## **Mereway Nature Park**

Twickenham

Borough of Richmond upon Thames

# Management Plan 2007 – 2012

(Version 2.4: 30<sup>th</sup> May 2007)



## Preface

This management plan contains recommendations for the ongoing management of Mereway Nature Park in line with the joint aspirations of nature conservation, recreational access and provision of educational opportunities at this site. The plan contains a full description of the site, a vision for the future of the site, the principles by which management of the site will be guided and prescriptions for managing the site.

This management plan was prepared and edited by Keith Martin on behalf of Friends of the River Crane Environment (FORCE).

This is the first management plan for Mereway Nature Park and covers the period 2007 – 2012.

Preface	
1 Introduction	
1.1 Summary	
1.2 Wider policy context	
1.3 Document structure	7
2 Site Description	8
2.1 General	8
2.2 Status	
2.3 Physical	
Climate	9
Topography	
Hydrology	
Geology	
Soils	9
2.4 Ecological	9
Vegetation	9
Fauna	10
2.5 Land use	11
2.6 Management	11
2.7 Issues and concerns	11
Development pressures	11
Allotment pressures	12
Fly-tipping	12
Bottle digging	12
Depot	12
Vehicular access	13
Cycle route	13
Crane corridor	13
3 Vision	14
3.1 Summary of vision	14
3.2 Value of Mereway Nature Park	14
As a component of the Crane Corridor	14
As a locally unusual habitat	14
As a home for important wildlife	15
As a location for environmental educational	15
As a wild place	15
3.3 Aims and objectives	
3.4 Constraints	16
Bodies involved	16
Manpower	16
Financial	
4 Principles and Policies	18
4.1 Ecological issues	18
General Principles	
Succession	
Introduction of plants	
Removal of plants	
Dead wood.	

<< Have a foreword by an appropriate dignitary or relevant councilor / officer >>

Bird breedi	ing season	21
Fires	-	21
Species me	onitoring	21
4.2 Amenity i	issues	21
4.3 Managen	nent practice	22
	ity involvement	
	ssues	
	Prescriptions	
5.1 Compartr	ment 1a. Weir Scrub	24
	n	
,	n	
	rojects	
•	ment 1b: North Scrub	
-	n	
	n	
	ment 1c: South Scrub	
	n	
	· · · · · · · · · · · · · · · · · · ·	
	ment 2a: Railway Woodland	
	٩	
,		
	n	
	rojects	
	ment 2b: Craneside Woodland	
	n	
,		
	<sup>n</sup>	
	ment 2c: Grotto Woodland	
	n	
	n	
•	rojects	
	ment 3a: Fox Meadow	
	n	
	;	
	۱ <b>ท</b>	
-	ment 3b: Middle Meadow	
	n	
	;	
Prescriptio	n	30
5.9 Compartr	ment 3c: Bottle-dig Area	30
Descriptior	n	30
Prescriptio	n	30
5.10 Compar	rtment 4a: Classroom Grassland	30
	٩	

Prescription	31
Possible projects	
5.11 Compartment 4b: Sensory Grassland	31
Description	31
Objectives	32
Prescription	32
Possible projects	32
5.12 Compartment 4c: Hidden Grassland	32
Description	32
Objectives	32
Prescription	
Possible projects	
5.13 Compartment 5a: Central Track Verge	33
Description	33
Objectives	33
Prescription	33
Possible projects	
5.14 Compartment 5b: DNR Path Verge	
Description	34
Objectives	
Prescription	
5.15 General: Pathways	
Objectives	
Prescription	
5.16 General: Dead Wood	
Objectives	
Prescription	
5.17 General: Boxes	
Objectives	
Prescription	
5.18 General: Vehicular access	
Objectives	
Prescription	
5.19 General: Educational activities	
Objectives	
Prescription	
5.20 Work schedule	
6 Monitoring and Review	
Appendix 1 – Location map	
Appendix 2 – Compartments map	
Appendix 3 – Species records	
Plants	
Birds	
Mammals	
Butterflies	
Other Invertebrates	
Amphibians	
Other species	47

## 1 Introduction

In comparison with anywhere else in its immediate vicinity this is the only tract of truly wild land through which the public may pass. Small as the site is, it nevertheless provides a welcome visual open interlude within the built up area.

Unitary Development Plan Inspector's Report, March 2004.

### 1.1 Summary

Mereway Nature Park is a small area of mixed habitat, dominated by bramble scrub, that is surrounded by a largely urban landscape. It has been left to naturally generate following the abandonment of allotment gardens in 1990. As a result, Mereway has developed into a haven for local wildlife. Perhaps just as significantly, it also provides human visitors with a sense of wildness that is extremely rare in the surrounding area. In addition, due to its location at the divergence of the River Crane and Duke of Northumberland River, it forms a vital component of the environmentally significant River Crane Corridor.

The fact that Mereway has been void of formal management since 1990 does have a downside. Illegal activities such as fly-tipping made the area visually unattractive and helped to reinforce an attitude of neglect. In 2003, Friends of the River Crane Environment (FORCE) commenced a series of workdays to make environmental improvements to Mereway Nature Park. Obvious management tasks such as removal of accumulated rubbish were completed.

This management plan presents a vision for the future of Mereway Nature Park that involves retaining its value to wildlife, preserving its inherent wildness, while also increasing its appeal to the local community. The plan aims to consolidate the mix of habitats currently in existence, so that Mereway Nature Park remains a place that wildlife lives and thrives. The plan also aims to encourage the local community to visit and enjoy Mereway Nature Park. The aim is that Mereway becomes a place that not only appeals to naturalists and those seeking a quiet moment in their day (which it currently does), but to the local community as a whole, and especially the young.

Mereway Nature Park provides a wonderful place for wildlife, and for humans to observe and appreciate nature. It also provides an opportunity to raise public awareness of the value of nature. These are the ultimate aspirations that lie behind this management plan.

### 1.2 Wider policy context

<< To highlight relevant aspects of any local, regional or national strategies and policy statements that impact on the plan >>

<<Include LBAP>>

<<Rob to draft>>

### 1.3 Document structure

The remainder of the management plan is structured as follows:

- Chapter 2 provides a full site description. This includes a physical description of the site, a summary of the ecology of the site and a history of land use. It also includes a discussion of the management status quo and issues and concerns facing the site.
- Chapter 3 presents the vision for the site. This explains the value of the site and states the aims and objectives of this management plan. It also identifies constraints on the vision being fully realised.
- Chapter 4 explains the principles and policies behind this management plan. These cover issues concerning ecology, amenities, management, relationship with the local community, and access.
- Chapter 5 includes a full description of each management compartment of the site, objectives for each compartment and precise management prescriptions. It also includes a calendar of management activities.
- Chapter 6 briefly discusses monitoring and review of the management plan.
- Appendix 1 is a location map of the site.
- Appendix 2 is a compartment map of the site.
- Appendix 3 contains species lists for the site.

## 2 Site Description

### 2.1 General

Mereway Nature Park (otherwise known as "Mereway" or the "former Mereway allotments") is located at Grid Reference TQ151733 approximately one kilometer due west of Twickenham town center in the London Borough of Richmond-upon-Thames.

The site is just under two hectares and is roughly triangular in shape and is bounded:

- south, by the River Crane, flowing in an artificial concrete culvert channel, beyond which are residential gardens and light industrial units;
- north-west, by the Duke of Northumberland's River, beyond which lies the open parkland of Kneller Gardens;
- west, by the River Crane Weir, where the two rivers diverge, and a residential street;
- north, by an embankment and railway lines;
- east, by a residential garden.

Its overall appearance is one of an open semi rural scrub landscape, which includes scattered trees, within an area of dense housing and light industrial use. It is notable however that the site itself is not closely overlooked by housing and thus retains a strong rural ambience.

A sealed track (the Central Track) runs through the centre of the site, providing access to a Council depot and several residential properties. This track is a designated cycle track and a public right of way. Two benches and five streetlights occur along its length. A public footpath (the DNR Path) cuts north from the Central Track at the western edge of the site and then turns east along the southern bank of the Duke of Northumberland's River. A short narrow unsealed footpath (the Loop Trail) winds its way south from the DNR Path (about 75 meters east along the Duke of Northumberland's River) to join the middle of the Central Track.

### 2.2 Status

<<discuss location within corridor here>>

#### <<Rob – anything more to say here?>>

Mereway Nature Park is currently Metropolitan Open Land. It lies within the Crane Corridor, a site of Metropolitan Importance for Nature Conservation.

Mereway Nature Park was selected by London Borough of Richmond upon Thames to be one of its key sites during the 2003-2006 European Union LIFE project entitled Sustainable Urban Networks for Green Spaces.

