue development of the woodland pasture in compartment 11
- Actively manage scrub and woodland edge habitat as transitional boundaries with open areas and seek to diversify age structure, thus improving potential for biodiversity
- Maintain openness of existing meadows and glades where appropriate to diversify woodland habitat and create warm microclimate for increased biodiversity
- Wet woodland management and restoration in both compartments 1 and 10
- Implement an ongoing programme of removal of non-native invasive species across the site. Sustain the progress made in compartment 9
- Increase the natural light around Dibles Pond and sustain the mosaic and diversity of scrub around all seasonal ponds
- Implement and commission ongoing biological survey work to assess effects of ongoing management on species diversity and abundance

# 3.2.2 Objective 2

# To engage the community in the management of the site and seek to develop a greater awareness of its' importance for both people and wildlife

It is important to provide opportunities for and encourage community involvement in all aspects of site management, from practical conservation to conducting wildlife surveys, visitor liaison and acting as advocates for the site. Promoting active involvement by all sections of the community will help to develop a greater understanding of the management issues at Warsash Common and to foster a communal respect and sense of ownership for the site. Consulting with local people and site users on the management of the site will help to steer site development in a positive direction to benefit both wildlife and people and ensure problem areas can be identified quickly and measures taken to try and tackle these problems.

This objective is further supported by objective 3 (to enhance and promote the site as an educational resource) as developing a greater awareness and understanding of the importance of the site for both people and wildlife can be achieved through active participation and interactive education.

Community involvement to date has included:

- Monthly practical tasks for the Friends of Warsash Common
- Numerous practical tasks for the Fareham Conservation Volunteers (FCV)
- Several wildlife surveys between 2012 and 2018. These include a small mammal survey, an annual butterfly survey and an annual reptile survey.
- Regular monitoring of the site by the voluntary wardens
- Events and guided walks (fungal foraging, evening moth spotting, tree trail talks and special hands on hedge laying sessions).
- Presentations given by the Ranger to the local Warsash Horticultural Society (2019), local church groups between 2012 and 2018 and walks and talks for the Beaver/ Cub groups
- Involvement of commercial organisation in practical tasks as part of their community outreach initiatives.

# Key Projects

- Develop further opportunities for volunteering within the commercial sector
- Continue to support the 'Friends' and FCV groups and continue to encourage their level of active participation in management
- Continue to provide meetings with the volunteer groups and encourage informal feedback
- Provide social media opportunities for local people to input their views and comment
- Continue to provide public events for people of all ages

# 3.2.3 Objective 3

# To enhance and promote the site as an educational resource

With a mosaic of habitats accessible for visitors to explore, Warsash Common provides a valuable resource for environmental education. Sustaining the existing links with the local schools would help to promote the site as an 'outdoor classroom' for work across a range of subjects within the national curriculum.

The Ranger will also continue to offer educational activities to out of school groups (Cubs/ Guides), and community groups.

# Key Projects

- Outreach to local schools and youth groups to promote Warsash Common as a venue for outdoor educational activities
- Sustain relationships with local interest groups and seek opportunities to give presentations and informal talks as an educational tool
- Provide facilities within the site for outdoor educational experiences
- Provide opportunities for local people to participate in educational activities to foster a greater understanding and awareness of the value of the site and a desire to maintain it for future generations
• Redesign the Warsash Common web page to include a greater range of interaction

#### 3.2.4 Objective 4

# To promote the sustainable use of the site for quiet, informal recreation and enjoyment

Warsash Common is a public open space and a designated Local Nature Reserve and is enjoyed by local people for recreational activities such as dog walking, cycling, horse riding, angling, wildlife watching and family walks. It is desirable to accommodate these recreational uses within the site but challenging to achieve whilst maintaining and enhancing the conservation value of the site and avoiding conflicts of interest.

The sites geology and topography make access more difficult in some areas with steep valley slopes to the south and seasonally wet areas throughout. Despite this, an extensive path network throughout the site allows access for walkers to different habitat types including the wet woodland via raised boardwalks.

Sensitive areas of the site such as regenerating habitat, known bat roosts and badger setts will be managed to minimise potential disturbance, by naturally zoning off these sensitive areas, This may include temporarily or permanently diverting formal footpaths around them. Generally, it is considered appropriate to allow access to different habitat types and to provide on-site interpretation to encourage responsible use of the site.

The formal footpath network through the site will be regularly monitored and maintained including repairs to damaged structures, clearing overhanging and ground vegetation and monitoring and removing where necessary potentially dangerous trees. The existing designated footpath network is very well used and is, in places, showing signs of old age. It will be necessary to monitor regularly the quality of the structure of suspended boardwalks, the surface drainage/ puddling and sustain an even surface where appropriate.

There is an easy access route along New Road to a radar gate leading to the main meadow. The track and footpath have been resurfaced as has a path which leads down to Dibles Pond. This now provides an adequate route for wheelchair users. However, the growing number of disabled people using mobility scutters will require that the Council looks more closely at providing wider access points whilst sustaining the level of security needed to prevent motor cycles access to the site. We will endeavour to provide additional access opportunities for disabled people where the topography and vegetation allows.

Dog walking is a popular activity with local people and some professional dog walkers. Whilst the majority of dog owners act responsibly there are some that do not keep dogs under control and do not pick up dog waste after their dogs, despite the provision of dog bins at the main entrances to the site. Dog bins are maintained and emptied by the Council's Grounds Maintenance Team. Uncontrolled dogs pose a threat to local wildlife, horses (see below) and dog excrement is unsightly as well as a potential health hazard to humans. In an effort to reduce the amount of dog excrement left on the site, the Council intends to engage in ongoing national and local campaigns designed to encourage all dog walkers to take greater responsibility for their pets. On the spot fines can be issued to those not bagging dog waste or littering the site with general waste and staff will be trained in dealing with this issue.

The site is generally free from litter due to patrols from the voluntary wardens, however there are 'litter hotspots' at the main meadow (compartment 3) and around the benches, the entrances and Dibles Pond.

The informal bridleway along New Road running through the centre of the site is frequently used by horse riders from local stables. From observation it appears that riders do stick to the bridleway and do not stray into other areas of the site, thus minimising disturbance to wildlife and associated habitat as well as lessening conflict with other users. However, horse riders have reported that some dogs which are not on leads run up to and bark at the horses. This spooks them and the riders have been dismounted (without injury).

In early 2020 signs were erected at four points on the site close to the main track asking dog walkers to keep their pets under control as they approach the area. See Appendix H.

At present seating is provided in the more open areas of the site for people to rest or sit to observe wildlife.

#### **Key Projects:**

- Improvements to the access of the easy access route
- Undertake consultation with local disabled access groups
- Improvements to general path network
- Investigate ways of reducing conflict between different user groups
- Promote appropriate use and appreciation of the site through the provision of information and education

#### 3.2.5 Objective 5

#### To encourage the effective and sustainable use of our resources

This plan aims, at site level, to apply the principles of sustainability to all our activities over the long-term. We can do this by applying those policies and procedures that stem from the Council's Environmental Sustainability Strategy, whilst ensuring that we identify and consider areas of improvement at a more intimate level.

#### The goal for sustainable development in the UK.

"The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations."

UK SD Strategy, 2005

The Council's Environmental Sustainability Strategy provides a framework for integrating sustainability into all the Council's activities and to encourage participatory working and awareness of sustainability with residents of the borough.

As part of the Council's commitment to the UK Sustainable Development (2013), a number of aims were agreed, with the following one being most appropriate in relation to Warsash Common.

## Living within Environmental Limits:

Fareham Borough Council Aims to protect and enhance the environment through:

- appropriate land use planning policies and robust decision making
- more natural management of Council owned land
- better integrated planning and management of recreation, open space, biodiversity and woodland areas in the Borough
- encouraging waste minimisation
- promoting energy efficiencies
- make procurement more sustainable
- transport, cycling, walking and parking policies
- reducing and eliminating the use of peat products for planting or within supplied plant stock

#### Sustainable use of open space resources:

# We will encourage the effective and long term sustainable use of all our resources .

This is an issue that touches every operational aspect of site management. It should be an integral part of all activities and we must strive for constant improvement wherever it is required. Resources may be taken to mean, financial, human, environmental and time. 'Sustainable management' will bring tangible benefits to the site.

Sustainable management must also examine the level and source of operational funding. Funding must be provided and maintained at a level sufficient to support the effective management of the site. It is the role of the Managers of the department to ensure that revenue funds are maintained at the required level. However, there are other financial opportunities that could be explored in order to support current revenue budgets. These may include applications for woodland grants, lottery funding and seeking developer contributions.

#### Measurement and Review.

# We will monitor and review our practices and policies to ensure that they are effective.

The principle of sustainability is not always simple to achieve and it will be necessary to review operational activities on a regular basis. To demonstrate the benefits of the sustainable approach we will need to improve how we measure and record its effectiveness in terms of environmental gain. Firstly, we should concentrate on the obvious areas such as measuring and recording reductions in fuel consumption, carbon dioxide production and providing demonstrable improvements to recycling processes, procurement and time management.

The responsibility to apply the principles of sustainability in the management of resources is clear at a national, corporate, departmental and local level.

### Key projects

- Consider and apply where possible the principles of sustainability in our operations and those of our contractors and others working on the site.
- Minimise the impact of the Council's built infrastructure at Warsash Common
- Support, implement and influence corporate and departmental policy
- Identify income generation opportunities to support the management of the site and improve services to visitors
- Identify further opportunities for people to contribute their time to the site
- Review the effectiveness of sustainability policies and practices

#### 3.2.6 Objective 6

# To monitor and review management practices and keep up to date with any advances in good practice guidelines for conservation purposes

It is vital that there are periodic appraisals of practices and updates of information relating to conservation work and the provision of recreation and education. This appraisal will also help to assess our performance in meeting site objectives.

#### Nature conservation

This will largely relate to habitat and species management and helping to ensure objectives/targets are being met and providing additional baseline data to build on. These will include:

- Undertake specific species surveys related to biodiversity action plans and red data book
- Undertake periodic taxonomic surveys of existing known groups and those less recorded, or little known e.g. lichens
- Ensure habitat restoration is meeting desired aims and objectives and use photography to monitor developments after any significant changes
- Continue regular monitoring of the wildlife in the form of yearly transect data and submission of data to conservation recording organisations
- Monitor tree and vegetation health in relation to effects of climate change, disease and pollution
- Continue to keep abreast of nature conservation legislation and changes in best practice.

Some of this work will require consultancy work from specialised individuals/organisations. It is envisaged that there will be ample opportunities for individuals, volunteers and students to also assist in biological data collection.

#### Recreation and education provision

Through events feedback and social media, it is hoped that a clearer picture emerges of opinions held by the public and their views of the sites overall development. This will help us to tailor or develop activities and services. Some constraints in relation to nature conservation shall hold precedence but this is a good gauge as to whether we are providing suitable informed information to this aspect of work. These will include:

- Recording of comments to staff and volunteers on site and gauging opinions from visitors who attend public events
- Regular review of the local and council social media reference points

### Key projects

- Undertake periodic taxonomic surveys of Biodiversity action species
- Compile inventory of less recorded or unknown taxa groups
- Monitor tree and vegetation health every 2 years for disease and health and safety purposes.
- Undertake annual data collection of reptile and butterfly species through regular transect work
- Develop existing quality standards

# **STAGE 4: PRESCRIPTIONS**

### 4.1 OUTLINE PRESCRIPTIONS

#### 4.1.1 Objective 1

# To maintain, preserve and enhance wildlife habitats and their associated species

#### **Outline prescriptions**

- Maintain consultation with statutory agencies and all other interested parties on relevant matters
- Undertake preliminary protected species surveys where appropriate
- Commission botanical and entomological surveys every 10 years
- Commission breeding bird and aquatic invertebrate surveys
- Continue and extend annual cutting regime of open grassland areas using forage harvesting method where appropriate in compartments 3, 4 and 5 to prevent encroachment of scrub and improve species diversity of ground flora
- Implement extensive, seasonal clearance of gorse and scrub in compartment 11a and 11b to maintain and continue to expand the acid grassland area and seek to restore heathland character
- Implement annual rotational coppicing regime of scrub and woodland edge habitat across the site to prevent further encroachment into open areas and create a more diverse age structure
- Carry out maintenance of existing rides along pathways
- Continue annual small block coppicing of grey willow and downy birch in compartment 7 on a rotational basis

- Investigate potential to coppice some of the mature alders along the streams in the valley bottom to improve structural diversity of habitat and increase light levels
- Continue to monitor the Japanese Knotweed hotspots and treat appropriately.
- Continue the phased removal of laurel and rhododendron from all compartments
- Continue to manually control the parrots feather in Dibles Pond
- Ensure dead wood provision is maintained in woodland compartments and conserve standing deadwood as habitat unless there is an overriding issue of public health and safety
- Investigate potential for extending and deepening seasonal ponds to enhance conservation value
- Monitor effects of management on habitat and species diversity with regular survey and analysis

### 4.1.2 Objective 2

# To engage the community in the management of the site and seek to develop a greater awareness of its' importance for both people and wildlife

- Maintain monthly practical volunteer tasks with the 'Friends of' group that provide an interest to a wide variety of people
- Identify and develop further opportunities for people to contribute their time to the site (litter picks, bird surveys etc).
- Support the Friends of Warsash Common and voluntary wardens and provide opportunities for consultation as well as rewarding efforts made
- Engage a broader range of people from the community to visit the site by organising events and one-off tasks that appeal to a wider audience including families
- Redevelop the Warsash Common web page on the Council's web site.
- Continue to post public notices which give users notice of any significant changes/ projects and the reason for making them.

#### 4.1.3 Objective 3

#### To enhance and promote the site as an educational resource

- Produce a summary sheet to schools to promote the site as an educational resource
- Investigate potential for providing additional facilities on site that would enhance its' value and appeal as a venue for outdoor education
- Continue to organise educational activities for the general public and schools
- Continue to give talks to local resident's association and other interest groups to raise awareness of the site and foster a greater respect for it.

# 4.1.4 Objective 4

# To promote the sustainable use of the site for quiet, informal recreation and enjoyment

- Undertake regular patrolling of the site, record findings and consult with the voluntary wardens to keep abreast of any problems concerning health and safety on formal routes
- Maintain safe and suitable structures
- Phase replacement of chicken wire on boardwalks with anti-slip grip slats
- Maintain safe and open formal pathways through the site throughout the year, clearing overhanging vegetation when necessary
- Continue the development of a safe and adequate network of surfaced pathways with passing points for easy access where possible on the site as a whole
- Consult with disabled access group on potential improvements to the site
- Remove dangerous objects from the site and dispose of appropriately
- Monitor condition of trees close to the main paths and inform the tree officer of any potentially dangerous trees for further assessment
- Install new way markers to comply with the new corporate criteria.
- Zone sensitive areas of the site from potential recreational disturbance
- Post public notices around the site informing users of 'best practise' and wildlife life cycles.