### 2.3 Physical

<< These are the headings in some management plans I have seen – I think hydrology, geology and soils certainly need a few lines – help please!>>

Climate

Topography

Hydrology

Geology

Soils

### 2.4 Ecological

#### Vegetation

Mereway Nature Park features a mosaic of differing vegetation types at various stages of successional maturity, ranging from unimproved grassland through bramble/dewberry scrub to nascent woodland. The main vegetation types are listed below, while a full list of plants identified this far in Mereway Nature Park can be found in Appendix 3.

#### Bramble scrub

The bulk of the site (approximately 80%) consists of dense bramble scrub, notably supplemented in patches by dewberry. This vegetation dominates the character of the site. The scrub has been penetrated by a number of saplings, including oak and sycamore, and taller scrubby plants such as hawthorn, but otherwise forms swathes of impenetrable vegetation.

#### Woodland

The fringes of the site feature small patches of woodland, mainly oak and sycamore. In addition a number of mature trees adorn the central track, including whitebeam, horse chestnut, hazel and ash. Isolated mature trees at other locations include a walnut tree on the banks of the River Crane. The western edge of the site features some mature hedgerow plants including hawthorn, blackthorn and elder. Woodland flora such as lesser celandine and dog's mercury occur in the shady understorey of these areas.

#### Rank grassland

Several patches of rank grassland, untouched by brambles, occur on the site. These include track-side fringes, disturbed areas and patches artificially cleared of brambles. This habitat is dominated by ground plants associated with fertile soil such as nettles, green alkanet and cleavers, however a wide variety of less dominant species have been identified. One patch close to the River Crane is particularly species-rich and includes thorn apple, early wintercress, comfrey and wild pansy. Some of these species may well be remnant allotment vegetation. In addition meadow plants such as ox-eye daisy and teasel have been encouraged by recent planting.

#### Grassland

Several small areas of open grassland occur on the site.

#### Remnant allotment vegetation

There are examples of remnant vegetation from the allotment use including mature rose bushes and horseradish along the verges of the Central Track.

#### Fauna

Mereway plays two important roles in supporting fauna. It not only supports its own resident fauna, but it also acts as a supporting conduit for animals moving through the Crane Valley. A full list of species identified at Mereway Nature Park thus far can be found in Appendix 3.

#### Mammals

The most commonly seen mammals are fox and grey squirrel, both of which breed on the site. Common and soprano pipistrelles have also both been regularly recorded foraging over Mereway. Little mammal survey work has been conducted on the site, but it is likely that most common mammals seen elsewhere in the Crane Valley will use the site, including brown rat, wood mouse, common shrew and hedgehog.

#### Birds

The varied habitats, in particular the dense scrub, provide excellent breeding and foraging habitat for a number of bird species. High densities of species such as dunnocks, wrens and long-tailed tits breed in the brambles. The dense scrub also supports several pairs of whitethroats in the summer months. Most typical woodland birds of the Crane Valley, including tits, blackbirds, greenfinches and robins can almost always be found at Mereway. Blackcaps and chiffchaffs occupy the site in the summer months. Significantly, Mereway has a large population of house sparrows and several breeding pairs of song thrush, both of which are red-listed species. Grey wagtail and kingfisher are often seen on the adjacent river stretches.

#### Reptiles and amphibians

Although Mereway does not feature any open water, it does provide abundant shelter that may be utilised by slow worms and amphibians. Common toad is the only

species known to use the site, but survey work is required to determine further information.

#### Invertebrates

Formal survey work of invertebrates has not yet been done at the site, however casual observations of charismatic species are currently being collated (see Appendix 3). The variety of habitats is likely to support extensive numbers of invertebrate species. Large numbers of bees, butterflies, shield bugs and spiders are clearly present.

### 2.5 Land use

Mereway Nature Park occupies land held in council ownership since 1897, if not before. It was listed as market gardens in 1886, and in 1915 as allotments. The allotment site was left to deteriorate by the council in the late 1980's and finally closed in October 1990. The site was subsequently allowed to naturally regenerate. Plans for a nature garden on the site were drawn up by BTCV in 1998, but fell through. Following proposals to develop the site for housing in 2003 a planning inspector recommended that the site be retained as open land in March 2004. Since that date FORCE has been working with the council to establish the site as Mereway Nature Park and this management plan represents a consolidation of this process.

### 2.6 Management

<<To explain management status quo>>

#### << More here??>>

Mereway Nature Park is owned and managed by the London Borough of Richmondupon-Thames (LBRUT). Since 2003 FORCE has undertaken several workdays on the site each year. The work conducted during these workdays has the approval of the LBRUT, who have provided assistance in the form of occasional equipment and materials.

### 2.7 Issues and concerns

#### << any other issues ? >>

The following issues and concerns have the potential to impact upon this management plan.

#### **Development pressures**

Mereway lies within an area of intense land use. Competition for land is thus high, with particular pressures from developers of housing. Mereway's status as Metropolitan Open Land was most recently challenged by LBRUT in 2003, but a

planning inspector ruled that it should retain its current status. While this would appear to guard against development pressure in the short term, it is recognised that this issue could return in the future.

There are many reasons why Mereway is not a good site for urban development, many of which relate to the aspirations behind this management plan. In addition, << more reasons from the proofs?>>

A related issue arises not from development of the site, but developments adjacent to the site. In particular it has been noted that Mereway's "wildness" comes partly from the benefit of being overlooked by very few buildings. Increased pressures to develop existing land into high density housing may mean that this aspect of Mereway comes under threat in the future.

#### **Allotment pressures**

There is currently increasing demand for allotment gardens. Mereway's previous use as allotment gardens makes it a potential candidate site. While allotments do indeed provide a home for some wildlife, this land use change would fall far below the aspirations of this management plan. The development of allotments would not only severely degrade Mereway's currently wildlife value, but they would destroy Mereway's wildness, restrict access to the site and lead to a missed opportunity for environmental education. There are also substantial practical problems concerning restriction of access and watering points. *More ????* 

#### **Fly-tipping**

Fly-tipping is a problem at Mereway Nature Park. This is almost certainly due to the fact that there is public vehicular access and that the site is not overlooked. It has also not been helped however by the previous era of management neglect. Fortunately most fly-tipping occurs directly adjacent to the Central Track, aiding removal. It is recognised that as long as public vehicular access remains, this issue is likely to remain a factor, however it is hoped that regular removal of fly-tipped material and other environmental improvements may reduce fly-tipping activities.

#### **Bottle digging**

One of the rank grassland compartments of Mereway appears to have had prior use as a Victorian refuse tip. This site has had occasional visits in the past from treasure hunters seeking items of historical interest or value. While this activity is fairly harmless if it is conducted sensitively and in a limited way, it is preferable to discourage this and leave the area undisturbed.

#### Depot

The land on the northern side of the railway is currently a council recycling depot. Currently the future of this site remains uncertain. One possibility is that part of the depot site becomes a high-density residential development. Such a development has the potential to impact negatively on Mereway by greatly increasing human activities on the site. However such a development also has the potential positive benefit of reducing vehicle activity through the site.

#### Vehicular access

The Central Track through Mereway is currently open to vehicular access. Such access is needed by the residents of Mereway Cottages. It is also currently used by council vehicles to access the recycling depot adjacent to Mereway. In addition however, the road appears to see use from vehicles using the Central Track as a "rat run" through the depot to access the A316. It is also used on rugby days by visitors to Twickenham Stadium and the Stoop, who park on the verges of Mereway Nature Park.

Vehicular access has a number of problems. The most obvious is safety of visitors to the site, many of whom do not realise that vehicles use the Central Track. Local schools have identified this is a significant issue during environmental education classes on the site. Vehicles also degrade the peace of the site. As visits are often short, a passing vehicle can substantially alter the experience of a user crossing Mereway. In addition, verge parking (and the necessary subsequent vehicle turning) often causes substantial environmental damage.

It is an aspiration of this management plan to see vehicular access to Mereway reduced to the minimum necessary, which ideally is the limited residential access to Mereway Cottages.

#### **Cycle route**

There are plans to develop a cycle route that roughly follows the River Crane through Richmond Borough. It is likely that such a route would pass through Mereway, bringing additional visitors to the site. Proposals have been put forward that would see such a route using the DNR Path and then crossing into Kneller Gardens by means of a new bridge. This would impact Mereway because the DNR Path itself would need widening, which would probably require limited scrub clearance. If this development proceeds then the management prescriptions in this plan for both the North and Weir Scrubs may need minor revision.

#### **Crane corridor**

There is considerable interest in more "joined-up" management of the Crane Corridor, with several projects in early running stages, several of which could ultimately have impact on the management of Mereway Nature Park. It is anticipated that any such developments are unlikely to impact significantly on the aspirations of this management plan. However, it is hoped that such projects could aid the successful implementation of the plan.

## 3 Vision

### 3.1 Summary of vision

Our vision for Mereway Nature Park is to create an open space with a genuine impression of wildness that is valued by the local community, provides a safe haven for local wildlife and forms a valuable component of the Crane Corridor.

The following principles for managing Mereway Nature Park in the spirit of the above vision form the basis of the proposed plan:

- Mereway Nature Park is currently a valuable wildlife habitat and thus the site should not be subject to radical management prescriptions.
- The quality of the wildlife habitats at Mereway Nature Park should be maintained and, where appropriate, enhanced to protect the biodiversity of the site.
- The aesthetic appeal of Mereway Nature Park should be improved from the perspective of visitors using, or passing through, the site.
- A limited infrastructure should be provided at Mereway Nature Park to allow visitors (including those coming for educational purposes) to engage with the site in a more fulfilling way.
- All management prescriptions should be sympathetic to the Crane Corridor.
- All management prescriptions should retain the wildness of the site.

### 3.2 Value of Mereway Nature Park

Mereway Nature Park is of considerable value to the local community, where community is used in its broadest sense to mean not just the people who live near Mereway Nature Park, but also the wildlife that shares this space with us. This value can be assessed in terms of a number of important categories.

#### As a component of the Crane Corridor

Mereway Nature Park is a small site on its own but is an integral part of the much larger Crane Corridor. The importance of corridors to wildlife is well understood, as is the notion that the value of a corridor greatly exceeds the sum of its parts. Mereway Nature Park is located at a particularly narrow section of this corridor, making its role in the corridor especially significant.

#### As a locally unusual habitat

Several habitats are represented at Mereway Nature Park, including scrub, native grassland and broadleaved woodland. Bramble scrub is the dominant habitat, making the site locally atypical as there are few patches of scrub of this size in this section of the Crane Corridor. As adjacent habitats along the Crane Corridor primarily consist of open parkland or broadleaved woodland, Mereway currently offers an important area of shelter and protection for wildlife, both resident and moving through the corridor.

#### As a home for important wildlife

Mereway Nature Park supports a diverse flora and fauna. While many of the species at Mereway are typical of the Crane Corridor, the locally unusual habitat in Mereway Nature Park results in strong populations of some species that are otherwise more thinly spread along the corridor. For example, Mereway Nature Park supports a large population of Long-tailed Tits, which breed in the security of the thick scrub, and hosts several pairs of summer-visiting Whitethroats, which are largely absent in the broad-leaved woodland of Crane Park. There are significant patches of Dewberry amidst the brambles and several unusual plants such as the Thorn-apple are present at the site. Several bird species of national and local conservation value are resident and breed at Mereway Nature Park, including good numbers of House Sparrow (Red-listed species in severe decline in Greater London) and Song Thrush (priority species under Richmond Biodiversity Action Plan).

#### As a location for environmental educational

The significant environmental threats facing future generations make it an imperative, if not a duty, for us to educate future citizens about our relationship with nature and our local environment. Mereway Nature Park provides an accessible green space that is within easy reach of a number of local schools, Richmond College, and a considerable residential population. It is thus a highly suitable venue for educational events that help to reconnect local families with the environment that exists beyond the man-made structures that cover most of the Crane Valley.

#### As a wild place

Due to the aesthetics of the habitat at Mereway Nature Park, the fact that it is not overlooked by many buildings and due to its isolation from major roadways and noise sources, Mereway Nature Park is respected by many members of the local community as one of the few places in this section of the borough where a genuine feeling of wildness can be experienced. The need for such places should not be underestimated and recent studies are increasingly indicating the psychological benefits of experiencing wildness to the human psyche. This is an extremely important quality of Mereway Nature Park and yet perhaps the least tangible. It is intended that the proposed management prescriptions do not reduce this quality to any significant degree and enable visitors to benefit spiritually, emotionally and physically from the site.

### 3.3 Aims and objectives

The overall aims of the management of Mereway Nature Park are to:

- Maintain the site as an open space with an impression of wildness.
- Consolidate, and where appropriate enhance, the biodiversity of the site.
- Ensure that the site remains a valuable component of the Crane Corridor.

• Increase the aesthetic and educational value of the site in order to further its appeal within the local community.

In order to achieve these aims the following objectives are identified:

- Maintenance of a significant component of the site as dense scrub.
- Consolidation of areas of native grassland, hedgerow and woodland on the site.
- Encouragement of hedgerow and woodland development along the outer margins of the site.
- Creation of a series of accessible interesting open spaces adjacent to the main pathway.
- Creation and maintenance of a pathway linking the center of the site with the Duke of Northumberland River.
- Development of an outdoor classroom on the site.
- Provision of a limited infrastructure (such as additional seating and natural artwork).
- Provision of on-site interpretive environmental information.
- Restriction of unnecessary vehicular access to the site.

### 3.4 Constraints

<< any other constraints? >>

#### **Bodies involved**

The main bodies involved in this management plan are:

- Friends of the River Crane Environment (FORCE), a registered charity based in Twickenham whose aims are to protect and enhance the open spaces and environment in and around the River Crane and the Duke of Northumberland's River within the London Borough of Richmond upon Thames and its environs.
- 2. London Borough of Richmond-upon-Thames, the landholder.

#### Manpower

This management plan is dependent on availability of labour and tools to conduct annual maintenance to the site. It is anticipated that most of the annual management prescriptions in this plan could be covered by the equivalent of two or three work days, involving the labour of at least six people (with additional minor work throughout the year for tasks such as path clearance). However the various optional prescriptions, identified as "projects", will require varying degrees of supplementary labour and expertise, depending on the nature of the task.

#### Financial

The annual management prescriptions do not have significant financial requirements, other than basic tool maintenance and occasional skip hire. However many of the "projects" do require specific funding for materials or expertise. These can therefore not proceed unless suitable revenue can be raised from grant applications, budget allocations or donations. It is noted that FORCE and LBRUT have had some success

in previous years in obtaining funding to allow early projects (such as the Fox bench) to proceed.

## 4 Principles and Policies

This section outlines the general principles that guide the management of Mereway Nature Park. It includes policies on specific issues, where relevant.

### 4.1 Ecological issues

#### **General Principles**

Mereway Nature Park contains a good mix of habitats and is valued as a wild green space. It is tempting to adopt the management principle that it should be "left alone", however this is naïve for a number of reasons:

- Ecosystems do not stand still. Mereway Nature Park is a landscape in succession, and what is valued now about the site could potentially be lost through natural processes without some management intervention.
- Some management prescriptions could improve the site for wildlife.
- There are members of the local community who are either not aware of the site's existence, or who do not necessarily regard "wildness" as an asset of great value. Some management prescriptions have the potential to both raise the profile of the site and increase its apparent value to a greater portion of the local community.

The case for active ecological management of Mereway Nature Park is therefore strong. However the following general principles lie behind this management plan:

- 1. All management prescriptions should either be:
  - a. to the specific benefit of local wildlife using the site;
  - b. to the specific benefit of local wildlife using the Crane Corridor;
  - c. to the general benefit of wildlife by facilitating human appreciation and understanding of nature.
- 2. All management prescriptions should adopt a "light hand" and not drastically alter the current balance of habitats and appearance of the site.

#### Succession

Mereway Nature Park is currently undergoing a process of ecological succession from its previous land use as allotment gardens. A previously open landscape of open soil, scattered shrubs and grassland is now largely dominated by bramble scrub. Left alone, this scrub will in turn eventually revert to broadleaved woodland (which is likely to have covered the site in the past). The primary ecological management question is: *to what extent should this natural succession be interfered with*?

There are several issues that have informed the management principles on succession adopted by this management plan:

- Scrub and wild grassland are habitats in relatively short supply in this section of the Crane Valley. This is largely because open space is either managed as mown grassland, gardens or woodland.
- A site is likely to be of greater value to wildlife if it contains a mix of different habitats.
- Habitat edges tend to be of particular value to wildlife.
- Scrub currently dominates other habitats at Mereway Nature Park.

As a result, the following management principles on interference with natural succession are adopted in this management plan:

- 1. *Scrub versus grassland.* The extent of grassland at Mereway should be slightly increased. Grassland habitat at Mereway should be actively protected from encroaching scrub.
- 2. *Woodland versus scrub*. The current succession of woodland should, for the time being, be allowed to continue without extensive management interference. This situation should however be subject to ongoing review.

#### Introduction of plants

The issue of plant introductions is highly emotive in conservation circles. There are two strands to this debate, which we touch on briefly here before identifying the principles applied as part of this management plan.