### 4.1.5 Objective 5

#### To encourage the effective and sustainable use of our resources

- Build partnerships with external organisations and neighbouring ranger services to make effective use of knowledge and resources
- Consider and apply where possible the principles of sustainability in our operations and those of our contractors and others working on site
- Support, implement and influence corporate and departmental policy
- Carry out sustainable management operations
- Identify income generation opportunities to aid management of the site for both short term and long-term goals
- Apply for grants where appropriate as a source of funding for work

# 4.1.6 Objective 6

# To monitor and review management practices and keep up to date with any advances in good practice guidelines for conservation purposes

- Consult with statutory organisations
- Maintain, undertake regular review and update the management plan to ensure the site is managed in accordance with recommendations
- Collect biological information
- Sustain the biological recording system and the monitoring/research database
- Monitor changes in habitat and species legislation and adapt management practices accordingly to reflect any changes in best practice guidelines

- Increase opportunities for volunteers to participate in biological recording and research projects
- Sustain a photographic record of the site as a record of long-term habitat enhancement projects.

### 4.2 SCHEDULED WORK IN COMPARTMENTS

This section of the plan gives a brief description of works planned for each compartment along with a brief description of habitats and associated species. Only specific projects are listed not routine management. A plan of the compartments can be found in the appendices.

Where minimum intervention is cited this denotes that no specific project is planned other than routine maintenance.

#### 4.2.1 Compartments 1a & 1b

Compartment 1a comprises the western slope of a steep stream valley containing ancient semi-natural woodland on both the valley side and floor. Alder dominates the valley floor as wet woodland habitat and contains W6 alder *Alnus glutinosa* – nettle *Urtica dioica* communities and W7b Alnus *glutinosa* - *Fraxinus excelsior* - *Lysimachia nemonem* communities. The slopes on the western side show W15 beech *Fagus sylvatica* – wavy hair grass *Deschampsia flexuosa* communities. A stream runs along the eastern boundary of this site abutting compartment 1b.

Compartment 1b comprises the eastern slope of a steep stream valley containing ancient semi-natural woodland on both the valley side and floor. Alder dominates the valley floor as wet woodland habitat and contains W5, W6 alder *Alnus glutinosa* – nettle *Urtica dioica* communities and W7b Alnus *glutinosa* - *Fraxinus excelsior* - *Lysimachia nemorum* communities. The eastern side of the valley is predominantely W10 oak *Quercus robur* – bracken *Pteridium aquilinum* – bramble *Rubus fruticosus* with some rowan, holly, hazel and elm.

#### Works:

- Monitor the Japanese Knotweed and take appropriate action.
- Continue the eradication of the laurel and rhododendron. Treat all stumps with herbicide.
- Consult with the Council's Tree Team regarding the potential thinning of the Alders.
- The boardwalks/ bridges are starting to show signs of weakness and have already received significant structural improvements. It will be necessary to monitor the wooden structures regularly and replace any unsafe sections.
- Spend time during the cutting season to clear the dense vegetation along the edge of the stream to improve the level of flow.
- Carry out a botanical and invertebrate survey.

### 4.2.2 Compartments 2a and 2b

Both compartments are semi-natural woodland dominated by W10 oak *Quercus robur* – bracken *Pteridium aquilinum* – bramble *Rubus fruticosus* on the banks and and W6 wet woodland closer to the stream. Access to 2a is via Dibles Road or a green way running adjacent the western boundary. There is no formal access to 2b. Laurel also has a significant hold in 2b and should be reduced. A path runs alongside the stream which divides compartments 2a and 2b and is very well used during school term time.

The path has been in place since 1995 and has required much repair work between 2017 and 2019.

The bank of the stream is also falling away. Whilst appropriate measures have been taken to reduce erosion in 2019, it will be necessary to monitor closely the effectiveness of the defence work.

#### Works:

- Replace the path revetment board as and when it becomes necessary.
- Keep the path free from vegetation (nettles, water dropwort etc). This is an annual task.
- Put in place the necessary anti-erosion measures to protect the banks of the stream and the path. Work with contractor.
- Retain the flow of water in the stream channel by removing debris.
- Reduce the laurel canopy to increase the light.

#### 4.2.3 Compartment 3

Formally used as a landfill site for household waste, this large open area was capped and levelled off in 1994. Development of the sword and germination of the wildflower seed was poor and the centre of this area has remained bear. It is thought that the soil used to cap the pit was contaminated. The regenerating semi-improved neutral grassland is similar in composition to MG6 and MG6v mesotrophic grassland with common knapweed, common bird's-foot-trefoil, Yorkshire-fog, crested dog's tail, oxeye daisy, white clover, curled dock and perforate St. John's wort all frequent. There is an undetermined OV (Open Vegetation) community in the semi-bare area. Surrounding this are MG1a rank grassland communities grading to W21a scrub and woodland behind. Bramble is also present forming patches of W24 and W25 scrub with hedge bindweed creeping through the scrub and grass communities. An unusual component on the eastern side of this compartment is an alien Austrian yellow cress *Rorippa austriaca*.

This site contains two very small sections of Japanese knotweed which are monitored and treated twice a year.

#### Works:

- Investigate the availability of a gate suitable for mobility scooters but will not allow access to motorbikes/ scramblers from New Road. Install if practicable.
- Continue to monitor the regrowth of the Japanese Knotweed and treat as appropriate.

- Continue annual rotational cutting regime using forage harvesting technique to maintain grassland habitat.
- Sustain the Lest We Forget memorial
- Cut the wild flower meadow under Poetry Tree 1 by hand and remove all organic material.
- Apply wood preserver to the benches in 2020 and 2024.
- Apply wood preserver to the waymarking posts in 2022 and 2025.
- Cut the scrub back around the edges of compartment 3 to prevent encouragement.

# 4.2.4 Compartment 4

This open glade consists of semi-improved neutral grassland habitat most closely resembling MG6b with good structural variation and peripheral scrub which seems to be W24 blackthorn (*Prunus spinosa*) – bramble (*Rubus fruticosus*) scrub but there is also W23 gorse (*Ulex europaeus*) – bramble (*Rubus fruticosus*) scrub here as well. The edges of the compartment are of broadleaved semi-natural woodland (W10). Uncommon species of note here include narrow-leaved bird's-foot-trefoil (*Lotus cornicultus*) and fleabane (*pulicaria vulgaris*). Goat's rue (*Galega officinalis*) occurs in the eastern section. The ground can become waterlogged seasonally therefore a gravel footpath has been constructed over the wettest areas to ensure access is possible at all times of year.

#### Works:

- Continue annual rotational cutting regime using forage harvesting technique to maintain and enhance grassland habitat
- Re-establish scallops on the edges of the woodland margins and make sure that they can be reached by the cut and collect foraging machinery
- Spot spray with herbicide the invasive goat's rue where practicable.
- Continue the redevelopment of grassland/ woodland pasture habitat on the western side abounding compartment 6.
- Maintain concrete blocks for reptiles as basking sites for reptiles like common lizards.
- Improve drainage of the existing raised path and replace all damaged revetment board.

#### 4.2.5 Compartment 5

An open area consisting of semi-improved neutral grassland of MG12v rank grassland dominated by goat's rue (*Galega officinalis*), with interspersed scattered scrub (W21) and more dense scrub on the periphery including oak, gorse and bramble. A laurel hedge runs along the northern boundary screening views of houses on Dibles Road. To the north of this compartment there is a main entrance point onto the site from Dibles Road. This compartment has notable reptile activity with surveys revealing the presence of a significant adder population as well as grass snake, slow worms and common lizards.

This area was part of a landfill tip and the clay capping is particularly thin in certain sections and it might be prudent to investigate recapping with more soil. Planned housing developments in the local area might provide a good source.

## Works:

- Continue annual rotational cutting regime using forage harvesting technique to maintain and enhance grassland habitat
- Mowing a non-linear path through the centre of the tall grassland in the summer in the interest of butterfly conservation
- Implement rotational coppicing regime of scrub on compartment boundaries to create a diverse age structure and enhance woodland edge habitat
- Liaise with the Council's Planning Department to discuss the practicalities of covering 'Dibles Meadow' with a new layer of soil. If this is a viable proposition, the existing vegetation should be treated with herbicide and the new soil impregnated with 80% grass seed and 20% wild flower seed to create a new wildflower meadow.

# 4.2.6 Compartment 6

Previously part of the quarry this compartment comprises predominantly W8 oak woodland with some cherry, birch, rowan and sycamore in the drier northern section with a change of vegetation to W2a dominated by willow to the south east of the compartment. There is also some laurel at the northern end. There is no evidence of the large V shaped pond indicated on maps. This compartment is largely inaccessible with some evidence of one informal desire-line running through it. A main formal footpath runs along the western boundary linking compartments 4 and 5.

# Works:

- Maintain the existing ride along pathway on the western boundary linking compartments 4 and 5 but do not allow drainage to be improved.
- Keep the boundary between compartment 6 and 7 free of scrub.
- Replace any rotten boardwalk bearers and slats with recycled plastic equivalents when necessary.
- Manage a section of the woodland which runs along the ridge/ boundary between compartments 6 and 2b with a view to developing an area with a strong sycamore presence. This will involve thinning the existing trees and saplings, treat stumps with herbicide and eradicate the established laurel.
- Manage the rest of this compartment as a non-intervention area to allow the rest of the woodland to mature.

# 4.2.7 Compartment 7

This compartment has changed significantly since the last management plan was written. In 2012, much of the dense willow carr was cleared and the season ponds were left to regenerate naturally. There are still some mature oaks, some willow (*Salix cinerea*), downy birch (*Betula pubescens*) trees and holly within the compartment. The drier areas are mostly W10 oak (*Quercus robur*) – bracken (*Pteridium aquilinum*) – bramble (*Rubus fruticosus*) - gorse scrub. There is some cherry laurel scrub on the

periphery of this compartment. There are two seasonal ponds and several wet hollows throughout. This is classified as M23, rush pasture and a priority habitat.

# Works:

- Monitor the existing willow stools and coppice when appropriate for use as hedge binders.
- Cut the reedmace before it goes to seed.
- Eradicate the pampas grass
- Clear the scrub regrowth on a rotational basis. This compartment can be divided into two sections as a result of the long dry ridge. Subsequently, the two halves can be cut separately in different years.
- Carry out an annual reptile survey. Great Crested Newts do exist here.

# 4.2.10 Compartment 8

This compartment comprises Dibles Pond which is of high conservation value for wildlife. The parrots feather (*Myriophyllum aquaticum*), has been largely irradiated and the small areas which do reoccur are confined to the edge of the pond which makes them easy to dig out. The pond contains a significant population of fish. A survey by the local anglers' association noted that the fish stock could not be transferred as a result of interbreeding and associated deformities. Subsequently, there are no plans to reduce the fish stock.

## Works:

- Clearance of overhanging vegetation around the pond to reduce shading and leaf litter
- Removal of some larger trees to the south of the pond to improve light levels and reduce leaf litter reaching pond
- Carry out regular pond surveys in association with Natural England

# 4.2.11 Compartment 9

A woodland compartment the majority of which comprises W1 sallow Salix cinerea-Galium palustre woodland, with W2a sallow (*Salix cinerea*) – downy birch (*Betula pubescens*) woodland located centrally and W10 oak (*Quercus robur*) – bracken (*Pteridium aquilinum*) – bramble (*Rubus fruticosus*) woodland on the southern periphery of the compartment abounding New Road. There is also a section of W10c (lowland mixed deciduous woodland or priority habitat). There is some ornamental scrub that cannot be defined and which contains cherry laurel (*Prunus laurocerasus*) at the eastern end of this compartment. At present there is no formal access.

# Works:

- Monitor and record mammal and reptile activity
- Sustain the central birch woodland by clearing all other invasive species (laurel/ rhododendron), and willow and use this as an example of secondary woodland progression.
- Finish clearance of the dense cherry laurel adjacent to the sewage pipe.

• Thin the small area of willow carr to increase the light and oxygen levels. This seasonal pond is a favoured location for frogs and toads.

#### 4.2.12 Compartment 10a and 10b

Compartment 10a is W7b Alnus *glutinosa - Fraxinus excelsior - Lysimachia nemonem.* The western side of the valley is predominantely W10 oak (*Quercus robur*)– bracken (*Pteridium aquilinum*) – bramble (*Rubus fruticosus*).

Compartment 10b is W7b Alnus *glutinosa - Fraxinus excelsior - Lysimachia nemorum*. The western side of the valley is predominantely W10 oak (*Quercus robur*) – bracken (*Pteridium aquilinum*) – bramble (*Rubus fruticosus*).

#### Works:

As a result of this area being left as a 'non-intervention area', the compartment has been invaded by laurel, sycamore and other unwanted species.

- Clear the stream channel of debris
- Reintroduce gaps in the canopy to improve the amount of light
- Work to develop a selection of well-spaced mature trees and remove the laurel, unwanted willow, holly and sycamore saplings
- Conduct botanical and invertebrate surveys in wet woodland and stream

#### 4.2.13 Compartment 11a and 11b

Compartment 11a comprises a growing area of regenerated acid grassland of the community *Festuca ovina-Agrostis capillaris-Rumex acetosella*, with adjacent *Prunus spinosa-Rubus* fruiticosus scrub. Compartment 11b comprises W10c oak (*Quercus robur*) – hawthorn (*Crataegus monogyna*) – bramble (*Rubus fruiticosus*) woodland. There are marginal areas of W25 (under-scrub), MG1a (grassland), W10 (open grassland) and a significant area of U1 (lowland acid grassland).

#### Works:

Reference 11a.

- Sustain the heathland rejuvenation with periodic, selective clearance of the bramble, broom and gorse.
- Sustain the grazing programme (two ponies, late spring and early autumn pending on growth of grass/ rainfall).
- Monitor the Yorkshire fog and Ragwort regrowth and spray any significant regrowth with herbicide.
- Keep any scrub encroachment on the boundaries with 11b to a minimum.
- Develop the hawthorn and blackthorn on the boundaries with 11b into hedges where practicable. Sustain the natural gaps and keep height restricted to 2 meters to ensure good light levels in 11b.

# Works:

Reference 11b.