#### Should plants be introduced at all?

Arguments against the introduction of plants include:

- Introducing plants can alter the existing balance of the local ecosystem in unpredictable ways.
- Introducing plants is an inherently "unnatural" activity.

As a result, some people believe that sites under conservation management should only allow plants that have arrived on the site "naturally" to establish themselves.

On the other hand, the arguments in favour of plant introductions include:

- Introducing some plants can enhance the value of a site for wildlife.
- Introducing some plants can make the site more attractive to visitors.

To a certain extent all these arguments are valid. It is thus wise to adopt a policy on plant introductions that occupies an informed middle ground by permitting plant introductions only if there is a strong case for doing so. This leads us to perhaps an even more emotive question.

#### Which plants should be allowed to be introduced?

A crude attempt that is often made to try to delineate desirable plants from undesirable plants is the notion of "native" species. The intuition behind the favouring of "native" species includes ideas such as:

- "Native" species "belong" here.
- An ecosystem is likely to be "healthier" if made up of "native" species.
- Genetic biodiversity is better protected by adoption of "native" species.

These laudable principles run into several difficulties when this notion is applied to an area such as Mereway Nature Park, for several reasons:

- What does "native" actually mean? A popular notion of this term is "naturally occurring", and not introduced by humans. However it is unclear how to relate this idea both temporally and geographically. If a plant was introduced to southern England 500 years ago, is it "native" now? (Many of our most characteristic local trees fall into this category). If a wild plant "naturally" grows in Kent, is it "native" to Middlesex?
- There probably aren't many truly "native" species anyway. The flora of the United Kingdom is already made up of many species that we know have been introduced by humans at various times in recent history. Many more species are conjectured to have been, but nobody knows for sure. One of the reasons that plant introductions have been so successful is that much of the northern temperate flora of Eurasia and North America is very closely related, making it easy for plants from one region to establish themselves in another.
- It is not clear that "native" species are better for wildlife. The main direct beneficiaries of plants within any ecosystem are plant-eating invertebrates. Research has demonstrated very little evidence that in the U.K. invertebrates strongly favour "native" species. In fact "introduced" trees such as sycamore often support substantial invertebrate communities and some "introduced" shrubs such as buddleia are widely recognised as being of outstanding benefit to invertebrates.

Once more there is substantial wisdom behind all these points, so again it seems prudent to establish management principles that take all these issues into account. We thus propose a set of principles based on the permission of precautionary introductions.

- 1. No plants should be deliberately introduced to the site without the approval of the management committee.
- 2. Plants should only be deliberately introduced to Mereway Nature Park if their introduction is in line with the management prescriptions.
- 3. When determining whether to deliberately introduce a particular plant, the following principles should be adhered to:
  - a. Where possible, an introduced plant should be of local stock (preferably from the Crane Valley).
  - b. If a plant is not of local stock then it should at least be of a species occurring in the wild in the Crane Valley.
  - c. Introducing plants to the site as seeds is preferred to introducing saplings.
  - d. Plants introduced to the site should be of recognised value to wildlife.

#### **Removal of plants**

The only situations where a "naturally established" plant may be legitimately removed from Mereway Nature Park are when:

- 1. The removal has been approved by the management committee.
- 2. Removal of the plant is in line with the management prescriptions.
- 3. The plant is an invasive species that is recognised as having little wildlife value.

Plant material should, where possible, be composted on the site. In the case of invasive species, plant material should ideally be removed from the site and disposed of in a manner conformant with best practice guidelines for the species concerned.

#### Dead wood

Dead wood is an extremely important habitat and is all too often cleared from adjacent areas to Mereway Nature Park. The following management principles are designed to encourage a build up of dead wood at Mereway Nature Park.

- 1. Where appropriate and safe to do so, dead wood should be left on the site.
- 2. In the event that dead wood occupies an inappropriate part of the site, it is acceptable to move dead wood to a more suitable location within the site.
- 3. If any tree falls or needs to be removed then if possible the stump should remain in the ground.
- 4. It is acceptable to import a limited amount of dead wood into Mereway from outside the site, so long as doing so conforms to the relevant management prescriptions.

#### Bird breeding season

All invasive management activities that involve clearance or removal of substantive vegetation should take place outside the bird breeding season (broadly defined as being between beginning March and end of August).

#### **Fires**

No material should be burned at Mereway Nature Park unless there are special reasons for doing so (for example safe disposal of invasive species).

#### **Species monitoring**

Records of species noted at Mereway Nature Park should be formally monitored and reported to relevant data collectors such as the Greenspace for Greater London (GIGL) partnership.

### 4.2 Amenity issues

<< any more? >>

#### Litter and fly-tipping

While neither of these undesirable activities cause any obvious threat to public safety, they both have negative impacts by devaluing the aesthetic appeal of Mereway as well as presenting the site with an air of neglect.

- 1. Visitors to Mereway should be encouraged to report any fly-tipping activities and the resulting debris should be removed as soon as practicable.
- 2. Litter removal should be a standard activity at any workday on Mereway.

#### **Bramble picking**

Mereway provides a rich source of brambles in the late summer, which attracts pickers (who are most welcome). However, some collectors push into the scrub causing limited damage. As brambles are fast growing, this is not regarded as an ecological problem. However such indents into the scrub are often unsightly and accumulate litter during the winter months.

- 1. Bramble picking damage should be monitored and damage noted.
- 2. If the situation becomes problematic then remedial action should be considered.

#### Lighting

Five streetlights currently lie along the Central Track at Mereway. This is regarded as a suitable level of lighting. More precisely,

- 1. Lighting should not be decreased, as it is important to provide sufficient lighting to provide a degree of safety for anyone passing through the site after dark.
- 2. Lighting should not be increased, as this has the potential to negatively impact on nocturnal invertebrates and bats that use the site.

#### **General safety**

As a fundamental aim of this management plan is to preserve Mereway as a public open space and encourage visitors to visit the site, it is recognised that it is important to ensure that the accessible parts of the site are maintained with the safety of the public in mind.

1. All applicable safety regulations and best practice should be adhered to with respect to public use of the site.

### 4.3 Management practice

<<Frances – do you have material for this section? Eg work day management. Mention local sourcing of materials and labour?>>

### 4.4 Community involvement

As the vision for Mereway indicates, it is an aspiration of this management plan that the local community becomes more aware of the value of the site and uses it as place to appreciate and learn about nature. The principles that guide this aspect of the management plan are as follows:

1. While some people appreciate any form of nature, many people are more likely to be drawn to specific features that are "striking" or "interesting". This management plan thus aims to establish a limited number of natural features at Mereway that are perceived to be of public appeal. These include a wild flower meadow and natural sculptures.

- 2. Appreciation is enhanced through knowledge. This management plan includes the establishment of interpretative information on the site that explains some of the ecological processes occurring there.
- 3. Environmental education is important for the young. Mereway lies close to a number of schools and this management plan includes development of an outdoor classroom infrastructure and provision of expertise to support educational visits to the site.
- 4. Involving the local community in the management activities at the site increases a feeling of local "ownership" that leads to enhanced appreciation. This management plan foresees the bulk of the management work being conducted by a local community organisation (FORCE) using local community volunteer labour.
- 5. The community cannot appreciate a site that they do not know exists. When appropriate, publicity opportunities should be sought to increase local community awareness of Mereway Nature Park.

### 4.5 Access issues

<<Who needs to have access to Mereway and from where>>

## **5 Management Prescriptions**

This section contains the precise management tasks that need to be carried out in order for the vision for Mereway Nature Park to be realised. For convenience, Mereway Nature Park has been partitioned into a number of "compartments", as indicated on the map in Appendix 2. These compartments broadly contain an area of similar habitat, and are summarised in Table 1.

Vegetation type	Compartment	Name		
	1a	Weir Scrub		
Bramble Scrub	1b	North Scrub		
	1c	South Scrub		
	2a	Railway Woodland		
Woodland	2b	Craneside Woodland		
	2c	Grotto Woodland		
	3a	Fox Meadow		
Rank Grassland	3b	Middle Meadow		
	Зс	Botanical Meadow		
	4a	Classroom Grassland		
Grassland	4b	Sensory Grassland		
	4c	Hidden Grassland		
Verge	Verge 5a Cen			
	5b	DNR Path Verge		

Table 1: Summary of Compartments

We now proceed through these compartments one by one. For each compartment we will provide a compartment description, outline the management objectives, and then identify a number of management prescriptions that should be applied in order to meet the stated objectives. Where appropriate, we also identify a number of "possible projects", which are optional tasks that could be carried out within this compartment. These projects typically require some additional resources (time and/or funding) in order to plan and develop.

### 5.1 Compartment 1a: Weir Scrub

\*\*Need to determine ownership of this compartment \*\*

#### Description

This small area of bramble scrub lies to the immediate west of the start of the DNR Path and forms the western extremity of Mereway Nature Park. It forms the first piece of land after the divergence of the Duke of Northumberland's River from the Crane. There is no public access as the area is fenced off from both the DNR Path and the Environment Agency Weir, although this fence is in quite poor condition. It consists of brambles with several groups of emergent trees, some of reasonable maturity, mostly sycamore. In the northeastern corner the trees have reached sufficient maturity that the brambles have receded.

#### Objectives

- Maintain as an undisturbed area of bramble scrub.
- Maintain good access along the DNR Path (eastern boundary).

#### Prescription

- 1. Liaise with Environment Agency to make sure that this area is maintained in such a way that it does not interfere with their operations.
- 2. Remove rubbish that accumulates in this area.
- 3. Remove fence on the eastern boundary that is adjacent to open woodland (which is in state of disrepair), but maintain fence that is adjacent to brambles.

#### **Possible projects**

• **The Gateway**: As this compartment forms the confluence of the two rivers, it is of some historical interest, as well as being a notable feature of the local area. The corner of this compartment is highly visible from Kneller Gardens and could act as a conceptual gateway to Mereway Nature Park. It might be worth placing a feature (either a natural feature such as a tree, art work, or attractive signage) at the corner of this compartment, so that it is visible from Kneller Gardens and draws attention to Mereway.

### 5.2 Compartment 1b: North Scrub

#### Description

This is the second largest compartment and consists of all the bramble scrub north of the Central Track, east of the DNR Path, and west of the Grotto. This scrub is broken only by the Loop Trail, which cuts through the eastern section of this compartment. There are several emergent saplings in this area (including oak and sycamore). The northern and western limits of this compartment are fenced off and the northern boundary follows part of the DNR Path, then the south of the Railway Woodland and finally a section of the railway itself. There are sections in the south and east of this area that are accessible to bramble pickers, who cause damage by pushing into the scrub (particularly behind the Fox Meadow). Several remnant man-made structures from the previous allotment use lie along the northern boundary.

#### Objectives

- Maintain as an undisturbed area of bramble scrub.
- Prevent encroachment of scrub onto the DNR Path (both to the west and north).
- Remove unsightly remnant structures from the scrub.

#### Prescription

1. Monitor damage to the scrub during the fruiting season and consider remedial action.

- 2. Maintain access along the Loop Trail by cutting back over-extending brambles (at least once every two months from April to September).
- 3. Remove unsightly remnant man-made structures from northern boundary.

### 5.3 Compartment 1c: South Scrub

#### Description

This is the largest compartment and consists of all the bramble scrub to the south of the Central Track. It is bordered to the south by the River Crane and to the east by a residential garden. This contiguous swathe of brambles flows around several of the small grassland compartments and is penetrated by a number of scattered shrubs (including hawthorn and elder) and emergent trees (including ash and sycamore). Much of this area is totally inaccessible. It is however possible to enter this area by walking through compartments 3c and 4c. This compartment, more than any other, is responsible for the feeling of "wildness" experienced at Mereway Nature Park. Minor damage from bramble pickers is only a problem on the northern boundary of this area.

#### Objectives

- Maintain as an undisturbed area of bramble scrub.
- Screen the buildings (as seen from the Central Track) on the southern boundary, to provide a natural edge to Mereway Nature Park.

#### Prescription

- 1. Monitor damage to the scrub during the fruiting season and consider remedial action.
- 2. Extend the hedgerow in compartment 2b along the south-western corner through selective planting of suitable species.

### 5.4 Compartment 2a: Railway Woodland

#### Description

This is a roughly triangular section of woodland that borders the Duke of Nortumberland's River to the northwest, the railway line to the northeast and the North Scrub to the south. It extends roughly from the corner of the DNR footpath and the Loop Trail until the corner when the Loop Trail wings south towards the Central Track. The northern section of the Loop Trail traverses this woodland. The woodland community includes blackthorn, elder and sycamore, beneath which cow parsley, hedge garlic, wild hop, herb bennett and other plants grow. In the centre of the woodland is a small open water tank, remnant from allotment use.

The accessibility and shelter provided by this area has led to it being used, on occasion, as a temporary home for vagrants, with associated problems of rubbish and human detritus.

#### Objectives

- Maintain as an area of deciduous woodland.
- Maintain access to Mereway Nature Park from the DNR Path through this area, keeping this access route narrow and "adventurous".
- Provide an attractive entrance to this compartment from the DNR Path.

#### Prescription

- 1. Maintain access along the Loop Trail by conservatively cutting back overextending vegetation (at least once every two months month between April and September).
- 2. Remove rubbish that has accumulated in this area.
- 3. Establish a log pile (loggery) to the immediate east of the Loop Trail entrance.

#### **Possible projects**

- **The Owl**. Place a natural sculpture near the entrance to Mereway Nature Park on the northern end of the Loop Trail. An owl made from scrap metal has been suggested as a possible candidate. (There is scope for further natural art works along the Loop Trail.)
- **The DNR/Loop Trail Gateway.** Improve the entrance to the Loop Trail from the DNR Path, clearing existing iron fence and perhaps featuring a wooden swivel gate with a sign.

### 5.5 Compartment 2b: Craneside Woodland

#### Description

This is narrow strip of woodland that forms the southerly section of Mereway Nature Park's western boundary. Most of it lies to the south of the Central Track, but a small area to the north of the Central Track is also included. To the south of the Central Track the woodland is essentially a mature hedgerow that consists of hawthorn and various fruiting trees, while to the north of the track it features elder and laurel.

#### Objectives

- Maintain as an area of deciduous woodland.
- Extend the hedgerow on the southern side along the southwestern corner of the South Scrub (see compartment 1c).

#### Prescription

1. Remove rubbish that accumulates in this compartment, particularly on the northern side of the Central Track.

### 5.6 Compartment 2c: Grotto Woodland

#### Description

This triangular area lies at the north-eastern corner of Mereway, to the north and west of the Central Track. It is bordered to the west by the North Scrub, to the north by the railway embankment. This area clearly indicates its past use as allotment gardens. A short concrete pathway capped by concrete slabs cuts north from the Central Track at the western boundary of this compartment and leads into a small enclosed coppice, beneath which the canopy shuts out the light so comprehensively that the ground is sparsely vegetated. Tall rose bushes, mature apple trees and hazel are features of the vegetation along this path. A one-metre strip adjacent to the railway verge has been cleared during works to control japanese knotweed on the railway side, which remains a threat to this compartment (a small stand also occurs at the eastern corner of the Grotto). The bulk of this area, to the east of the concrete pathway, is emergent sycamore and hazel woodland, beneath which is relatively sparse bramble scrub.

#### Objectives

- 1. Maintain this area as a distinctive corner of the park.
- 2. Remove bramble scrub from this area.
- 3. Screen off the unsightly fence and railway embankment.
- 4. Eliminate japanese knotweed from this site.

#### Prescription

- 1. Cut back all brambles in this compartment. First cut late autumn 2007, digging out root systems and then continuing this process on an annual basis.
- 2. Develop an attractive understorey flora beneath the sycamore woodland through selective planting (perhaps of bluebells).
- 3. Liaise with council and Network Rail to determine management regime for Japanese knotweed.
- 4. Selectively plant whips of tall shrubs along the fence line in order to supplement the existing emergent woodland (once knotweed management regime has been determined).
- 5. Tidy the eastern corner of this compartment by selective planting (once knotweed management regime has been determined).

#### **Possible projects**

• **Grotto enhancement**. The Grotto pathway entices visitors to walk down it, but currently the Grotto itself has no notable features. Provision of a feature of interest in the Grotto should be considered, perhaps through a consultation (or competition) with local schools.

### 5.7 Compartment 3a: Fox Meadow

#### Description

This small open area lies to the north of the Central Track at the western end of Mereway Nature Park. It is characterised by a wooden bench featuring a sculpted fox that sits in the north-eastern corner, which has been in place since May 2006. When

left to its own devices this area of rich soil is dominated by nettles, although patches of opium poppy and wayside plants such as mugwort form a dense tangle by late summer.

This meadow has been subject to somewhat ad hoc management. The meadow itself was enlarged in 2004, in order to release two young oak trees from the bramble scrub. In autumn 2006 the entire meadow was strimmed. The western third of the meadow had its soil turned in autumn 2005 and 2006, nettles thinned and mixed wild flower seeds scattered. In autumn 2006 ox-eye daisy and teasel seedlings were planted in the north-western corner. In spring 2007, council contractors severely strimmed the entire meadow. One short pathway is maintained through the meadow from the Central Track to the fox bench, although a second unofficial short pathway has recently become established.