- Cut the wildflower meadow at the entrance in late August, early September.
- Monitor the pond and clear out the organic debris after the autumn leaf fall.
- Encourage the growth of foxgloves and native bluebells in the woodland pasture.
- Select and fell further trees in the eastern section to improve growth of the pasture. All felled trunks to be stacked appropriately and the canopy wood to be left behind the existing stock fencing to form dead hedging.
- Sustain the periodic, selective clearance of scrub regeneration in the woodlands particularly the holly.
- Pollard the relevant oaks in 2023



# Plan showing outline of Warsash Common





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# Vascular Plant Survey Results 2011/12

Compartment 1a	
Rumex obtusifolius	Broad-leaved dock
Salix cinerea	Grey Willow
Solanum dulcamara	Bittersweet
Sonchus asper	Prickly Sow-thistle
Sorbus aucuparia	Rowan
	Hedge Woundwort
Stachys sylvatica Teucrium scorodonia	<b>v</b>
Valeriana officinalis	Wood Sage Common Valerian
Vicia hirsuta	Hairy Tare
Potentilla reptans	Creeping Cinquefoil
Carex paniculta	Greater Tussock-sedge
Veronica polita	Grey Field-speedwell
Lathyrus pratensis	Meadow Vetching
Cirsium vulgare	Spear Thistle
Epilobium hirsutum	Great Willowherb
Epilobium tetragonum	Square-stalked Willowherb
Filipendula ulmaria	Meadowsweet
Geranium dissectum	Cut-leaved Crane's-bill
Heracleum sphondylium	Hogweed
Holcus lanatus	Torkshire-fog
Hypericum perforatum	PerforateSt John's wort
Ranunculus repens	Creeping Buttercup
Lapsana communis	Nipplewort
Quercus cerris	Turkey Oak
Lysimachia nemorum	Yellow Pimpernel
Malva sylvestris	Common Mallow
Matricaria recutita	Scented Mayweed
Medicago lupulina	Black Meddick
Molinia caerulea	Purple Moor-grass
Persicaria maculosa	Redshank
Plantago major	Greater Plantain
Poa pratensis	Smooth Meadow-grass
Juncus effusus	Soft-rush
Cardamine flexuosa	Wavy Bitter-cress
Crataegus laevigata	Midland Hawthorn
Acer campestre	Field Maple
Alnus glutinosa	Alder
Arum maculatum	Lords-and-Ladies
Athyrium filix-femina	Lady-fern
Betula pubescens	Downy Birch
Carex pendula	Pendulous Sedge
Chrysosplenium oppositifolium	Opposite-leaved Golden-saxifrage
Fallopia japonica	Japanese knotweed
Corylus avellana	Hazel

Compartment 1a con't.	
Crataegus monogyna	Hawthorn
Crocosmia x crocosmiiflora	Montbretia
Dactylis glomerata	Cock's-foot
Dipsacus fullonum	Wild Teasel
Dryopteris dilatata	Broad Buckler-fern
Dryopteris affinis	Scaly Male-fern
Dryopteris filix-mas	Male-fern
Epilobium montanum	Broad-leaved Willowherb
Castanea sativa	Sweet Chestnut
Circaea lutetiana	Enchanter's nightshade
Fraxinus excelsior	Ash
Senecio jacobaea	Common Ragwort
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Urtica dioica	Common Nettle
Veronica hederifolia	Ivy-leaved Speedwell
Veronica montana	Woody Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell
X Cupressocyparis leylandii	Leyland Cypress
Fagus sylvatica	Beech
Alliaria petiolata	Garlic Mustard
Rhododendron ponticum	Rhododendron
Aesculus hippocastanum	Horse-chestnut
Agrostis capillaris	Common Bent (grass)
Anagallis arvensis	Scarlet Pimpernel
Angelica sylvestris	Wild Angelica
Aquilegia vulgaris	Columbine
Arrhenatherum elatius	False Oat-grass
Brachypodium sylvaticum	False-broom
Calystegia silvatica	Large Bindweed
Acer pseudoplatanus	Sycamore
Phyllitis scolopendrium	Hart's tongue
Galium aparine	Cleavers
Geranium robertianum	Herb Robert
Geum urbanum	Wood Avens
Hedera helix subsp. helix	Common Ivy
Hyacinthoides non-scripta	Bluebell
llex aquifolium	Holly
Ligustrum vulgare	Wild Privet
Lonicera periclymenum	Honeysuckle
Narcissus agg.	Cultivated Daffodil
Rumex sanguineus	Wood Dock
Petasites fragrans	Winter Heliotrope
Ribes rubrum	Red Currant
Polystichum setiferum	Soft Shield-fern
Prunus avium	Wild Cherry
Prunus cerasifera	Cherry Plum

Compartment 1a con't.	
Prunus laurocerasus	Cherry Laurel
Pteridium aquilinum	Bracken
Quercus ilex	Evergreen Oak
Quercus robur	Pedunculate Oak
Ranunculus ficaria	Lesser Celandine
Oenanthe crocata	Hemlock Water-dropwort
Blechnum spicant	Hard-fern
Calluna vulgaris	Heather
Compartment 1b	
Acer pseudoplatanus	Sycamore
Agrimonia eupatoria	Agrimony
Agrostis stolonifera	Creeping Bent (grass)
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Arum maculatum	Lords-and-Ladies
Athyrium filix-femina	Lady-fern
Betula pubescens	Downy Birch
Brachypodium sylvaticum	False Brome
Calluna vulgaris	Heather
Caltha palustris	Marsh Marigold
Cardamine flexuosa	Wavy Bitter-cress
Calystegia silvatica	Large Bindweed
Carex divulsa subsp. divulsa	Grey Sedge
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
Castanea sativa	Sweet Chestnut
Chrysosplenium oppositifolium	Opposite-leaved Golden-saxifrage
Circaea lutetiana	Enchanter's nightshade
Cirsium vulgare	Spear Thistle
Cornus sanguinea	Dogwood
Crocosmia x crocosmiiflora	Montbretia
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Dactylis glomerata	Cock's foot
Digitalis purpurea	Foxglove
Dryopteris dilatata	Broad Buckler Fern
Dryopteris filix-mas	Male fern
Epilobium montanum	Broad-leaved Wilowherb
Epilobium obscurum	Short-fruited Willowherb
Fagus sylvatica	Beech
Fallopia japonica	Japanese Knotweed
Festuca rubra	Red Fescue
Filipendula ulmaria	Meadowsweet
Fraxinus excelsior	Ash
Gallum aparine	Cleevers
Geranium molle	Dove's foot Crane's-bill
Geranium robertianum	Herb-Robert

Compartement 1b con't.	
Geum urbanum	Wood Avens
Glechoma hederacea	Ground Ivy
Heracleum sphondylium	Hogweed
Holcus mollis	Creeping Soft-grass
llex aquifolium	Holly
Iris pseudacorus	Yellow Iris
Juncus effusus	Soft-rush
Lapsana communis	Nipplewort
Ligustrum ovalifolium	Garden Privet
Ligustrum vulgare	Wild Privet
Lonicera periclymenum	Honeysuckle
Luzula multiflora	Heath Wood-rush
Luzula pilosa	Hairy wood-rush
Medicago lupulina	Black Medick
Moehringia trinervia	Three-nerved sandwort
Molinia caerulea	Purple Moor-grass
Oenanthe crocata	Hemlock Water-dropwort
Phyllitis scolopendrium	Hart's-tongue
Plantago major	Greater Plantain
Polystichum setiferum	Soft Sheild-fern
Populus alba	White poplar
Populus tremula	Aspen
Potentilla reptans	Creeping Cinquefoil
Prunus laurocerasus	Cherry Laurel
Pteridium aquilinum	Bracken
Ranunculus acris	Meadow Buttercup
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup Rhododeron
Rhododendron ponticum	
Rosa canina	Dog-rose
Rubus fruticosus agg.	Bramble
Rumex obtusifolius	Broad-leaved Dock
Rumex sanguineus Salix cinerea	Wood Dock
	Grey Willow Elder
Sambucus nigra	
Scrophularia nodosa	Common Figwort
Solanum dulcamara	Bittersweet
Sorbus aucuparia	Rowan
Stachys sylvatica	Hedge Woundwort
Stachys x ambigua	Hybrid Woundwort (S. palustris x
Sumphariaarnaa alkus	sylvatica)
Symphoricarpos albus	Snowberry
Taraxacum agg.	Dandelion Small laguad Lima
Tilia cordata	Small leaved Lime
Torilis japonica	Upright Hedge Parsley
Ulmus minor	Small-leaved Elm
Urtica dioica	Common Nettle

Compartment 1b con't.	
Veronica hederifolia	Ivy-leaved Speedwell
Valeriana officinalis	Common Valerian
Veronica montana	Wood Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell
Compartment 2a	
Acer pseudoplatanus	Sycamore
Aesculus hippocastanum	Horse-chestnut
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Arrhenatherum elatius	False Oat-grass
Arum maculatum	Lords-and-ladies
Athyrium filix-femina	Lady fern
Brachypodium sylvaticum	False-broome
Calystegia sepium	Hedge Bindweed
Buddleja davidii	Buddleia
Cardamine flexuosa	Wavy Bitter-cress
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
Circaea lutetiana	Enchanter's-nightshade
Corylus avellana	Hazel
Cotoneaster rehderi	Bullate Cotoneaster
Crataegus monogyna	Hawthorn
Dactylis glomerata	Cock's-foot
Dryopteris affinis	Scaly Male-fern
Dryopteris dilatata	Broad Buckler-fern
Epilobium hirsutum	Great Willowherb
Epilobium montanum	Broad-leaved Willowherb
Equisetum arvense	Field Horsetail
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Geranium robertianum	Herb Robert
Geranium x oxonianum	Druce's Cranes Bill
Geum urbanum	Wood Avens
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Hyacinthoides x massartiana	Hybrid Bluebell
llex aquifolium	Holly
Ligustrum vulgare	Wild Privet
Melissa officinalis	Balm
Myosotis sylvatica	Wood Forget-me-not
Narcissus agg.	Cultivated Daffodil
Oenanthe crocata	Hemlock water-dropwort
Pentaglottis sempervirens	Green Alkanet
Phyllitis scolopendrium	Hart's tongue
Plantago major	Greater Plantain

Compartment 2a con't	
Prunus avium	Wild Cherry
Potentilla reptans	Creeping Cinquefoil
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Quercus robur	Pedunculate Oak
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Rubus caesius	Dewberry
Rubus fruticosus agg.	Bramble
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Sambucus nigra	Elder
Scrophularia nodosa	Common Figwort
Senecio jacobaea	Common Ragwort
Solanum dulcamara	Bittersweet
Stachys sylvatica	Hedge Woundwort
Taraxacum agg.	Dandelion
Urtica dioica	Common Nettle
Veronica chamaedrys	Germander Speedwell
Veronica hederifolia	Ivy-leaved Speedwell
Veronica montana	Wood Speedwell
Veronica persica	Common Field Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell
Viburnum opulus	Guelder Rose
Vinca major	Greater Periwinkle
Viola riviniana	Common Dog-violet
Compartment 2b	
Acer platanoides	Norway Maple
Agrostis capillaris	Common Bent
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Arum maculatum	Lords-and-Ladies
Athyrium filix-femina	Lady-fern
Brachypodium sylvaticum	False-brome
Buxus sempervirens	Box
Calystegia sepium	Hedge Bindweed
Chrysosplenium oppositifolium	Opposite-leaved Golden-saxifrage
Cardamine flexuosa	Wavy Bitter-cress
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
Circaea lutetiana	Enchanter's-nightshade
Corylus avellana	Hazel
Cotoneaster rehderi	Bullate Cotoneaster
Crataegus monogyna	Hawthorn

Compartment 2b con't.	
Dryopteris affinis	Scaly Male-fern
Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male Fern
Epilobium hirsutum	Great Willowherb
Épilobium parviflorum	Hoary Willowherb
Fargus sylvatica	Beech
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Geranium robertianum	Herb Robert
Geranium x oxonianum	Druce's Cranes Bill
Geum urbanum	Wood Avens
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Hyacinthoides massartiana	Bluebell
llex aquifolium	Holly
Lemna minor	Common Duckweed
Lonicera periclymenum	Honeysuckle
Malus domestica	Apple
Narcissus agg.	Cultivated Daffodil
Oenanthe crocata	Hemlock Water-dropwort
Persicaria hydropiper	Water-pepper
Plantago major	Greater Plantain
Polystichum setiferum	Soft Shield-fern
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Quercus robur	Pendunculate Oak
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Ribes nigrum	Black Currant
Ribes rubrum	Red Currant
Rubus fruticosus agg.	Bramble
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Scrophularia nodosa	Common Figwort
Solanum dulcamara	Bittersweet
Spiraea japonica	Japanese Spiraea
Stachys sylvatica	Hedge Woundwort
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Urtica dioica	Common Nettle
Veronica beccabunga	Brooklime
Veronica hederifolia	Ivy-leaved Speedwell
Veronica montana	Wood Speedwell

Compartment 3	
Acer pseudoplatanus	Sycamore
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Alopecurus pratensis	Meadow Foxtail
Anagallis arvensis	Scarlet Pimpernell
Anisantha sterilis	Barren Brome
Anthoxanthum odoratum	Sweet Vernal grass
Anthriscus sylvestris	Cow Parsley
Arctium minus	Lesser Burdock
Armoracia rusticana	Horse-radish
Arrhenatherum elatius	False Oat Grass
Artemisia vulgaris	Mugwort
Arum maculatum	Lords-and-Ladies
Aster lanceolatus	Narrow-leaved Michaelmas-daisy
Bellis perennis	Daisy
Betula pendula	Silver Birch
Brachypodium sylvaticum	False-brome
Bromus hordeaceus	Soft-brome
Calystegia silvatica	Large Bindweed
Capsella bursa-pastoris	Shepherds Purse
Carex divulsa	Grey Sedge
Carex hirta	Hairy Sedge
Carex muricata	Prickly Sedge
Centaurea nigra	Common Knapweed
Centaurium erythraea	Common Centaury
Cerastium fontanum	Common Mouse-ear
Cerastium glomeratum	Sticky mouse-ear
Circaea lutetiana	Enchanter's Nightshade
Cirsium arvense	Creeping Thistle
Cirsium vulgare	Spear Thistle
Convolvulus arvensis	Field Bindweed
Conyza canadensis	Canadian Fleabane
Coronopus didymus	Lesser Swine-cress
Coronopus squamatus	Swine-cress
Crataegus monogyna	Hawthorn
Cruciata laevipes	Crosswort
Cynosurus cristatus	Crested Dog's-tail
Dactylis glomerata	Cock's Foot
Daucus carota	Carrot
Deschampsia cespitosa	Tufted Hair-grass
Dipsacus fullonum	Wild Teasel
Dryopteris filix-mas	Male Fern
Elytrigia atherica	Sea Couch

Compartment 3 Con't.	
Equisetum arvense	Field Horsetail
Fallopia japonica	Japanese knotweed
Festuca arundinacea	Tall Fescue
Festuca pratensis	Meadow Fescue
Festuca rubra	Red Fescue
Fraxinus excelsior	Ash
Galega officinalis	Goat's Rue
Galium aparine	Cleavers
Geranium dissectum	Cut-leaved Crane's Bill
Geranium molle	Dove's foot Crane's Bill
Geranium robertianum	Herb Robert
Geum urbanum	Wood Avens
Glechoma hederacea	Ground Ivy
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanthus	Yorkshire Fog (grass)
Hypericum androsaemum	Tutsan
Hypericum perforatum	Perforate St John's wort
Hypochaeris radicata	Cat's Ear
Iris pseudacorus	Yellow Iris
Juncus conglomeratus	Compact rush
Juncus inflexus	Hard rush
Lamium album	White Dead Nettle
Lapsana communis	Nipplewort
Lathyrus nissolia	Grass Vetching
Lathyrus pratensis	Meadow Vetching
Leontodon autumnalis	Autumn Hawkbit
Leontodon saxatilis	Lesser Hawkbit
Lepidium campestre	Field Pepperwort
Lepidium draba	Hoary Cress
Leucanthemum vulgare	Oxeye Daisy
Ligustrum vulgare	Wild Privet
Linaria vulgaris	Common Toadflax
Lolium perenne	Perennial Rye-grass
Lotus corniculatus	Bird's foot trefoil
Malus domestica	Apple
Malva moschata	Musk Mallow
Malva sylvestris	Common Mallow
Matricaria discoidea	Pineapple Weed
Medicago arabica	Spotted Medick
Medicago lupulina	Black Medick
Melilotus altissimus	Tall Melilot
Mentha spicata	Spear Mint