#### Objectives

- Maintain this area as an open meadow.
- Maintain fringes of rank grassland (nettles) to the south and east of the meadow, containing the meadow within an enchanting "bowl" of vegetation.
- Maintain access to the fox bench
- Establish an annual flourish of wild blossom on this site that will be clearly visible to someone passing along the Central Track.

#### Prescription

- 1. Strim the entire meadow, once in autumn.
- 2. Cut back brambles that encroach onto the meadow, once in autumn.
- 3. Delicately strim the rank grassland between the meadow and the Central Track at regular intervals to maintain a fringe of at least half a metre (but to maintain a kempt appearance with good sightlines of the Fox).
- 4. Continue to experiment with planting on this meadow. In particular it is suggested that the eastern section of this meadow has its soil fertility reduced in order to discourage rank grasses in favour of wild flowers.
- 5. Maintain the pathway to the fox bench by clearing vegetation (at least once every two months between April and September).

### 5.8 Compartment 3b: Middle Meadow

#### Description

This small open area lies to the north of the Central Track, between the Fox Meadow to the west and the Classroom Grassland to the east. It consists primarily of rank grassland, dominated by nettles, which surround remnant allotment vegetation consisting of wild rose and mock orange. The western section has a layer of fine-grained rubble and appears from the mounds of snail shells to have been used a substantial song thrush anvil. Brambles are currently encroaching on this meadow on the northern side and it is under threat of disappearing.

#### Objectives

• Maintain this area primarily as rank grassland, dominated by nettles.

#### Prescription

- 1. Consolidate this grassland by cutting back brambles around the margins of this area to form a gentle arc, terminating at the line of mature scrub.
- 2. Cut back brambles that encroach onto the meadow, once in autumn.

### 5.9 Compartment 3c: Botanical Meadow

#### Description

This interesting open area stretches south from the Central Track until the Crane and forms a narrow strip on the western end of Mereway. This site appears to have been a Victorian refuse tip and as a result substantial amounts of porcelain fragments, tiles, bottles and other artifacts have been recovered from beneath the surface of the soil, as well as shells of whelk and oyster. This area has attracted souvenir hunters over time and as a result the soil has been regularly disturbed, thus becoming deep and enriched. Indeed several substantial pits occur at this site.

The regular disturbance in this area is probably a major factor in the richness of the flora in this compartment. Unusual plants for Mereway such as thorn-apple, early wintercress and comfrey occur here. The vegetation becomes very dense and by late summer it can be hard to enter this area, making it another of Mereway's attractive wild corners.

#### **Objectives**

- Maintain this open area as a particularly botanically rich corner of the nature park.
- Discourage general access to this area.
- Make the area safer to facilitate restricted access.

#### Prescription

- 1. Cut back brambles that encroach onto the area, once in autumn.
- 2. Partially fill in some of the deeper pits in order to make the area safer.
- 3. Turn over the soil in selected parts of this area on a rotational basis, once in late autumn.

### 5.10 Compartment 4a: Classroom Grassland

#### Description

This small open area lies to the immediate north of the Central Track, approximately two thirds along its length (west to east), with its southern limit marked by a mature horse chestnut. It consists primarily of grass, although wild flowers such as dog's mercury and michaelmas daisy occur. The Loop Trail cuts through this area as it heads north from the Central Track. On the west side a small compost heap is

maintained. The southern section features a wooden table and a number of log seats, which lead to this area becoming a recognised point of focus on the site and notional "centre".

#### Objectives

- To maintain this area as grassland.
- To slightly increase the size of the grassland.
- To sensitively develop this area as the focus point of an outdoor classroom for educational activities.
- To maintain good access to the classroom and Loop Trail.

#### Prescription

- 1. Cut back brambles that encroach onto the area, once in autumn.
- 2. Gradually remove narrow layers of scrub to the east of the grassland (autumn) and encourage spread of the grassland into newly cleared areas.
- 3. Regularly strim the fringes of the Loop Trail and around the classroom, but leave the grass throughout most this area to grow long.
- 4. Seek funding to add and improve the infrastructure on this site (see possible projects).
- 5. Limit the size of the compost heap (it is suggested that a main compost heap be maintained in Hidden Meadow).

#### **Possible projects**

- *Magnipost*. Establish a magnipost in order to allow close inspection of "found objects" on site.
- *Habitat sign*. Create a signboard that features the main habitats at Mereway and provides basic interpretation for the site.
- *Improved seating*. Improve the seating available around the table area.
- Log pile. A log pile (stag beetle loggery) could be developed (with the help of local schools) in the northeastern corner of this site, by first clearing a small area of scrub.

### 5.11 Compartment 4b: Sensory Grassland

#### Description

This small open area lies to the south of the Central Track, directly opposite the Classroom Grassland. It consists primarily of grass, although its northern fringe consists of a line of mature trees (whitebeam and hazel) beneath which remnant allotment and woodland flora such as grape-hyacinth, spanish bluebell and daffodil flower. A number of other interesting plants such as blackcurrant bushes occur on its western fringes. A small number of ant hills occur amidst the grassland. In 2005 and 2006 several layers of woodchips were placed on part of this area, preventing growth of the grass and facilitating access to the edges of the South Scrub. Two short tracks lead into the South Scrub and terminate at a mature hawthorn and an elder. In

January 2006 two separate collections of willow whips were planted at the site in an attempt to establish a natural sculpture and a short tunnel, respectively.

#### Objectives

- Maintain this area primarily as open grassland.
- Develop a "sensory trail" within this area that allows visitors to explore microhabitats and the previous land use of the site.

#### Prescription

- 1. Cut back brambles that encroach on this area, once in autumn.
- 2. Control and manage growth of all introduced natural features on this site.
- 3. Regularly strim the fringes of the short tracks, but leave the grass throughout most this area to grow long.
- 4. Maintain delicate narrow tracks through grassland using woodchips (but avoid woodchip spill onto the fringes).

#### **Possible projects**

- **Sensory "garden"**. Sensitively introduce a number of native plants of particular interest, either from a cultural or culinary perspective, or because they have unusual smell, texture or colour. (This to an extent complements existing activities to introduce natural art and isolate plants of interest in this compartment.)
- **Pond**. Build a small pond as one of the sensory features of the site. A potential location is to the immediate north of the hawthorn (this pond would not be visible from the grassland or Central Track and would only be "discovered" by following the southeastern trail.
- *Minibeast homes*. Place some wildlife homes in areas of this compartment, as part of the sensory trail.

### 5.12 Compartment 4c: Hidden Grassland

#### Description

This small open area of grassland almost forms an island within the western section of the South Scrub. It can only be accessed by first traversing the Botanical Meadow. In recent years an active fox den has been a feature of this site. Access to this area can be difficult and brambles are currently encroaching seriously into the area.

#### Objectives

• Maintain this area as open grassland.

#### Prescription

1. Consolidate this grassland by severely cutting back brambles around the margins of this area (one initial heavy cut, autumn of first year).

2. Cut back brambles that encroach on this area, once in autumn, including provision of a permanent (but discrete) access to this compartment.

#### **Possible projects**

- 1. **Compost Heap.** This is a good location in which to maintain our main compost heap (out of sight).
- 2. *Mound.* Build a small mound for viewing Mereway from (for visiting school groups).

### 5.13 Compartment 5a: Central Track Verge

#### Description

The verge of the Central Track has been included as a management compartment in its own right, as it has a number of unique features and management problems. This verge varies between grass (e.g. Sensory Grassland), rank grass (e.g. Fox Meadow), bramble scrub (e.g. North and South Scrub) and mature trees (e.g. Craneside Woodland, Grotto Woodland and Sensory Grassland) along its length. A flowering currant is a feature of the southeastern corner, just as the Central Track turns northwards and passes underneath the railway.

An ongoing management problem concerns parking along this verge, particularly on match days at either Twickenham Stadium or Twickenham Stoop. Various deterrents have been placed at opportune places along this verge, including woody debris and raised embankments, however these have limited effect. Rank grass and brambles have been encouraged where this verge borders open areas such as the Fox Meadow. On the other hand, the council has, on an ad hoc basis, occasionally strimmed this verge up to one metre on ether side and inadvertently encouraged parking.

The long term objective for this verge is to open it up and encourage strips of wayside flora on either side of the Central Track.

#### **Objectives**

- Prevent parking along the verge.
- Encourage wayside flowering through regular, but limited, strimming of the verges.
- Maintain micro habitats along the verge.

#### Prescription

- 1. Fortify the verge, where appropriate, to discourage parking. Existing techniques such as placement of woody debris and embankment enhancement appear to be reasonably successful, however consolidation through the use of stakes would seem more likely to succeed.
- 2. Once (but not before) parking preventative measures have been successful, commence regular strimming of the verges. Strimming should be not more than

0.5 metres on either side, and not at all beneath mature trees where woodland flora has developed.