Compartment 3 Con't.	
Myosotis arvensis	Field Forget-me-not
Narcissus agg.	Cultivated Daffodil
Odontites vernus	Red Bartsia
Persicaria amphibia	Amphibious Bristort
Phleum bertolonii	Smaller Cat's tail
Picris echioides	Bristly Oxtongue
Pilosella officinarum	Mouse-eared Hawkweed
Plantago lanceolata	Ribwort Plantain
Plantago major	Greater Plantain
Poa annua	Annual Meadow grass
Poa pratensis	Smooth Meadow grass
Poa trivialis	Rough Meadow grass
Polygonum aviculare	Knotgrass
Potentilla anserina	Silverweed
Potentilla reptans	Creeping Cinquefoil
Prunella vulgaris	Selfheal
Prunus avium	Wild Cherry
Prunus domestica	Wild Plum
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Pulicaria dysenterica	Common Fleabane
Pyrus communis	Pear
Quercus robur	Pendunculate Oak
Ranunculus acris	Meadow Buttercup
Ranunculus bulbosus	Bulbous buttercup
Ranunculus ficaria	Lesser celandine
Ranunculus repens	Creeping buttercup

Compartment 3 Con't.	
Rorippa austriaca	Austrian Yellow Cress
Rosa arvensis	Field Rose
Rosa canina	Dog rose
Rosa micrantha	Small flowered sweet briar
Rubus fruticosus agg.	Bramble
Rumex crispus	Curled Dock
Rumex obtusifolius	Broad-leaved Dock
Rumex sanguineus	Wood Dock
Rumex x pratensis	Hybrid Dock
Sagina procumbens	Procumbent Pearlwort
Salix caprea	Goat Willow
Salix cinerea	Grey Willow
Sambucus nigra	Elder
Scrophularia nodosa	Common Figwort
Senecio erucifolius	Hoary Ragwort
Senecio jacobaea	Common Ragwort
Silaum silaus	Pepper-saxifrage
Sisymbrium officinale	Hedge Mustard
Solanum dulcamara	Bittersweet

Solidago gigantea	Early Goldenrod
Stachys sylvatica	Hedge Woundwort
Stellaria graminea	Lesser Stitchwort
Stellaria holostea	Greater Stitchwort
Symphoricarpos albus	Snowberry
Tanacetum vulgare	Tansy
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Tragopogon pratensis	Goat's-beard
Trifolium campestre	Hop Trefoil
Trifolium dubium	Lesser Trefoil
Trifolium ornithopodioides	Bird's-foot Clover

Trifolium pratense	Red Clover
Trifolium repens	White Clover
Ulex europaeus	Gorse
Urtica dioica	Common Nettle
Veronica chamaedrys	Germander Speedwell
Veronica hederifolia	Ivy-leaved Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell
Vicia cracca	Tufted Vetch
Vicia hirsuta	Hairy Tare
Vicia sativa subsp. nigra	Narrow-leaved Vetch
Vicia sativa subsp. sativa	Common Vetch
Vicia tetrasperma	Smooth Tare

Compartment 4	
Crocosmia x crocosmiiflora	Montbretia (C. aurea x pottsii)
Cynosurus cristatus	Crested Dog's-tail
Cytisus scoparius	Broom
Dactylis glomerata	Cock's-foot
Daucus carota	Carrot
Dryopteris filix-mas	Male-fern
Epilobium montanum	Broad-leaved Willowherb
Equisetum arvense	Field Horsetail
Festuca arundinacea	Tall Fescue
Festuca rubra	Red Fescue
Foeniculum vulgare	Fennel
Fraxinus excelsior	Ash
Galega officinalis	Goat's-rue
Galium aparine	Cleavers
Geranium dissectum	Cut-leaved Crane's-bill
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Holcus mollis	Creeping Soft-grass
Hyacinthoides non-scripta	Bluebell
Hypericum perforatum	Perforate St John's-wort
llex aquifolium	Holly
Juncus conglomeratus	Compact Rush
Juncus effusus	Soft-rush
Juncus inflexus	Hard Rush
Lathyrus nissolia	Grass Vetchling
Lathyrus pratensis	Meadow Vetchling
Leucanthemum vulgare	Oxeye Daisy
Ligustrum vulgare	Wild Privet
Compartment 4 Con't	
Lolium perenne	Perennial Rye-grass

Lonicera periclymenum	Honeysuckle
Lotus corniculatus	Common Bird's-foot-trefoil
Lotus glaber	Narrow-leaved Bird's-foot-trefoil
Lotus pedunculatus	Greater Bird's-foot-trefoil
Luzula campestris	Field Wood-rush
Malus domestica	Apple
Medicago arabica	Spotted Medick
Melilotus altissimus	Tall Melilot
Odontites vernus	Red Bartsia
Pastinaca sativa	Wild Parsnip
Phyllitis scolopendrium	Hart's-tongue
Plantago lanceolata	Ribwort Plantain
Plantago major	Greater Plantain
Poa pratensis	Smooth Meadow-grass
Poa trivialis	Rough Meadow-grass
Polystichum setiferum	Soft Shield-fern
Populus tremula	Aspen
Potentilla anserina	Silverweed
Potentilla reptans	Creeping Cinquefoil
Prunus avium	Wild Cherry
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Pulicaria dysenterica	Common Fleabane
Quercus cerris	Turkey Oak
Quercus ilex	Evergreen Oak
Quercus robur	Pedunculate Oak
Ranunculus acris	Meadow Buttercup
Ranunculus bulbosus	Bulbous Buttercup
Ranunculus repens	Creeping Buttercup
Ribes rubrum	Red Currant
Rosa canina	Dog-rose
Rosa stylosa	Short-styled Field-rose
Rubus fruticosus agg.	Bramble
Rumex crispus	Curled Dock
Rumex sanguineus	Wood Dock
Sagina procumbens	Procumbent Pearlwort
Salix cinerea	Grey Willow
Scrophularia nodosa	Common Figwort
Senecio erucifolius	Hoary Ragwort
Senecio jacobaea	Common Ragwort
Stachys sylvatica	Hedge Woundwort
Stellaria graminea	Lesser Stitchwort
Symphytum officinale	Common Comfrey
Syringa vulgaris	Lilac
Compartment 4 Con't	
Taraxacum agg.	Dandelion

Trifolium dubium	Lesser Trefoil
Trifolium micranthum	Slender Trefoil
Trifolium ornithopodioides	Bird's-foot Clover
Trifolium pratense	Red Clover
Trifolium repens	White Clover
Ulex europaeus	Gorse
Urtica dioica	Common Nettle
Veronica beccabunga	Brooklime
Veronica chamaedrys	Germander Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell
Vicia cracca	Tufted Vetch
Vicia hirsuta	Hairy Tare
Vicia sativa subsp. nigra	Narrow-leaved Vetch
Vicia tetrasperma	Smooth Tare

Achillea millefolium	Yarrow
Alopecurus pratensis	Meadow Foxtail
Anisantha sterilis	Barren Brome
Anthoxanthum odoratum	Sweet Vernal-grass
Armoracia rusticana	Horse-radish
Arrhenatherum elatius	False Oat-Grass
Artemisia vulgaris	Mugwort
Barbarea vulgaris	Winter-cress
Bellis perennis	Daisy
Bromus hordeaceus	Soft-brome
Carex pendula	Pendulous Sedge
Cerastium fontanum	Common Mouse-ear
Cirsium arvense	Creeping Thistle
Clinopodium vulgare	Wild Basil
Cortaderia selloana	Pampas-grass
Crataegus monogyna	Hawthorn
Crepis capillaris	Smooth Hawk's-beard
Dactylis glomerata	Cock's-foot
Daucus carota	Carrot
Dipsacus fullonum	Wild Teasel
Equisetum arvense	Field Horsetail
Festuca arundinacea	Tall Fescue
Foeniculum vulgare	Fennel
Galega officinalis	Goat's-rue
Galium aparine	Cleavers
Galium mollugo	Hedge Bedstraw
Geranium dissectum	Cut-leaved Crane's-bill
Geum urbanum	Wood Avens
Glechoma hederacea	Ground-ivy
Hedera helix	
Heracleum sphondylium	Hogweed

Holcus lanatus	Yorkshire-fog
Hypericum androsaemum	Tutsan
Hypericum hirsutum	Hairy St John's-wort
Hypericum perforatum	Perforate St John's-wort
Juncus inflexus	Hard Rush
Lathyrus pratensis	Meadow Vetchling
Lepidium draba	Hoary Cress
Leucanthemum vulgare	Oxeye Daisy
Linaria vulgaris	Common Toadflax
Lolium perenne	Perennial Rye-grass
Lotus corniculatus	Common Bird's-foot-trefoil
Malus domestica	Apple
Medicago arabica	Spotted Medick
Medicago lupulina	Black Medick
Melilotus altissimus	Tall Melilot
Odontites vernus	Red Bartsia
Pastinaca sativa	Wild Parsnip
Persicaria amphibia	Amphibious Bistort
Phleum bertolonii	Smaller Cat's-tail
Phragmites australis	Common Reed
Picris echioides	Bristly Oxtongue
Picris hieracioides	Hawkweed Oxtongue
Plantago lanceolata	Ribwort Plantain
Plantago major	Greater Plantain
Poa annua	Annual Meadow-grass
Poa pratensis	Smooth Meadow-grass
Poa trivialis	Rough Meadow-grass
Populus tremula	Aspen
Potentilla anserina	Silverweed
Potentilla reptans	
Pteridium aquilinum	Bracken
Quercus robur	
Ranunculus acris	Meadow Buttercup
Ranunculus repens	Creeping Buttercup
Rosa canina	Dog-rose
Rosa obtusifolia	Round-leaved Dog-rose
Rubus armeniacus	Himalayan Bramble
Rubus fruticosus agg.	Bramble
Rumex crispus	Curled Dock
Rumex obtusifolius	Broad-leaved Dock
Rumex sanguineus	Wood Dock
Senecio erucifolius	Hoary Ragwort
Senecio jacobaea	Common Ragwort
Solanum dulcamara	Bittersweet
Solidago canadensis	Canadian Goldenrod
Stachys byzantina	Lamb's-ear
Stachys sylvatica	Hedge Woundwort

	Hybrid Woundwort (S. palustris x
Stachys x ambigua	sylvatica)
Stellaria graminea	Lesser Stitchwort
Taraxacum agg.	Dandelion
Tragopogon pratensis	Goat's-beard
Trifolium dubium	Lesser Trefoil
Trifolium pratense	Red Clover
Trifolium repens	White Clover
Urtica dioica	Common Nettle
Veronica chamaedrys	Germander Speedwell
Veronica persica	Common Field-speedwell
Vicia cracca	Tufted Vetch
Vicia sativa subsp. nigra	Narrow-leaved Vetch
Vicia sativa subsp. sativa	Common Vetch
Vicia tetrasperma	Smooth Tare

Acer pseudoplatanus	Sycamore
Agrimonia eupatoria	Agrimony
Agrostis capillaris	Common Bent
Agrostis stolonifera	Creeping Bent
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Arrhenatherum elatius	False Oat-Grass
Arum maculatum	Lords-and-Ladies
Athyrium filix-femina	Lady-fern
Betula pubescens	Downy Birch
Brachypodium sylvaticum	False-brome
Calystegia silvatica	Large Bindweed
Carex otrubae	False Fox-sedge
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
Carex spicata	Spiked Sedge
Chamerion angustifolium	Rosebay Willowherb
Circaea lutetiana	Enchanter's-nightshade
Cornus sanguinea	Dogwood
Corylus avellana	Hazel
Cotoneaster bullatus	Hollyberry Cotoneaster
Crataegus monogyna	Hawthorn
Cyclamen hederifolium	Sowbread
Cytisus scoparius	Broom
Dactylis glomerata	Cock's-foot
Deschampsia cespitosa	Tufted Hair-grass
Dryopteris affinis	Scaly Male-fern
Dryopteris carthusiana	Narrow Buckler-Fern
Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male-fern
Epilobium hirsutum	Great Willowherb

Broad-leaved Willowherb
Short-fruited Willowherb
Tall Fescue
Giant Fescue
Wild Strawberry
Ash
Cleavers
Cut-leaved Crane's-bill
Herb-Robert
Wood Avens
Common Ivy
Hogweed
Yorkshire-fog
Bluebell
Tutsan
Holly
Hard Rush
Meadow Vetchling
Wild Privet
Perennial Rye-grass
Honeysuckle
Common Reed
Hart's-tongue
Soft Shield-fern
Aspen
Grey Poplar (P. alba x tremula)
Silverweed
Wild Cherry
Cherry Plum
Wild Plum
Cherry Laurel
Blackthorn
Bracken
Common Fleabane
Turkey Oak
Evergreen Oak
Pedunculate Oak
Lesser Celandine
Creeping Buttercup
Red Currant
Gooseberry
Dog-rose
Dog-rose
Bramble
Raspberry
Broad-leaved Dock
Wood Dock

Ruscus aculeatus	Butcher's-broom
Salix cinerea	Grey Willow
Sambucus nigra	Elder
Senecio jacobaea	Common Ragwort
Solanum dulcamara	Bittersweet
Sorbus aucuparia	Rowan
Stachys sylvatica	Hedge Woundwort
Taraxacum agg.	Dandelion
Ulmus procera	English Elm
Urtica dioica	Common Nettle
Veronica beccabunga	Brooklime
Veronica hederifolia	Ivy-leaved Speedwell
Vicia sativa subsp. nigra	Narrow-leaved Vetch
Vicia sativa subsp. sativa	Common Vetch

# Compartment 7.

Acer pseudoplatanus	Sycamore
Agrimonia eupatoria	Agrimony
Agrostis capillaris	Common Bent
Agrostis stolonifera	Creeping Bent
Alisma plantago-aquatica	Water-plantain
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Amelanchier lamarckii	Juneberry
Arrhenatherum elatius	False Oat-Grass
Arum maculatum	Lords-and-Ladies
Athyrium filix-femina	Lady-fern
Betula pendula	Silver Birch
Betula pubescens	Downy Birch
Brachypodium sylvaticum	False-brome
Buddleja davidii	Butterfly-bush
Calystegia silvatica	Large Bindweed
Carex flacca	Glaucous Sedge
Carex nigra	Common Sedge
Carex otrubae	False Fox-sedge
Carex pendula	Pendulous Sedge
Carex pilulifera	Pill Sedge
Carex remota	Remote Sedge
Carex sylvatica	Wood-sedge
Chamerion angustifolium	Rosebay Willowherb
Circaea lutetiana	Enchanter's-nightshade
Convolvulus arvensis	Field Bindweed
Crataegus monogyna	Hawthorn
Crocosmia x crocosmiiflora	Montbretia (C. aurea x pottsii)
Cytisus scoparius	Broom
Dactylis glomerata	Cock's-foot
Dipsacus fullonum	Wild Teasel
Dryopteris affinis	Scaly Male-fern

Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male-fern
Epilobium hirsutum	Great Willowherb
Epilobium parviflorum	Hoary Willowherb
Epilobium tetragonum	Square-stalked Willowherb
Epipactis helleborine	Broad-leaved Helleborine
Fagus sylvatica	Beech
Fallopia japonica	Japanese Knotweed
Festuca gigantea	Giant Fescue
Fragaria vesca	Wild Strawberry
Frangula alnus	Alder Buckthorn
Fraxinus excelsior	Ash
Galega officinalis	Goat's-rue
Geranium dissectum	Cut-leaved Crane's-bill
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Hypericum perforatum	Perforate St John's-wort
Ilex aquifolium	Holly
Juncus acutiflorus	Sharp-flowered Rush
Juncus conglomeratus	Compact Rush
Juncus effusus	Soft-rush
Juncus inflexus	Hard Rush
Lathyrus pratensis	Meadow Vetchling
Lotus pedunculatus	Greater Bird's-foot-trefoil
Medicago lupulina	Black Medick
Medicago sativa subsp. sativa	Lucerne
Molinia caerulea	Purple Moor-grass
Pastinaca sativa	Wild Parsnip
Persicaria maculosa	Redshank
Phalaris arundinacea	Reed Canary-grass
Phragmites australis	Common Reed
Phyllitis scolopendrium	Hart's-tongue
Plantago lanceolata	Ribwort Plantain
Poa annua	Annual Meadow-grass
Poa trivialis	Rough Meadow-grass
Polypodium vulgare sens. lat.	Polypody
Potentilla anserina	Silverweed
Potentilla reptans	Creeping Cinquefoil
Prunus laurocerasus	Cherry Laurel
Pteridium aquilinum	Bracken
Quercus cerris	Turkey Oak
Quercus ilex	Evergreen Oak
Quercus robur	Pedunculate Oak
Rhododendron ponticum	Rhododendron
Ribes nigrum	Black Currant

Ribes rubrum	Red Currant
Rosa canina	Dog-rose
Rubus caesius	Dewberry
Rubus fruticosus agg.	Bramble
Rumex acetosella	Sheep's Sorrel
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Salix viminalis	Osier
Sambucus nigra	Elder
Scrophularia nodosa	Common Figwort
Senecio erucifolius	Hoary Ragwort
Solanum dulcamara	Bittersweet
Symphytum officinale	Common Comfrey
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Ulex europaeus	Gorse
Urtica dioica	Common Nettle
Vicia sativa	Common Vetch
Vicia tetrasperma	Smooth Tare

Agrostis capillaris	Common Bent
Athyrium filix-femina	Lady-fern
Betula pubescens	Downy Birch
Caltha palustris	Marsh-marigold
Cardamine pratensis	Cuckooflower
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
Ceratophyllum demersum	Rigid Hornwort
Circaea lutetiana	Enchanter's-nightshade
Cotoneaster simonsii	Himalayan Cotoneaster
Cytisus scoparius	Broom
Dryopteris affinis	Scaly Male-fern
Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male-fern
Equisetum arvense	Field Horsetail
, Festuca arundinacea	Tall Fescue
Festuca rubra	Red Fescue
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Glyceria fluitans	Floating Sweet-grass
Hedera helix	Common Ivy
Holcus lanatus	Yorkshire-fog
llex aquifolium	Holly
Juncus conglomeratus	Compact Rush
Juncus effusus	Soft-rush
Juncus tenuis	Slender Rush
Lotus pedunculatus	Greater Bird's-foot-trefoil
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Luzula campestris	Field Wood-rush
Lycopus europaeus	Gypsywort
Medicago lupulina	Black Medick
Myriophyllum aquaticum	Parrot's-feather
Nymphaea alba	White Water-lily
Nymphoides peltata	Fringed Water-lily
Poa annua	Annual Meadow-grass
Prunella vulgaris	Selfheal
Prunus avium	Wild Cherry
Prunus laurocerasus	Cherry Laurel
Quercus cerris	Turkey Oak
Quercus ilex	Evergreen Oak
Quercus robur	Pedunculate Oak
Ranunculus flammula	Lesser Spearwort
Rhododendron ponticum	Rhododendron
Rubus fruticosus agg.	Bramble
Rumex obtusifolius	Broad-leaved Dock
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Sorbus aucuparia	Rowan
Sparganium erectum	Branched Bur-reed
Taraxacum agg.	Dandelion
Ulex europaeus	Gorse

oompartmont o	
Acer pseudoplatanus	Sycamore
Aesculus hippocastanum	Horse-chestnut
Agrostis capillaris	Common Bent
Agrostis stolonifera	Creeping Bent
Alliaria petiolata	Garlic Mustard
Anthriscus sylvestris	Cow Parsley
Arrhenatherum elatius	False Oat-Grass
Arum maculatum	Lords-and-Ladies
Betula pendula	Silver Birch
Betula pubescens	Downy Birch
Brachypodium sylvaticum	False-brome
Bromopsis ramosa	Hairy-brome
Buddleja davidii	Butterfly-bush
Calystegia silvatica	Large Bindweed
Carex remota	Remote Sedge
Castanea sativa	Sweet Chestnut
Circaea lutetiana	Enchanter's-nightshade
Cirsium arvense	Creeping Thistle
Cornus sanguinea	Dogwood
Crataegus monogyna	Hawthorn
Crocosmia x crocosmiiflora	Montbretia (C. aurea x pottsii)
Cytisus scoparius	Broom

Dactylis glomerata	Cock's-foot
Dryopteris affinis	Scaly Male-fern
Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male-fern
Epilobium hirsutum	Great Willowherb
Epilobium montanum	Broad-leaved Willowherb
Epilobium parviflorum	Hoary Willowherb
Epilobium tetragonum	Square-stalked Willowherb
Euphorbia peplus	Petty Spurge
Fallopia japonica	Japanese Knotweed
Forsythia x intermedia	Forsythia
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Galium palustre	Marsh-bedstraw
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Glechoma hederacea	Ground-ivy
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Holcus mollis	Creeping Soft-grass
Hyacinthoides non-scripta	Bluebell
	Hybrid Bluebell (H. non-scripta x
Hyacinthoides x massartiana	hispanica)
llex aquifolium	Holly
Juncus conglomeratus	Compact Rush
Juncus effusus	Soft-rush
Lapsana communis	Nipplewort
Ligustrum ovalifolium	Garden Privet
Ligustrum vulgare	Wild Privet
Lonicera japonica	Japanese Honeysuckle
Lonicera periclymenum	Honeysuckle
Lonicera tatarica	Tartarian Honeysuckle
Malus sylvestris sens. lat.	Apple
Narcissus agg.	Cultivated Daffodil
Petasites fragrans	Winter Heliotrope
Poa pratensis	Smooth Meadow-grass
Polystichum setiferum	Soft Shield-fern
Populus tremula	Aspen
Populus x canescens	Grey Poplar ( <i>P. alba x tremula</i> )
Prunus avium	Wild Cherry
Prunus domestica	Wild Plum
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Pulicaria dysenterica	Common Fleabane
Quercus cerris	Turkey Oak
Quercus ilex	Evergreen Oak

Quercus robur	Pedunculate Oak
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Ribes nigrum	Black Currant
Ribes rubrum	Red Currant
Rosa canina	Dog-rose
Rubus caesius	Dewberry
Rubus fruticosus agg.	Bramble
Rubus idaeus	Raspberry
Rubus loganobaccus	Loganberry
Rumex sanguineus	Wood Dock
Ruscus aculeatus	Butcher's-broom
Salix cinerea	Grey Willow
Sambucus nigra	Elder
Senecio erucifolius	Hoary Ragwort
Senecio jacobaea	Common Ragwort
Solanum dulcamara	Bittersweet
Sorbus aucuparia	Rowan
Stachys sylvatica	Hedge Woundwort
Stellaria holostea	Greater Stitchwort
Symphytum orientale	White Comfrey
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Teucrium scorodonia	Wood Sage
Tilia platyphyllos	Large-leaved Lime
Ulex europaeus	Gorse
Urtica dioica	Common Nettle
Veronica chamaedrys	Germander Speedwell
Veronica hederifolia	Ivy-leaved Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell
Viburnum lantana	Wayfaring-tree
Viola odorata	Sweet Violet

Acer pseudoplatanus	Sycamore
Arctium minus	Lesser Burdock
Arum maculatum	Lords-and-Ladies
Cardamine flexuosa	Wavy Bitter-cress
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
Chrysosplenium oppositifolium	Opposite-leaved Golden-
	saxifrage
Circaea lutetiana	Enchanter's-nightshade
Crataegus monogyna	Hawthorn

Dactylis glomerata	Cock's-foot
Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male-fern
Dryopteris x complexa	D. affinis x filix-mas
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Hedera helix subsp. helix	Common Ivy
Heracleum sphondylium	Hogweed
Hyacinthoides non-scripta	Bluebell
Ilex aquifolium	Holly
Ligustrum vulgare	Wild Privet
Lonicera nitida	Wilson's Honeysuckle
Lonicera periclymenum	Honeysuckle
Malus domestica	Apple
Narcissus agg.	Cultivated Daffodil
Oenanthe crocata	Hemlock Water-dropwort
Phyllitis scolopendrium	Hart's-tongue
Prunus avium	Wild Cherry
Prunus laurocerasus	Cherry Laurel
Pteridium aquilinum	Bracken
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Ribes sanguineum	Flowering Currant
Rosa canina	Dog-rose
Rubus fruticosus agg.	Bramble
Salix cinerea	Grey Willow
Salix fragilis	Crack-willow
Scrophularia nodosa	Common Figwort
Sorbus aucuparia	Rowan
Stachys sylvatica	Hedge Woundwort
Symphoricarpos albus	Snowberry
Taraxacum agg.	Dandelion
Ulex europaeus	Gorse
Ulmus procera	English Elm
Urtica dioica	Common Nettle
Compartment 10 Con't.	
Veronica hederifolia	Ivy-leaved Speedwell
Acer platanoides	Norway Maple
Acer pseudoplatanus	Sycamore
Alliaria petiolata	Garlic Mustard
Alnus glutinosa	Alder
Angelica sylvestris	Wild Angelica
Anthriscus sylvestris	Cow Parsley
Apium nodiflorum	Fool's-water-cress
Arrhenatherum elatius	False Oat-Grass
Arum maculatum	Lords-and-Ladies

Athyrium filix-femina	Lady-fern
Betula pubescens	Downy Birch
Blechnum spicant	Hard-fern
Brachypodium sylvaticum	False-brome
Calystegia silvatica	Large Bindweed
Cardamine flexuosa	Wavy Bitter-cress
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge
	Opposite-leaved Golden-
Chrysosplenium oppositifolium	saxifrage
Circaea lutetiana	Enchanter's-nightshade
Cirsium arvense	Creeping Thistle
Cirsium vulgare	Spear Thistle
Cornus sanguinea	Dogwood
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Dactylis glomerata	Cock's-foot
Dryopteris affinis	Scaly Male-fern
Dryopteris carthusiana	Narrow Buckler-Fern
Dryopteris dilatata	Broad Buckler-fern
Epilobium montanum	Broad-leaved Willowherb
Epilobium parviflorum	Hoary Willowherb
Frangula alnus	Alder Buckthorn
Fraxinus excelsior	Ash
Galium aparine	Cleavers
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Hedera helix subsp. helix	Common Ivy
Heracleum sphondylium	Hogweed
Hyacinthoides non-scripta	Bluebell
Hypericum androsaemum	Tutsan
llex aquifolium	Holly
Ligustrum vulgare	Wild Privet
Lonicera periclymenum	Honeysuckle
Malus domestica	Apple
Medicago lupulina	Black Medick
Moehringia trinervia	Three-nerved Sandwort
Compartment 10 Con't.	
Oenanthe crocata	Hemlock Water-dropwort
Phyllitis scolopendrium	Hart's-tongue
Plantago major	Greater Plantain
Poa pratensis	Smooth Meadow-grass
Prunus avium	Wild Cherry
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Quercus robur	Pedunculate Oak
Ranunculus ficaria	Lesser Celandine

Ranunculus repens	Creeping Buttercup
Rosa canina	Dog-rose
Rubus fruticosus agg.	Bramble
Rubus idaeus	Raspberry
Rumex obtusifolius	Broad-leaved Dock
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Sambucus nigra	Elder
Senecio jacobaea	Common Ragwort
Solanum dulcamara	Bittersweet
Sonchus oleraceus	Smooth Sow-thistle
Sorbus aucuparia	Rowan
Stachys sylvatica	Hedge Woundwort
Symphoricarpos albus	Snowberry
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Tripleurospermum inodorum	Scentless Mayweed
Urtica dioica	Common Nettle
Veronica hederifolia	Ivy-leaved Speedwell

#### Compartment 11a

Acer pseudoplatanus	Sycamore
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Agrostis capillaris	Common Bent
Aira praecox	Early Hair-grass
Alliaria petiolata	Garlic Mustard
Alopecurus myosuroides	Black-grass
Alopecurus pratensis	Meadow Foxtail
Amelanchier lamarckii	Juneberry
Anthoxanthum odoratum	Sweet Vernal-grass
Arrhenatherum elatius	False Oat-Grass
Arum maculatum	Lords-and-Ladies
Betula pendula	Silver Birch
Betula pubescens	Downy Birch
Bryonia dioica	White Bryony
Cardamine hirsuta	Hairy Bitter-cress
Compartment 11a Con't.	
Carex hirta	Hairy Sedge
Carex nigra	Common Sedge
Carex otrubae	False Fox-sedge
Centaurea nigra	Common Knapweed
Cerastium fontanum	Common Mouse-ear
Cerastium glomeratum	Sticky Mouse-ear
Chamerion angustifolium	Rosebay Willowherb
Cirsium arvense	Creeping Thistle
Cirsium vulgare	Spear Thistle
Cotoneaster bullatus	Hollyberry Cotoneaster

Cotoneaster simonsii	Himalayan Cotoneaster
Crataegus monogyna	Hawthorn
Cynosurus cristatus	Crested Dog's-tail
Cytisus scoparius	Broom
Dactylis glomerata	Cock's-foot
Dryopteris dilatata	Broad Buckler-fern
Dryopteris filix-mas	Male-fern
Epilobium ciliatum	American Willowherb
Epilobium montanum	Broad-leaved Willowherb
Euonymus europaeus	Spindle
Festuca rubra	Red Fescue
Frangula alnus	Alder Buckthorn
Galium aparine	Cleavers
Galium mollugo	Hedge Bedstraw
Geranium dissectum	Cut-leaved Crane's-bill
Geum urbanum	Wood Avens
Hedera helix subsp. helix	Common Ivy
Heracleum sphondylium	Hogweed
Holcus lanatus	Yorkshire-fog
Holcus mollis	Creeping Soft-grass
Hypochaeris radicata	Cat's-ear
llex aquifolium	Holly
Juncus conglomeratus	Compact Rush
Juncus effusus	Soft-rush
Lathyrus pratensis	Meadow Vetchling
Leucanthemum vulgare	Oxeye Daisy
Lolium perenne	Perennial Rye-grass
Lonicera periclymenum	Honeysuckle
Plantago lanceolata	Ribwort Plantain
Poa annua	Annual Meadow-grass
Poa pratensis	Smooth Meadow-grass
Potentilla reptans	Creeping Cinquefoil
Prunus avium	Wild Cherry
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Quercus cerris	Turkey Oak
Quercus ilex	Evergreen Oak
Compartment 11a. Con't.	
Quercus robur	Pedunculate Oak
Ranunculus acris	Meadow Buttercup
Ranunculus bulbosus	Bulbous Buttercup
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Ribes rubrum	Red Currant
Rosa canina	Dog-rose
Rosa micrantha	Small-flowered Sweet-briar
Rubus fruticosus agg.	Bramble
Rubus idaeus	Raspberry