3. Where good patches of nettles have become established (such as on the north verge between the Classroom Grassland and Grotto Woodland), maintain this habitat by cutting back encroaching brambles, once in autumn.

#### **Possible projects**

• **Eastern Gateway**. Provide an interesting eastern entrance to greet visitors as they enter Mereway Nature Park from beneath the railway bridge, perhaps complementing the natural feature (flowering currant) and revealing remnant stonework. A sign could also be considered for this location.

### 5.14 Compartment 5b: DNR Path Verge

#### Description

The verges of the DNR Path form two strips of rank grassland between the northern boundary of the North Scrub and the DNR, from the Weir Scrub in the west until the tunnel underneath the railway in the east.. These verges are dominated by cow parsley but also contain some riverside plants such as bargeman's cabbage, making them of genuine botanical interest. Damselflies and dragonflies can be seen along this stretch in summer. The DNR Path is quite narrow along this length and the vegetation encroaches quite severely on either side from late spring onwards. The verges are rarely strimmed.

#### **Objectives**

- Maintain a range of grassland and riverside flora along the verges.
- Maintain access along the DNR Path.
- Consolidate the Railway Woodland through the development of a hedgerow along part of the southern verge.

#### Prescription

- 1. Sensitively strim the immediate verges of the DNR Path in order to maintain access throughout the summer months. This strim to be the minimum necessary to maintain access and should preserve vegetation between the DNR Path and the river edge.
- 2. Plant a short contained hedgerow along the northern boundary of the North Scrub (from the Loop Trail entrance in the west until the old allotment shed in the east).

### 5.15 General: Pathways

Mereway Nature Park only features one internal pathway (the Loop Trail) and one partially external pathway (the public right of way known as the DNR Path). In addition, there are very short trails on both the Fox Meadow and Sensory Grassland.

#### Objectives

• Keep pathways in a fit state for use.

#### Prescription

 In addition to prescriptions identified regarding vegetation clearance in the respective compartments through which these pathways pass, once per year (and more often if necessary) the Loop Trail to be covered along its entirety with a layer of fresh woodchips.

### 5.16 General: Dead Wood

In addition to the general policy of leaving dead wood on site, there are several existing log piles on Mereway, notably on the northern boundary of the North Scrub. It is suggested that several log pile areas (loggeries) are deliberately maintained on Mereway.

#### **Objectives**

• Maintain several log piles on Mereway.

#### Prescription

 Identify locations for log piles. One such area has been identified in the Railway Woodland. Another possible area has been identified in the Classroom Grassland.

### 5.17 General: Boxes

There are currently four basic bird boxes erected on mature trees in Mereway Nature Park and one set of bat boxes. These are not of particularly good quality.

#### Objectives

- Maintain existing bird and bat boxes.
- Add further bird (and possibly bat) boxes on the site.

#### Prescription

- 1. Clean out and repair (or if necessary replace) existing boxes in the period October to December each year.
- 2. Seek funding for further boxes to erect on the site (the area could probably support up to ten bird boxes and two sets of bat boxes).

### 5.18 General: Vehicular access

The Central Track currently sees a fair amount of vehicular traffic, with vehicles accessing the depot, the residential properties and using the site for parking. This

situation will need to be monitored with the future of the depot currently uncertain. An ideal solution would see depot traffic ceasing to use the Central Track and suitable deterrents in place to prevent parking along the Central Track. This would leave only residential traffic using this lane.

Parking deterrents are considered, in part, in the prescriptions for compartment 5a.

#### Objectives

 Restrict vehicular use of the Central Track to essential traffic only (and ideally ultimately only residential traffic).

#### Prescription

1. Continue to engage in discussions with the council about use of the Central Track.

### 5.19 General: Educational activities

Many of the objectives of this management plan are targeted towards creating a space that is, at least in part, appropriate for use in environmental education activities. It is essential that the development of this aspect of Mereway Nature Park proceeds in consultation with local schools.

#### **Objectives**

• Create an educational facility at Mereway Nature Park that local schools use and benefit from.

#### Prescription

- 1. Continue to hold regular meetings with local schools to explain the potential benefits of the site and involve them in the project.
- 2. Continue to target work days on the site as specifically "child friendly" and advertise these events in local schools.
- 3. Facilitate the holding of schools events at Mereway Nature Park, through the provision of suitable expertise.

### 5.20 Work schedule

Task	Brief description	Jan Feb	Mar Apr	May Jun	Jul Aug	Sep Oct	Nov Dec
1a2	Rubbish removal from Weir Scrub						
1b1	Assessment of North Scrub damage after fruiting season	Х					
1b2	Clearance of Loop Trail			Х	Х	Х	

## 6 Monitoring and Review

1. Discuss << This section to discuss how we will monitor our progress. I suggest that we largely do this by means of a management committee of some sort – the section should then identify members, how often they meet, survey work, community consultation activities etc>>

# Appendix 1 – Location map

# Appendix 2 – Compartments map

# Appendix 3 – Species records

### Plants

This plant list is based on surveys conduced by Chris Hill prior to the UDP inquiry in 2003. Subsequent additions to this list are based on informal observations. Chris used the following numeric frequency codes, which are included in the notes column of the species list (species with no code have been added subsequently to his surveys).

- 1 Very rare, one or two plants only
- 2 Rare or very localised
- 3 Locally common
- 4 Common at least in patches over much of the whole area
- 5 Abundant and/or locally dominant

<< Species added in green are my own additions to Chris' list >>

Common name	Scientific name	Notes
EQUISETACEAE		
Common (Field) Horsetail	Equisetum arvense	3
RANUNCULACEAE		-
Creeping Buttercup	Ranunculus repens	2
Celery Leaved Buttercup	R. scleratus	1
Lesser Celandine	R. ficaria	
PAPAVERACEAE		
Corn Poppy	Papaver rhoeas	2
Long-headed Poppy	P. dubium	2
Opium Poppy	P. somniferum	2
CRUCIFERAE		
Early Wintercress	Barbarea intermedia	
Bargeman's Cabbage (Wild	Brassica campestris	2
Turnip)		
Horseradish	Armoracia rusticana	3
Watercress	Rorippa nasturtium-aquaticum	2
Garlic Mustard/ Hedge Garlic	Alliaria petiolata	3
Hedge Mustard	Sisymbrium officinale	
Tumbling Mustard	Sisymbrium altissimum	2
HYDRANGEACEAE		
Mock Orange	Philadelphus coronarius	
GROSSULARIACEAE		
Black Currant	Ribes nigrum	
Flowering Currant	Ribes sanguineum	

CHENOPODIACEAE		
Fat Hen	Chenopodium album	3
Halberd-leaved Orache	Atriplex hastata	2
MALVACEAE		
Common Mallow	Malva sylvestris	3
VIOLACEAE		
Wild Pansy	Viola tricolor	
ACERACÉAE		
Sycamore	Acer pseudoplatanus	2
HIPPOCASTANACEA		
Horse Chestnut	Aesculus hippocastanum	2
PAPILIONACEAE		
White Clover	Trifolium repens	2
ROSACEAE		
Bramble	Rubus fruticosus	5
Dewberry	R. caesius	3
Raspberry	R. idaeus	
Creeping Cinquefoil	Potentilla reptans	2
Herb Bennet	Geum urbanum	2
Blackthorn	Prunus spinosa	3
Cultivated Cherry	Prunus avium	1
Hawthorn	Crataegus monogyna	2
Swedish Whitebeam	Sorbus intermedia	2
ONAGRACEAE		
Great Willowherb	Epilobium hirsutum	2
ARALIACEAE		
lvy	Hedera helix	2
UMBELLIFERAE		
Cow Parsley	Anthriscus sylvestris	2
Hogweed	Heracleum sphondylium	2
EUPHORBIACEAE		
Annual Mercury	Mercurialis annua	2
Petty Spurge	Euphorbia peplus	2
CARYOPHYLLACEAE		
Red Campion	Silene dioica	
Common Chickweed	Stellaria media	
POLYGONACEAE		
Knotgrass	Polygonum aviculare	3
Redleg	P. persicaria	1
?Pale Persicaria	P. lapathifolium	2
Water Pepper	P. hydropiper	1
Black bindweed	P. convolvulus	2
Japanese Knotweed	P. cuspidatum	2
Broad Dock	Rumex obtusifolius	2
Clustered Dock	R. conglomeratus	3
URTICACEAE		
Stinging Nettle	Urtica dioica	4
CANNABINACEAE		