Rumex acetosella	Sheep's Sorrel
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Sambucus nigra	Elder
Senecio erucifolius	Hoary Ragwort
Senecio jacobaea	Common Ragwort
Solanum dulcamara	Bittersweet
Sonchus asper	Prickly Sow-thistle
Sorbus aucuparia	Rowan
Stellaria graminea	Lesser Stitchwort
Stellaria holostea	Greater Stitchwort
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Teucrium scorodonia	Wood Sage
Trifolium dubium	Lesser Trefoil
Trifolium pratense	Red Clover
Ulex europaeus	Gorse
Urtica dioica	Common Nettle
Vicia cracca	Tufted Vetch
Vicia hirsuta	Hairy Tare
Vicia sativa subsp. nigra	Narrow-leaved Vetch
Vicia tetrasperma	Smooth Tare

#### **Compartment 11b**

Compartment 11b	
Acer pseudoplatanus	Sycamore
Achillea millefolium	Yarrow
Aegopodium podagraria	Ground-elder
Aesculus hippocastanum	Horse-chestnut
Agrostis stolonifera	Creeping Bent
Alliaria petiolata	Garlic Mustard
Allium vineale	Wild Onion
Anagallis arvensis	Scarlet Pimpernel
Anthriscus sylvestris	Cow Parsley
Aquilegia vulgaris	Columbine
Arctium minus	Lesser Burdock
Arrhenatherum elatius	False Oat-Grass
Arum maculatum	Lords-and-Ladies
Compartment 11b Con't.	
Avena sativa	Oat
Betula pendula	Silver Birch
Betula pubescens	Downy Birch
Brachypodium sylvaticum	False-brome
Buddleja davidii	Butterfly-bush
Calystegia sepium	Hedge Bindweed
Calystegia silvatica	Large Bindweed
Carex divulsa	Grey Sedge
Carex pendula	Pendulous Sedge
Carex remota	Remote Sedge

Castanea sativa	Sweet Chestnut
Circaea lutetiana	Enchanter's-nightshade
Cirsium arvense	Creeping Thistle
Cirsium palustre	Marsh Thistle
Clematis vitalba	Traveller's-joy
Cornus sanguinea	Dogwood
Corylus avellana	Hazel
Crataegus laevigata	Midland Hawthorn
Crataegus monogyna	Hawthorn
Crocosmia x crocosmiiflora	Montbretia ( <i>C. aurea x pottsii</i> )
Cytisus scoparius	Broom
Dactylis glomerata	Cock's-foot
Dracunculus vulgaris	Dragon Arum
Dryopteris dilatata	Broad Buckler-fern
	Male-fern
Dryopteris filix-mas Epilobium hirsutum	Great Willowherb
1	
Epilobium montanum	Broad-leaved Willowherb
Epilobium tetragonum	Square-stalked Willowherb
Euonymus europaeus	Spindle
Euphorbia peplus	Petty Spurge
Fagus sylvatica	Beech
Festuca gigantea	Giant Fescue
Frangula alnus	Alder Buckthorn
Fraxinus excelsior	Ash
Galanthus plicatus	Pleated Snowdrop
Galium aparine	Cleavers
Galium mollugo	Hedge Bedstraw
Geranium robertianum	Herb-Robert
Geum urbanum	Wood Avens
Glechoma hederacea	Ground-ivy
Hedera helix	Common Ivy
Heracleum sphondylium	Hogweed
Hirschfeldia incana	Hoary Mustard
Holcus mollis	Creeping Soft-grass
llex aquifolium	Holly
Juncus effusus	Soft-rush
Laburnum anagyroides	Laburnum
Compartment 11b Con't.	
Lapsana communis subsp.	
communis	Nipplewort
Laurus nobilis	Bay
Ligustrum ovalifolium	Garden Privet
Ligustrum vulgare	Wild Privet
Linaria vulgaris	Common Toadflax
Lonicera japonica	Japanese Honeysuckle
Lonicera periclymenum	Honeysuckle
Luzula pilosa	Hairy Wood-rush
Malus sylvestris	Crab Apple

Mercurialis perennis	Dog's Mercury
Narcissus agg.	Cultivated Daffodil
Panicum miliaceum	Common Millet
Parthenocissus quinquefolia	Virginia-creeper
Pentaglottis sempervirens	Green Alkanet
Petasites fragrans	Winter Heliotrope
Photinia davidiana	Stranvaesia
Phyllitis scolopendrium	Hart's-tongue
Picris echioides	Bristly Oxtongue
Poa pratensis	Smooth Meadow-grass
Polygonum aviculare	Knotgrass
Polystichum setiferum	Soft Shield-fern
Populus tremula	Aspen
Potentilla reptans	Creeping Cinquefoil
Primula x polyantha	False Oxlip (P. veris x vulgaris)
Prunus avium	Wild Cherry
Prunus cerasifera	Cherry Plum
Prunus domestica	Wild Plum
Prunus laurocerasus	Cherry Laurel
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Quercus ilex	Evergreen Oak
Quercus robur	Pedunculate Oak
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Rhododendron ponticum	Rhododendron
Ribes rubrum	Red Currant
Rosa canina	Dog-rose
Rubus fruticosus agg.	Bramble
Rumex acetosella	Sheep's Sorrel
Rumex crispus	Curled Dock
Rumex sanguineus	Wood Dock
Salix cinerea	Grey Willow
Salix fragilis	Crack-willow
Sambucus nigra	Elder
Scrophularia nodosa	Common Figwort
Senecio jacobaea	Common Ragwort
Compartment 11b Con't.	
Sonchus oleraceus	Smooth Sow-thistle
Sorbus aucuparia	Rowan
Stachys sylvatica	Hedge Woundwort
Stellaria holostea	Greater Stitchwort
Taraxacum agg.	Dandelion
Taxus baccata	Yew
Teucrium scorodonia	Wood Sage
Ulex europaeus	Gorse
Ulmus procera	English Elm
Urtica dioica	Common Nettle

Veronica hederifolia	Ivy-leaved Speedwell
Veronica serpyllifolia	Thyme-leaved Speedwell

Appendix D

Compartment 3

Photos of each compartment Compartment 3







### Compartment 4



## Compartment 5





Appendix D Con't.

Compartment 7 (after)

Compartment 7 (before)







Compartment 9 (2016)



# Compartment 8



Compartment 9 (2016)



Appendix D Con't.

### Compartment 9 (2019)



Compartment 11 (July 2010) Acid Grassland



Compartment 11 (July 2018) Acid Grassland



Compartment 11 Woodland Pasture 2017







# Entomology Survey Results 2013

Compartment 1a & 1b	
Epermenia chaerophyllella	a mining moth
Bombus terrestris	Buff-tailed Bumble Bee
Amauromyza morionella	a mining fly
Chromatomyia Ionicerae	a mining fly
Harmonia axyridis	Harlequin Ladybird
Compartment 2a & 2b	
Cepaea hortensis	White-lipped Snail
Metellina mengei	a spider
Pyrrhosoma nymphula	Large Red Damselfly
Pyrrhosoma nymphula	Large Red Damselfly
Liocoris tripustulatus	a Mirid bug
Andrena fulva	a mining bee
Bombus terrestris	Buff-tailed Bumble Bee
Nomada leucophthalma	a solitary bee
Osmia rufa	Red Mason Bee
Osmia rufa	Red Mason Bee
Vespula vulgaris	Common Wasp
Bombylius major	Common Bee-fly
Cheilosia longula	a hoverfly
Helopholis pendulus	a hoverfly
Melanostoma mellinum	a hoverfly
Melanostroma scalare	a hoverfly
Parasyrphus malinellus	a hoverfly
Platycheirus albimanus	a hoverfly
Compartment 3	
Calocybe gambosa	St Georges Mushroom
Calocybe gambosa	St Georges Mushroom
Phoma hedericola	a fungus
Rhytisma acerinum	Tar Spot Fungus
Mollusca	
Cepaea hortensis	White-lipped Snail
Cepaea hortensis	White-lipped Snail
Crustacea	
Armadillidium vulgare	Common pill woodlouse
Armadillidium vulgare	Common pill woodlouse
Philoscia muscorum	Common striped woodlouse
Arachnida	
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Compartment 3 Con't.	
Aranae: Mites and Ticks	
Aculus laevis	a mite
Eriophyes laevis	a mite
Eriophyes prunispinosae	a mite
Eriophyes rubicolens	a mite
Phyllocoptes goniothorax	a mite
Aranae: Spiders	
Anelosimus vittatus	a spider
Anyphaena accentuata	a spider
Araniella cucurbitina sens. lat.	a spider
Araniella cucurbitina sens. lat.	a spider
Araniella cucurbitina sens. str.	a spider
Araneus angulatus	a spider
Ballus chalybeius	a spider
Clubiona comta	a spider
Enoplognatha ovata/latimana sens. lat.	a spider
Philodromus cespitum	a spider
Philodromus cespitum	a spider
Pisaura mirabilis	Purse-web Spider
Tetragnatha extensa	a spider
Tetragnatha extensa	a spider
Xysticus cristatus	a spider
Zilla diodia	a spider
Insecta	
Odonta	
Coenagrion puella	Azure Damselfly
Orthoptera	
Conocephalus discolor	Long-winged Conehead
Leptophyes punctatissima	Speckled Bush Cricket
Metrioptera roeselii	Roesel's Bush Cricket
Pholidoptera griseoaptera	Dark Bush Cricket
Dermaptera	
Forficula auricularia	Common Earwig
Forficula lesnei	
FOLICIIA IESTEI	
	Lesne's Earwig
Dictyoptera	
Dictyoptera Ectobius lapponicus	Dusky cockroach
Dictyoptera Ectobius lapponicus Hemiptera	Dusky cockroach
Dictyoptera Ectobius lapponicus Hemiptera Anthocoris nemorum	Dusky cockroach a flower bug
Dictyoptera Ectobius lapponicus Hemiptera Anthocoris nemorum Anthocoris nemorum	Dusky cockroach a flower bug a flower bug
Dictyoptera Ectobius lapponicus Hemiptera Anthocoris nemorum Anthocoris nemorum Anthocoris nemorum	Dusky cockroach a flower bug a flower bug a flower bug
DictyopteraEctobius lapponicusHemipteraAnthocoris nemorumAnthocoris nemorumAnthocoris nemorumAnthocoris nemorumAnthocoris nemorum	Dusky cockroach a flower bug a flower bug a flower bug a flower bug a flower bug
DictyopteraEctobius lapponicusHemipteraAnthocoris nemorumAnthocoris nemorumAnthocoris nemorumAnthocoris nemorumAnthocoris nemorumCalocoris roseomaculatus	Dusky cockroach a flower bug a flower bug a flower bug a flower bug a flower bug a flower bug a Mirid bug
Dictyoptera Ectobius lapponicus Hemiptera Anthocoris nemorum Anthocoris nemorum Anthocoris nemorum Calocoris roseomaculatus Coreus marginatus	Dusky cockroach a flower bug a flower bug a flower bug a flower bug a flower bug a Mirid bug Dock Bug
Dictyoptera Ectobius lapponicus Hemiptera Anthocoris nemorum Anthocoris nemorum Anthocoris nemorum Calocoris roseomaculatus Coreus marginatus Coreus marginatus	Dusky cockroach a flower bug a flower bug a flower bug a flower bug a flower bug a Mirid bug Dock Bug Dock Bug
Dictyoptera Ectobius lapponicus Hemiptera Anthocoris nemorum Anthocoris nemorum Anthocoris nemorum Calocoris roseomaculatus Coreus marginatus	Dusky cockroach a flower bug a flower bug a flower bug a flower bug a flower bug a Mirid bug Dock Bug

Compartment 3 Con't.	
Eurygaster testudinaria	Tortoise Shieldbug
Himacerus mirmicoides	Ant Damselbug
Ischnodemus sabuleti	European Chinch-bug
Leptopterna dolabrata	a Mirid bug
Leptopterna dolabrata	a Mirid bug
Liocoris tripustulatus	a Mirid bug
Liocoris tripustulatus	a Mirid bug
Miris striatus	a Mirid bug
Myrmus miriformis (Rhopalidae)	
Nabis rugosus	Common Damsel-bug
Nabis rugosus	Common Damsel-bug
Nabis rugosus	Common Damsel-bug
Notostira elongata	a Mirid bug
Notostira elongata	a Mirid bug
Oncotylus viridiflavus	a Mirid bug
Palomena prasina	Common Green Shieldbug
Phytocoris varipes	a Mirid bug
Rhopalus subrufus	a bug
Scolopostethus affinis	a ground bug
Stenodema laevigata	a Mirid bug
Trigonotylus ruficornis	a Mirid bug
Homoptera	
Evacanthus interruptus	a leafhopper
Ledra aurita	Eared Leafhopper
Panorpa communis	a scorpion fly
Butterflies	
Anthocharis cardamines	Orange tip
Celastrina argiolus	Holly Blue
Colias croceus	Clouded Yellow
Inachis io	Peacock
Pararge aegeria	Speckled Wood
Pieris rapae	Small White
Polygonia c-album	Comma
Polyommatus icarus	Common Blue
Thymelicus sylvestris	Small Skipper
Moths	
Adela cuprella	a micro moth
Agriopis aurantiaria	Scarce Umber
Agriphila straminella	a micro moth
Agriphila straninella Anthophila fabriciana	Nettle-tap Moth
Callisto denticulella	a micro moth
Caloptilia syringella	a micro moth
Caloplina synngena Chrysoteuchia culmella	Garden Grass-veneer
Cosmia trapezina	Dun-bar
Cosma trapezina Cyclophora punctaria	Maiden's Blush
Dichrorampha petiverella	a micro moth
Eupithecia abbreviata	Brindled Pug
בטאונווכטום מאאופיומנם	Dinuleu Fuy

Compartment 3 Con't	
Glyphipterix fuscoviridella	a micro moth
Grapholita internana	a micro moth
Lyonetia clerkella	Apple Leaf Miner
Operophtera brumata	Winter Moth
Parornix anglicella	a micro moth
Parornix scoticella	a micro moth
Pyrausta aurata	Mint Moth
Rivula sericealis	Straw Dot
Semiaspilates ochrearia	Yellow Belle
Stigmella aurella	a micro moth
Stigmella microtheriella	a micro moth
Stigmella plagicolella	a micro moth
Stigmella ruficapitella	a micro moth
Stigmella splendidissimella	a micro moth
Tyria jacobaeae	Cinnabar
Zygaena filipendulae	Six-spot Burnet
Hymenoptera	
Andrena nitida	a mining bee
Andricus fecundator f. agamic	Artichoke gall causer
Andricus kollari f. agamic	Marble gall
Andricus lignicola f. agamic	Cola-nut causer
Andricus quercuscalicis f. agamic	Knopper gall causer
Apis mellifera	Honey Bee
Biorhiza pallida f. sexual	Oak-apple causer
Bombus hypnorum	a bumble bee
Bombus pascuorum	Common carder bee
Bombus pratorum	Early bumble bee
Bombus terrastris	Buff-tailed bumble bee
Lasius niger sens. Lat.	An ant
Neuroterus quercusbaccarum f. agamic	Common spangle causer
Neuroterus quercusbaccarum f. sexual	Currant gall causer
Nomada fabriciana	Fabricius' Nomad Bee
Diptera	
Beris chalybata	a soldier fly
Bombylius major	Common Bee-fly
Chloromyia formosa	a soldier fly
Dasysyrphus venustus	a hoverfly
Epistrophe eligans	a hoverfly
Episyrphus balteatus	Marmalade Hoverfly
Eriothrix rufomaculata	a fly
Eristalis intricaria	a hoverfly
Eristalis pertinax	a hoverfly
Eristalis tinax	a hoverfly
Helophilus hybridus	a hoverfly
Helophilus pendulus	a hoverfly
Limnia unguicornis	a fly
Melanostoma mellinum	a hoverfly