Нор	Humulus lupulus	2
BETULACEAE		
Downy Birch	Betula pubescens	1
CORYLACEAE		
Hazel	Corylus avellana	2
FAGACEAE		
Oak	Quercus robur	3
LOGANIACEAE		
Buddleia	Buddleja davidi	1
OLEACEAE		
Ash	Fraxinus excelsior	1
Walnut	Juglans regia	1
Privet	Ligustrum vulgare	2
BORAGINACEAE		
Comfrey sp.	Symphytum sp.	
Green Alkanet	Pentaglottis sempervirens	2
APOCYNACEAE		
Lesser Periwinkle	Vinca minor	
CONVOLVULACEAE		
Field Bindweed	Convolvulus arvensis	3
Great Bindweed	C. sepium	3
SOLANACEAE		
Black Nightshade	Solanum nigrum	2
Thorn-Apple	Datura stramonium	2
SCROPHULARIACEA		
Common Mullein	Verbascum thapsus	1
Common Field Speedwell	Veronica persica	
Ivy-leaved Speedwell	Veronica hederifolia	
LABIATAE		
Black Horehound	Ballota nigra	2
Red Dead-Nettle	Lamium purpureum	
White Dead-Nettle	L. album	2
Spearmint	Mentha spicata	
PLANTAGINACEAE		
Ratstail Plantain	Plantago major	3
Ribwort Plantain	P. lanceolata	2
RUBIACEAE		
Cleavers / Goosegrass	Galium aparine	3
CAPRIFOLIACEAE		
Elder	Sambucus nigra	3
Daisy	Bellis perennis	
Michaelmas Daisy sp.	Aster sp.	
Common Ragwort	Senecio jacobaea	1
Garden Goldenrod	Solidago altissima	3
Pineapple Weed	Matricaria matricarioides	3
Groundsel	Senecio vulgaris	
Mugwort	Artemisia vulgaris	3

Chinese Mugwort	A. verlotorum	3
Burdock	Arctium minus	2
Creeping Thistle	Cirsium arvense	4
Nipplewort	Lapsana communis	2
Smooth Sow-Thistle	Sonchus oleraceus	2
Dandelion	Taraxacum officinale	2
LIMNANTHACEA		
Poached egg Plant	Limnanthes douglasii	
LILIACEAE		
Asparagus	Asparagus officinalis	2
Spanish Bluebell	Hyacinthoides hispanica	
Garden Grape-hyacinth	Muscari armeniacum	
Daffodil sp.	Narcissus sp.	
ARACEAE		
Lords and Ladies	Arum maculatum	2
GRAMINEAE		
Annual Meadow-Grass	Poa annua	3
Cocksfoot	Dactylis glomerata	2
Hairy Brome	Bromus ramosus	2
Common Couch	Agropyron repens	3
Wall Barley	Hordeum murinum	2
False Oat	Arrhenatherum elatius	5
White (Creeping) Bent	Agrostis stolonifera	2

#### Birds

The bird list is based on informal observations at Mereway Nature Park and a document submitted to the UDP inquiry *Birds at the former Mereway Allotments* by Keith Martin. A species identified as breeding in the column "use of Mereway" breed at the site. If a species breeds locally, but has not been established as breeding at Mereway, then this is observed in the column "Notes".

Species	Use of Mereway	Notes
Grey Heron	Regularly seen at the weir.	
Mute Swan	Occasional on the rivers.	Has attempted to breed in adjacent Kneller Gardens.
Mallard	Common resident on the rivers.	Breeds adjacent to Mereway.
Sparrowhawk	Uncommon resident of Crane Park.	
Moorhen	Common resident on the rivers.	Breeds adjacent to Mereway.
Black-headed Gull	Common visitor (primarily winter) to the rivers.	
Feral Pigeon	Common resident in surrounding area.	Breeds locally.
Wood Pigeon	Common breeding resident.	
Collared Dove	Common resident in	Breeds locally.

	surrounding area.	
Swift	Common summer visitor.	Breeds in buildings close to Mereway.
Kingfisher	Regularly seen on the rivers.	Breeds along the Crane and DNR.
Rose-ringed Parakeet	Common resident.	Breeds in Kneller Gardens.
Green Woodpecker	Uncommon resident.	Likely to breed locally.
Great Spotted Woodpecker	Fairly common resident.	Breeds locally.
Grey Wagtail	Uncommon resident on the rivers.	Breeds along Crane.
Wren	Common breeding resident.	
Dunnock	Common breeding resident.	
Robin	Common breeding resident.	
Song Thrush	Common breeding resident (one or two territories).	Red list species. Richmond Biodiversity Action Plan Species.
Redwing	Fairly common winter visitor.	
Mistle Thrush	Fairly common resident.	Likely to breed locally.
Blackbird	Common breeding resident.	· · · · ·
Blackcap	Fairly common breeding summer visitor (several territories).	
Whitethroat	Fairly common breeding summer visitor (several territories).	
Chiffchaff	Fairly common summer visitor.	Breeds locally.
Willow Warbler	Uncommon passage migrant	
Great Tit	Common breeding resident.	
Blue Tit	Common breeding resident.	
Long-tailed Tit	Common breeding resident.	
Magpie	Common resident.	Breeds locally.
Jay	Uncommon resident.	Likely to breed locally.
Carrion Crow	Common resident.	Breeds locally,
Starling	Common resident.	Red list species. Breeds locally.
House Sparrow	Common resident.	Red list species. Breeds adjacent to Mereway.
Chaffinch	Fairly common resident.	Breeds locally.
Goldfinch	Fairly common resident.	Breeds locally.
Greenfinch	Common breeding resident.	Í Í

### Mammals

Mammal records are based on informal observations at the site. This list is extremely unlikely to be complete.

Species	Use of Mereway	Notes
Fox	Breeding resident (at least one	
	den).	
Grey Squirrel	Common resident.	Breeds locally.
Common Pipistrelle	Common resident.	Breeds locally.

#### **Butterflies**

Butterfly records are based on regular informal observations and a London Wildlife Trust site visit in July 2003.

Species	Observed location and month	Notes
Comma	March, July	
Common Blue	May, July	
Green-veined White	July	
Small White	April, July	
Speckled Wood	April	
Peacock	April	
Small Tortoiseshell	April	
Large White	May	

#### Other Invertebrates

No formal surveys have been done. All records are informal.

Species	Observed location and month	Notes
DAMSELFLIES		
Blue-tailed Damselfly	DNR verge (May)	
(Ischnura elegans)		
LADYBIRDS		
7-spot Ladybird	Meadows (March, April, May)	
(Coccinella 7-puntata)		
22-spot Ladybird	Fox Meadow (April)	
(Psyllobora 22-punctata)		
14-spot Ladybird	Middle Meadow (May)	
(Propylea 14-punctata)		
Harlequin Ladybird	Meadows (May), DNR verge (May)	
(Harmonia axyridis)		
BEETLES		
Oedemera nobilis	Meadows	(feeding on nectar

		of Creeping Buttercup)
BUGS		
Common Froghopper ( <i>Philaenus spumarius</i> )	Railway Woodland (Cuckoo spit in May)	
<i>Liocoris tripustulatus (</i> type of Mirid Bug)	Botanical Meadow (May)	
Crucifer Shieldbug ( <i>Eurydema oleracea</i> )	Hidden, Middle Meadow (May).	Otherwise known as Brassica Bug.
Dock Bug (Coreus marginatus)	Botanical (April), Hidden Meadow (May).	
Green Shieldbug ( <i>Palomena prasina</i> ) SAWFLIES	Fox Meadow (March), Middle Meadow (April)	
Arge Pagana	Fox Meadow (May)	Mating on Creeping Buttercup
BUMBLEBEES		
Buff-tailed Bumblebee (Bombus terristris)	Fox Meadow (Jun), Botanical (March).	
Common Carder Bumblebee ( <i>Bombus</i> <i>pascuorum</i> )	Botanical (March), Meadows (April)	
BEES		
Honey Bee		
(Apis mellifera)		
FLIES		
Greenbottle ( <i>Lucilia Caesar</i> )	Fox Meadow (April)	

### Amphibians

No formal surveys have been done. All records are informal.

Species	Observed location and month	Notes
Common Toad	In an old water tank on one of the	
	meadows.	

### Other species

Species	Observed location and month	Notes
Nursery Web Spider	Fox Meadow (March).	

(Pisaura mirablis)		
Wolf Spider	Meadows (March, April)	
(Pardosa amentata)		
Crab Spider	Fox Meadow (April)	
(Xysticus cristatus)		
Brown Lipped Snail	Middle Meadow (Song	
(Cepaea nemoralis)	Thrush anvil), Botanical	
	(April)	
White Lipped Snail	Fox Meadow, Middle	
(Cepaea hortensis)	Meadow (March),	
	Botanical (April)	