Compartment 3 Con't	
Merodon equestris	Narcissus Fly
Myathropa florea	a hoverfly
Myopa testacea	a thick-headed fly
Nephrotoma appendiculata	a crane-fly
Rhingia rostrata	a hoverfly
Sphaerophoria scripta	a hoverfly
Urophora cardui	Thistle Gall Fly
Xanthogramma pedissequum	a hoverfly
Xylota segnis	a hoverfly
Xylota sylvarum	a hoverfly
Coleoptera	
Ampedus sanguinolentus	a click beetle
Byturus tomentosus	Raspberry Beetle
Cantharis rustica	a sailor beetle
Coccinella septempunctata Curculio glandium	7-spot Ladybird Acorn Weevil
	a click beetle
Dalopius marginatus	
Dorytomus taeniatus	a weevil
Grammoptera ruficornis	a longhorn beetle
Harmonia axyridis	Harlequin Ladybird
Lochmaea crataegi	Hawthorn Leaf Beetle
Nedyus quadrimaculatus	Small Nettle Weevil
Oedemera lurida	a beetle
Phyllobius pyri	Common Leaf Weevil
Propylea quattuordecimpunctata	14-spot Ladybird
Rhagonycha fulva	Red Soldier Beetle
Rhagonycha limbata	a beetle
Rhynchites aequatus	Apple Fruit Rhynchites
Reptiles	
Lacerta vivipara	Viviparous Lizard
Vipera berus	Adder
Birds	
Sylvia communis	Common Whitethroat
Compartment 4	
Mollusca	
Philoscia muscorum	Common striped woodlouse
Mites and Ticks	
Aculus laevis	a mite
Eriophyes prunispinosae	a mite
Spiders	
Mangora acalypha	a spider
Misumena vatia	a spider
Tetragnatha extensa	a spider
Delichon urbicum Luscinia megarhynchos Sylvia communis Compartment 4 Mollusca Philoscia muscorum Mites and Ticks Aculus laevis Eriophyes prunispinosae Spiders Mangora acalypha Misumena vatia	a mite a mite a mite a spider a spider

Compartment 4 con't	
Pyrrhosoma nymphula	Large Red Damselfly
Orthoptera	
Leptophyes punctatissima	Speckled Bush Cricket
Meconema thalassinum	Oak Bush Cricket
Pholidoptera griseoaptera	Dark Bush Cricket
Hemiptera	
Deraeocoris ruber	a Mirid bug
Leptopterna dolabrata	a Mirid bug
Rhopalus subrufus	a bug
Homoptera	
Cicadella viridis	a leafhopper
Butterflies	
Inachis io	Peacock
	Comma
Polygonia c-album Polyomatus icarus	Common Blue
Moths	
	Dark Archas
Apamea monoglypha	Dark Arches Silver Y
Autographa gamma	Maiden's Blush
Cyclophora punctaria	
Ectoedemia septembrella	a micro moth
Eilema griseola	Dingy Footman
Glyphipterix fuscoviridella	a micro moth
Phyllonorycter harrisella	a micro moth
Rivula sericealis	Straw Dot
Stigmella plagicolella	a micro moth
Stigmella ruficapitella	a micro moth
Hymenoptra	
Andricus fecundator f. agamic	Artichoke gall causer
Andricus quercuscalicis f. agamic	Knopper gall causer
Bombus hortorum	Small Garden Bumble Bee
Bombus lapidarius	Large Red Tailed Bumble Bee
Bombus pascuorum	Common Carder Bee
Bombus terrestris	Buff-tailed Bumble Bee
Cynips divisa f. agamic	Red-pea gall causer
Diplolepis rosae	Rose bedeguar causer
Megachile willughbiella	Willughby's Leaf-cutter Bee
Neuroterus albipes f. agamic	Smooth-spangle causer
Neuroterus numismalis f. agamic	Silk-button causer
Neuroterus quercusbaccarum f. agamic	Common spangle causer
Diptera	
Bombylius major	Common Bee-fly
Epistrophe eligans	a hoverfly
Eristalis intricaria	a hoverfly
Eristalis nemorum	a hoverfly
Eristalis pertinax	a hoverfly
Eristalis tenax	a hoverfly

Compartment 4 con't	
Helophilus pendulus	a hoverfly
Limnia unguicornis	a fly
Liriomyza congesta	a mining fly
Phytomyza conyzae	a mining fly
Sicus ferrugineus	a thick-headed fly
Coleoptera	
Xylota sylvarum	a hoverfly
Malachius bipustulatus	Malachite Beetle
Oedemera nobilis	Swollen-thighed Beetle
Pyrochroa serraticornis	Common Cardinal Beetle
Birds	
Strix aluco	Tawny Owl
Compartment 5	
Spiders	
Araniella cucurbitina sens. Lat.	A spider
Misumena vatia	a spider
Odonata	•
Aeshna cyanea	Southern Hawker
Sympetrum striolatum	Common Darter
Orthoptera	
Pholidoptera griseoaptera	Dark Bush Cricket
Forficula auricularia	Common Earwig
Hemiptera	
Anthocoris nemorum	a flower bug
Miris striatus	a Mirid bug
Palomena prasina	Common Green Shieldbug
Butterflies	Ť
Aglais urticae	Small Tortoiseshell
Inachis io	Peacock
Maniola jurtina	Meadow Brown
Pieris rapae	Small White
Polygonia c-album	Comma
Moths	
Grapholita internana	a micro moth
Pyrausta aurata	Mint Moth
Apis mellifera	Honey Bee
Hymenoptera	
Bombus pascuorum	Common Carder Bee
Lasioglossum calceatum	Slender Mining Bee
Bombylius major	Common Bee-fly
Graphomya maculata	A fly
Eristalis pertinax	a hoverfly
Eristalis tenax	a hoverfly
Graphomya maculata	a fly
Helophilus pendulus	a hoverfly
Phasia hemiptera	a fly
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Compartment 5 con't.	
Sphaerophoria scripta	a hoverfly
Syritta pipiens	a hoverfly
Tachina fera	
	a fly
Byturus tomentosus	Raspberry Beetle
Cantharis fusca	a sailor beetle
Curculio glandium	Acorn Weevil
Grammoptera ruficornis	a longhorn beetle
Malachius bipustulatus	Malachite Beetle
Pyrochroa serraticornis	Common Cardinal Beetle
Birds	
Sylvia atricapilla	Blackcap
Mammals	
Vulpes vulpes	Fox
Compartment 6	
Fungi	+
Phoma hedericola	a fungus
Rhytisma acerinum	Tar Spot Fungus
Mites & Ticks	
Eriophyes laevis	a mite
Eriophyes rubicolens	a mite
Phyllocoptes goniothorax	a mite
Butterflies	
Gonepteryx rhamni	Brimstone
Moths	Dimsione
Caloptilia syringella	a micro moth
Emmetia marginea	a micro moth
Parornix anglicella	a micro moth
Phyllonorycter leucographella	Firethorn Leaf Miner
Phyllonorycter nicellii	a micro moth
Phyllonorycter oxyacanthae	a micro moth
Phyllonorycter rajella	a micro moth
Stigmella aurella	a micro moth
Stigmella microtheriella	a micro moth
Stigmella splendidissimella	a micro moth
Hymenoptera	
Fenusa dohrnii	a sawfly
Diptera	, , , , , , , , , , , , , , , , , , ,
Agromyza idaeiana	a mining fly
Phytomyza ilicis	a mining fly
Compatrment 7	
Compatrment 7 Odonata	
	Couthorn Houles
Aeshna cyanea	Southern Hawker
Hemipetera	
Cymus melanocephalus	Hemipteran bug
Eurygaster testudinaria	Tortoise Shieldbug

Compartment 7 con't.	
Homoptera	
Centrotus cornutus	a trachanaar
	a treehopper
Cicadella viridis	a leafhopper
Butterflies	
Gonepteryx rhamni	Brimstone
Inachis io	Peacock
Hymenoptera	
Andrena nitida	a mining bee
Bombus hypnorum	a bumblebee
Coleoptera	
Pyrochroa serraticornis	Common Cardinal Beetle
Birds	
Dendrocopos major	Great Spotted Woodpecker
Phylloscopus trochilus	Willow Warbler
Compartment 8	
Coenagrion puella	Azure Damselfly
Enallagma cyathigerum	Common Blue Damselfly
Ischnura elegans	Blue-tailed Damselfly
Anax imperator	Emperor Dragonfly
Pyrrhosoma nymphula	Large Red Damselfly
Compartment 10a & 10b	
Fungi	
Lathyrus nissolia	Grass Vetchling
Spiders	
Mangora acalypha	a spider
Butterflies	
Pieris rapae	Small White
Diptera	
Eristalis pertinax	a hoverfly
Helophilus pendulus	a hoverfly
Compartment 11a & 11b	
Crustacea	
Armadillidium vulgare	Common pill woodlouse
Spiders	· · · · · · · · · · · · · · · · · · ·
Anyphaena accentuata	a spider
Araniella cucurbitina sens. str.	a spider
Enoplognatha ovata/latimana sens. lat.	a spider
Mangora acalypha	a spider
Misumena vatia	a spider
Tetragnatha extensa	a spider
Odonata	
Sympetrum striolatum	Common Darter
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Meadow Grasshopper
Long-winged Conehead
Speckled Bush Cricket
Common Green Grasshopper
Lesser cockroach
Bishops Mitre Shieldbug
Dock Bug
Tortoise Shieldbug
Common Damsel-bug
a Mirid bug
a Mirid bug
a ground bug
a Mirid bug
a treehopper
Brimstone (male & female)
Small White
Comma
a micro moth
Common Wave
Mother of Pearl
Honey Bee
Common Carder Bee
Common Carder Bee
St Mark's Fly
Common Bee-fly
a hoverfly
a hoverfly
a hoverfly
7-spot Ladybird
a ladybird
a weevil
Nut Leaf Weevil

## Small Mammal Survey Results 2015

# Appendix F

Compartment	Species
1	Bank Vole, Field Vole, Woodmouse
3	Woodmouse, Common Shrew, Field Vole
4	Woodmouse, Bank Vole
5	Field Vole, Bank Vole, Woodmouse
9	Woodmouse, Bank Vole
11	Woodmouse, Bank Vole, Field Vole

#### Appendix G

#### **Dogs and Horses Sign**

# Important information for dog owners

Fareham welcomes responsible dog owners

Please be aware horses use the main track on a regular basis. We would ask that all dog walkers keep their dogs under control when approaching and using the bridleway as horses can be easily spooked. Thank you for your cooperation.



Appendix H Work Plan 2020 - 2025

Yr1: Operations 2020/21	Compartment	Resources	Finance	Timescale
Nature Conservation: Habitat & Species Management				
(Objective 1)				
Liaise with statutory organisations and other interested		Staff	Current Resources	Ongoing
parties				
Liaise with Planning Dept: Planning application - site impacts		Staff	Current Resources	Ongoing
Herbicide control of Japanese Knotweed	1a,3,11	Contractors	Current Resources	2 x per year
Continued restoration of acid grassland and woodland pasture	11	Staff/Volunteers	HLS	Sept 2020-Feb 2021
Arrange grazing of acid grassland (June/ July & October)	11	Contractors	Current Resources	June – October 2020
Maintain the wildlife garden at New Rd entrance. Water roof top gardens when req. Cut meadow in late summer	11	Staff/ Volunteers	Current Resources	Ongoing
Maintain open grassland habitat with forage harvesting technique	3,4,5	Contractors	Current Resources	Nov 2020-Jan 2021
Bramble clearance and coppicing scrub in scallops / woodland edge	3,4,5	Staff /Volunteers	Current Resources	Oct 2020-Mar 2021
Clearance of selected trees south of Dibles Pond to increase light	8	Contractors	Current Resources	Nov 2020-Jan 2021
Propogate willows around Dibles Pond and seasonal ponds for use in hedge work and weaving workshops	7, 8	Staff/Volunteers	Current Resources	Nov 2020-Feb 2021
Manual control of parrot's feather	8	Staff/Volunteers	Current Resources	June - July 2020
Continue phased removal of rhododendron and laurel - cut and treat stumps. Deadhedge debris where possible Community Engagement (Objective 2)	9	Staff/ Volunteers	Current Resources	Oct 2020-Feb 2021
Sustain a comprehensive diary of practical tasks and survey work for the volunteer groups		Staff	Current Resources	Ongoing
Seek to redevelop links with local businesses for volunteering opportunities		Staff	Current Resources	Ongoing
Sustain bi-annual meetings with volunteers, encouraging feedback and consultation on future projects		Staff	Current Resources	Ongoing
Sustain the Lest We Forget memorial with an annual soil prep and seeding event	3	Staff/ Volunteers	Current Resources	Ongoing

Educational & Interpretation (Objective 3)				
Encourage school visits & site activities		Staff	Current Resources	Ongoing
Promote site through attendance of local events		Staff	Current Resources	Ongoing
Sustain public contributions to the Poetry Path		Staff	Current Resources	Ongoing
Utilise internal & external publications for site promotion		Staff	Current Resources	Ongoing
Maintain the Tree Trail and monitor the public use via IT		Staff	Current Resources	Ongoing
Provide information to schools and other educational bodies		Staff	Current Resources	Ongoing
Undertake yearly public events, walks		Staff	Current Resources	Ongoing
Sustainable Recreation Provision (Objective 4)				
Dog bin emptying	Site	FBC Street Scene	Current Resources	Ongoing
		Dpt		
Monthly site safety checks: paths, trees, furniture, lifebuoys,	Site	Staff	Current Resources	Ongoing
bridleway				
Litter clearance	Site	Staff/Volunteers	Current Resources	Ongoing
Ensure all paths are maintained under in-house contract	Site	Staff/ FBC Street	Current Resources	3 x annually
		Scene Dept		
Maintain paths network as required	Site	Staff/Contractors	Current Resources	Ongoing
Research and seek funding for better access gates for	3	Staff	Current Resources	Ongoing
mobility scooters – easy access route				
Resource Management (Objective 5)				
Investigate and seek grant initiatives to aid management		Staff	Current Resources	Ongoing
resources				
Monitoring and Review (Objective 6)				
Undertake reptile survey	Site	Contractors	Current Resources	Ongoing
Undertake preliminary survey for protected species prior to	Site	Staff/Volunteers	Current Resources	As required
operations				
GCN survey	7	Staff/Volunteers	Current Resources	Mar-May 2021
Maintain & update biological and historical data	Site	Staff	Current Resources	Ongoing
Undertake fixed point photography as and when notable	Site	Staff	Current Resources	Ongoing
changes have been made				

Yr 2: Operations 2021/22	Compartment	Resources	Finance	Timescale
Nature Conservation: Habitat & Species Management				
(Objective 1)				
Liaise with statutory organisations and other interested		Staff	Current Resources	Ongoing
parties				
Liaise with Planning Dept: Planning application - site impacts		Staff	Current Resources	Ongoing
Herbicide control of Japanese Knotweed if required	1a,3,11	Contractors	Current Resources	2 x annually
Sustain the acid grassland and woodland pasture	11	Staff/Volunteers	Current Resources	Oct 2021-Feb 2022
Arrange grazing of acid grassland (June/ July & October)	11	Staff	Current Resources	June-Oct 2022
Maintain the wildlife garden at bottom of New Rd entrance.	11	Staff/ Volunteers	Current Resources	Ongoing
Water roof top gardens when req. Cut meadow in late				
summer				
Maintain open grassland habitat with forage harvesting	3,4,5	Contractors	Current Resources	Nov 2021-Jan
technique				2022
Arrange grazing of acid grassland (June/ July & October)	11	Staff	Current Resources	June-Oct 2022
Bramble clearance and coppicing scrub in scallops /	3,4,5	Staff/Volunteers	Current Resources	Oct 2021-Feb
woodland edge				2022
Manual control of parrot's feather	8	Staff/Volunteers	Current Resources	June - July 22
Retain Silver Birch woodland – thin the number of trees and	9	Staff/Volunteers/	Current Resources	Oct 21-Feb
fell Willow/ Oaks/ Sycamore		Contractors		2022
Investigate potential to deepen seasonal ponds	7	Staff/Contractors	Current Resources	When dry
Propagate and when necessary coppice the willow around	7, 8	Staff/Volunteers	Current Resources	Oct 2021 – Fel
seasonal and Dibles pond for use in hedging and basket				2022
weaving workshops				
Investigate potential for coppicing small section of trees along	10a,10b	Staff/ Volunteers	Current Resources	Oct 2021-Feb
stream to thin canopy. Carry out work when planned.				2022
Save any wood suitable for making charcoal and offer it to				
Les Brannon.				
Community Engagement (Objective 2)				

Sustain a comprehensive diary of practical tasks and survey		Staff	Current Resources	Ongoing
work for the volunteer groups				
Seek to redevelop links with local businesses for volunteering		Staff	Current Resources	Ongoing
opportunities where possible				
Sustain bi-annual meetings with volunteers and encourage		Staff	Current Resources	Ongoing
them to give feedback and consult on future projects				
Sustain the Least We Forget memorial (soil prep & annual	3	Staff/ Volunteers	Current Resources	Ongoing
seed spreading event)				
Education & Interpretation (Objective 3)				
Encourage school visits & site activities		Staff	Current Resources	Ongoing
Promote site through attendance of local events		Staff	Current Resources	Ongoing
Utilise internal & external publications for site promotion		Staff	Current Resources	Ongoing
Provide information to schools and other educational bodies		Staff	Current Resources	Ongoing
Undertake yearly public events, walks, talks		Staff	Current Resources	Ongoing
Sustain contributions to the Poetry Path from the public and	Site	Staff	Current Resources	Ongoing
local schools				
Maintain the Tree Trail and monitor the public use via IT	Site	Staff	Current Resources	Ongoing
Sustainable Recreation Provision (Objective 4)				
Dog bin emptying	Site	FBC Street Scene	Current Resources	Ongoing
		Dept		
Monthly site safety checks: paths, trees, furniture, lifebuoys,	Site	Staff	Current Resources	Ongoing
bridleway				
Ensure all paths are maintained under in-house contract	Site	Staff/ FBC Street	Current Resources	3 x annually
		Scene Dept		
Litter clearance	Site	Staff/Volunteers	Current Resources	Ongoing
Maintain the way-marking infrastructure and benches	Site	Staff/Volunteers	Current Resources	Ongoing
Maintain path network as required	Site	Staff/Volunteers	Current Resources	Ongoing
Resource Management (Objective 5)				
Investigate grant initiatives to aid management resources		Staff	Current Resources	Ongoing
Monitoring and Review (Objective 6)				

Undertake preliminary survey for protected species prior to	Site	Staff/Volunteers	Current Resources	As required
operations				
Undertake a small mammal survey	Site	Staff	Current Resources	Autumn 2021
Undertake reptile survey	3, 4, 5, 7, 8, 11	Volunteers	Current Resources	May – Sept 21
Monitoring and Review (Objective 6) Con't				
Maintain & update biological and historical data		Staff	Current Resources	Ongoing
Undertake fixed point photography before and after	Site	Staff	Current Resources	Seasonal
significant changes				

Yr 3: Operations 2022-23	Compartment	Resources	Finance	Timescale
Nature Conservation: Habitat & Species Management (Objective 1)				
Liaise with statutory organisations and other interested parties		Staff	Current Resources	Ongoing
Liaise with Planning Dept: Planning application - site impacts		Staff	Current Resources	Ongoing
Carry out herbicide control of Japanese Knotweed if required	1a,3,11	Staff/Contractors	Current Resources	2 x annually
Sustain the acid grassland and woodland pasture	11	Staff/Volunteers	Current Resources	Ongoing
Arrange grazing of the acid grassland, woodland pasture habitat (July & Oct)	11	Staff	Current Resources	July and Oct 2023
Maintain open grassland habitat with forage harvesting technique	3,4,5	Contractors	Current Resources	Nov 2022-Jan 2023
Maintain the wildlife garden at bottom of New Rd entrance. Water roof top gardens when req. Cut meadow in late summer	11	Staff/ Volunteers	Current Resources	Ongoing
Bramble clearance and coppicing scrub in scallops / woodland edge	3,4,5	Staff/Volunteers	Current Resources	Oct 2022-Feb 2023
Manual control of parrot's feather in Dibles Pond	8	Staff/Volunteers	Current Resources	June - July 2023
Propagate and cut when needed the willow around seasonal and Dibles Pond for use in hedges and basket weaving workshops	7,8	Staff/ Volunteers	Current Resources	Oct 2022-Feb 2023
Work to eradicate invasive species in 1a &1b	Site	Staff/ Volunteers	Current Resources	Sept 22-Feb 23
Community Engagement (Objective 2)				

Sustain a comprehensive diary of practical tasks and survey		Staff	Current Resources	Ongoing
work for volunteer groups				
Seek to redevelop links with local businesses for volunteering		Staff	Current Resources	Ongoing
opportunities				
Sustain bi-annual meetings with volunteers and encourage		Staff/Volunteers	Current Resources	Ongoing
them to give feedback and consult on future projects.				
Sustain the Least We Forget memorial (soil prep & annual		Staff/ Volunteers	Current Resources	Ongoing
seed spreading event).				
Education & Interpretation (Objective 3)				
Encourage school visits & site activities		Staff	Current Resources	Ongoing
Promote site through attendance of local events		Staff	Current Resources	Ongoing
Utilise internal & external publications for site promotion		Staff	Current Resources	Ongoing
Provide information to schools and other educational bodies		Staff	Current Resources	Ongoing
Undertake yearly public events, walks, talks		Staff	Current Resources	Ongoing
Sustain contributions to the Poetry Path from the public and		Staff	Current Resources	Ongoing
local schools				
Maintain the Tree Trail and monitor the public use via IT	Site	Staff	Current Resources	Ongoing
Sustainable Recreation Provision (Objective 4)				
Dog bin emptying	Site	FBC Street Scene	Current Resources	Ongoing
		Dept		
Monthly site safety checks: paths, trees, furniture, lifebuoys,	Site	Staff	Current Resources	Ongoing
bridleway				
Litter clearance	Site	Staff/Volunteers		Ongoing
Maintain way-marking infrastructure and benches	Site	Staff/Volunteers	Current Resources	Ongoing
Maintain path network as required	Site	Staff/Volunteers/	Current Resources	Ongoing
		Contractors		
Ensure path network is maintained under in-house contract	Site	Staff/ FBC Street	Current Resources	3 x annually
		Scene Dept		
Resource Management (Objective 5)				
Investigate grant initiatives to aid management resources		Staff	Current Resources	Ongoing
Monitoring and Review (Objective 6)				
Undertake preliminary survey for protected species prior to	Site	Staff	Current Resources	As required
operations				
Monitoring and Review (Objective 6) Con't.				

Undertake fixed point photography before and after any	Site	Staff	Current Resources	Ongoing
significant changes to the site				

Yr 4: Operations 2023/24	Compartment	Resources	Finance	Timescale
Nature Conservation: Habitat & Species Management				
(Objective 1)				
Liaise with statutory organisations and other interested		Staff	Current Resources	Ongoing
parties				
Liaise with Planning Dept: Planning application - site impacts		Staff	Current Resources	Ongoing
Implement herbicide control of Japanese Knotweed if req.	1a,3,11	Contractors	Current Resources	Summer
Sustain the acid grassland and woodland pasture	11	Staff/Volunteers	Current Resources	Nov-Feb
Arrange grazing of acid grassland summer & autumn	11	Staff	Current Resources	Summer/ Aut'
Maintain open grassland habitat with forage harvesting	3,4,5	Contractors	Current Resources	Dec-Feb
technique				
Bramble clearance and coppicing scrub in scallops /woodland	3,4,5	Staff /volunteers	Current Resources	Oct-Mar
edge				
Propagate Willow around seasonal and Dibles pond as	7, 8	Staff/volunteers	Current Resources	Nov 2023-Feb
necessary / when required for hedge laying or willow weaving				2024
workshops				
Manual control of parrot's feather in Dibles Pond	8	Staff/volunteers	Current Resources	Summer 2023
Thin the Silver Birch to the south of Woodland Pasture with a	11	Staff & local	Current Resources	Oct-Feb
view to extending it. Select wood suitable for making charcoal		Woodsman		
and besoms and offer to Les Brannon.				
Community Engagement (Objective 2)				
Sustain a comprehensive diary of practical tasks and survey		Staff	Current Resources	Ongoing
work for the volunteer groups				
Seek to develop/ maintain links with local businesses for		Staff	Current Resources	Ongoing
volunteering opportunities				
Sustain bi-annual meetings with volunteers and encourage		Staff/ Volunteers	Current Resources	Ongoing
them to give feedback and consult on future projects				
Educational & Interpretation (Objective 3)				

Encourage school visits & site activities		Staff	Current Resources	Ongoing
Promote site through attendance of local events		Staff	Current Resources	Ongoing
Utilise internal & external publications for site promotion		Staff	Current Resources	Ongoing
Provide information to schools and other educational bodies		Staff	Current Resources	Ongoing
Undertake yearly public events, walks, talks		Staff/ Volunteers	Current Resources	Ongoing
Sustain contributions to the Poetry Path from the public and	Site	Staff	Current Resources	Ongoing
local schools				
Maintain the Tree Trail and monitor the use via IT technology	Site	Staff	Current Resources	Ongoing
Sustainable Recreation Provision (Objective 4)				
Dog bin emptying	Site	FBC Street Scene Dept	Current Resources	Ongoing
Monthly site safety checks: paths, trees, furniture, lifebuoys, bridleway	Site	Staff	Current Resources	Ongoing
Litter clearance	Site	Staff/Volunteers	Current Resources	Ongoing
Maintain way marking infrastructure	Site	Staff	Current Resources	Ongoing
Monitor and maintain boardwalks and path infrastructure	Site	Staff/Contractors	Current Resources	Ongoing
Ensure all paths are maintained under the in-house contract	Site	Staff/ FBC Street Scene Dept	Current Resources	3 x annually
Resource Management (Objective 5)				
Investigate and seek grant initiatives to aid management resources. The HLS agreement comes to an end this year.		Staff	Current Resources	2024
Monitoring and Review (Objective 6)				
Undertake preliminary survey for protected species prior to operations	Site	Staff/Volunteers	Current Resources	As required
Undertake a reptile survey	3,4,5,7,8,11	Staff/ Volunteers	Current Resources	May – Sept 2023
Maintain & update biological and historical data	Site	Staff	Current Resources	Ongoing
Carry out fixed point photography before and after significant changes	Site	Staff	Current Resources	Ongoing

Yr 5: Operations 2024/25	Compartment	Resources	Finance	Timescale
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(Objective 1)				
Liaise with statutory organisations and other interested parties		Staff	Current Resources	Ongoing
Liaise with Planning Dept: Planning application - site impacts		Staff	Current Resources	Ongoing
Sustain the acid grassland and woodland pasture	11	Staff/Volunteers	Current Resources	Nov 2024-Feb 2025
Maintain open grassland habitat with forage harvesting technique	3,4,5	Contractors	Current Resources	Dec 2024-Feb 2025
Arrange grazing of acid grassland (summer & autumn)	11	Staff	Current Resources	Summer & Autumn
Bramble clearance and coppicing scrub in scallops / woodland edge	3,4,5	Staff /Volunteers	Current Resources	Oct 2024-Mar 2025
Manual control of parrot's feather	8	Staff/Volunteers	Current Resources	Summer 2024
Propogate and when necessary/ needed, coppice the willow around Dibles and seasonal ponds for hedge laying or weaving workshops	7	Staff/Volunteers	Current Resources	Nov 2024-Jan 2025
Extend the laurel clearance area and treat stumps	9 + 11	Staff/ Volunteers/ Contractors	Current Resources	Oct 2024-Feb 2025
Community Engagement (Objective 2)				
Sustain a comprehensive diary of practical tasks and survey work for volunteer groups		Staff	Current Resources	Ongoing
Seek to develop links with local businesses for volunteering opportunities		Staff	Current Resources	Ongoing
Provide opportunities for volunteers to give feedback and consultation on future projects		Staff	Current Resources	Ongoing
Educational & Interpretation (Objective 3)				
Encourage school visits & site activities		Staff	Current Resources	Ongoing
Promote site through attendance of local events		Staff	Current Resources	Ongoing
Utilise internal & external publications for site promotion		Staff	Current Resources	Ongoing
Provide information to schools and other educational bodies		Staff	Current Resources	Ongoing
		Staff	Current Resources	Ongoing

Dog bin emptying	Site	FBC Street Scene	Current Resources	Ongoing
		Dept		
Monthly site safety checks: paths, trees, furniture, lifebuoys,	Site	Staff	Current Resources	Ongoing
bridleway				
Litter clearance	Site	Staff/Volunteers		Ongoing
Maintain way-marking infrastructure	Site	Staff	Current Resources	Ongoing
Ensure all paths are maintained under in-house contract	Site	FBC Street Scene	Current Resources	Ongoing
		Dept		
Maintain path network and benches as required	Site	Staff/ Volunteers	Current Resources	Ongoing
Resource Management (Objective 5)				
Investigate and seek grant initiatives to aid management		Staff	Current Resources	Ongoing
resources				
Monitoring and Review (Objective 6)				
Entomological survey	Site	Contractors	Current Resources	Ongoing
Maintain & update biological and historical data	Site	Staff	Current Resources	Ongoing
Undertake fixed point photography before and after any	Site	Staff	Current Resources	Ongoing
significant changes to the site.				
Management Plan Review and update		Staff	Current Resources	Mar 2025