Habitat survey of proposed Sites of Importance for Nature Conservation in the London Borough of Richmond upon Thames



Produced on behalf of the

London Borough of Richmond upon Thames

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EXECUTIVE SUMMARY

Salix Ecology was commissioned by the London Borough of Richmond upon Thames to undertake a number of habitat surveys in the London Borough of Richmond upon Thames. Five sites were selected for survey:

- Meadway Orchard
- Mereway Nature Park
- St Michael's Convent
- St Margaret's Residential Grounds
- The Rifle Range

The purpose of the surveys was to establish which sites might qualify for designation as Sites of Importance for Nature Conservation and to recommend an appropriate grade of designation. The assessment of sites comprised a:

- desktop study involving the retrieval of species records (from Greenspace Information for Greater London) and site related information from associated organisations;
- habitat surveys of each site (access permitting) employing GLA methodology.

The habitat surveys were undertaken in August 2016 by Paul Loose BSc (Hons), MSc, MCIEEM. Paul has extensive experience in carrying out vegetation surveys including using GLA protocol.

Each site was visited at least once in early August 2016 (with the exception of St Michael's Convent where access could not be gained). A brief description of each site was undertaken. In addition details such as habitat type and percentage coverage, species richness and other information required using GLA methodology were recorded. Protected or notable species and non-native invasive species were target noted.

Sites recommended for designation as SINCs were selected and the grade of each determined using the criteria (and methodology) detailed by the London Wildlife Site Board (2013). An outline of recommendations follows:

Meadway Orchard adjoins the River Crane. Despite current mediocre value for wildlife the site is considered to have high potential as a nature conservation area if managed more appropriately. Additionally the site is contiguous with the river and the species assemblage similar to some terrestrial parts of the river SINC. Therefore it is recommended that Meadway Orchard *be integrated into the River Crane SINC*.

Mereway Nature Park is situated at the confluence of the Duke of Northumberland's River and River Crane. The wildlife value of the site is currently average but has the potential be much higher if managed more appropriately. The current habitats are of a similar nature to some terrestrial parts of the river SINC and contiguous with the river. Therefore it is recommended this area be *integrated into the River Crane SINC*.

St Michael's Convent Garden – there was no access to this site. The desktop study found it to be an important part of the River Thames to Richmond Park Green Corridor. It contains a wide variety of native and non-native tree species - most notable a 300 year old black mulberry. Forty five species of birds have been recorded including a number of Red

List species. Bats also commute across the area including Daubenton's bat. There is a risk this site will be sold for future development. If this happens the green corridor it sits within will be seriously fragmented. It is strongly suggested that this potentially important site is surveyed and its quality confirmed. Subject to this confirmation it is recommended that this site be designated as a *Borough Grade 2 SINC*.

St Margaret's Residential Grounds comprises three parcels of mature parkland with many native and non-native veteran trees (some with decay wood) and a lake with marginal vegetation. This site provides habitat for a variety of birds and bats. The latter example includes common and soprano pipistrelles, noctule and Daubenton's bats some of which might be roosting. The globally threatened stag beetle has been recorded here. Overall this site is of considerable importance to the borough therefore it is recommended this site be *designated as Borough Grade 2 SINC*.

The Rifle Range is unmanaged, grassland areas are becoming colonised chiefly with bramble scrub. It is a relatively undisturbed area which would provide suitable habitat for foraging bats, birds, butterflies, amphibians and reptiles. There is no public access thus this site cannot qualify as a local site, but in isolation it is not of sufficient quality to be designated as a borough site. However, it sits next to the River Crane and has high potential to respond to positive conservation management. Additionally, the current habitats present are of a similar nature to some terrestrial parts of the river SINC which it adjoins. Therefore it is recommended that this site is *added to the River Crane SINC*.

1.0 Introduction

1.1 Introduction and Scope

- 1.1.1 Salix Ecology was commissioned by Richmond upon Thames Council in July 2016 to undertake a number of habitat surveys in the London Borough of Richmond upon Thames. Five sites were selected for survey:
 - Meadway Orchard
 - Mereway Nature Park
 - o St Michael's Convent
 - o St Margaret's Residential Grounds
 - The Rifle Range

1.2 Purpose and objectives

- 1.2.1 The purpose of the work was to establish which sites might qualify for designation as Sites of Importance for Nature Conservation (SINCs) and to recommend an appropriate grade of designation.
- 1.2.2 Objectives include;
 - Recording of all vascular plant types recorded on site and the relative abundance
 - Identification of plant species of particular note or rarity and placing them in a geographic context, i.e. important locally, borough-wide, in Greater London and nationally.
 - Identification of habitat types present and assessment of their extent and quality.
 - Mapping of sites, parcels and features and species of specific note.
 - Making observations about current site conditions, management and how the site's biodiversity value could be enhanced.
 - Vulnerability and potential threats to the integrity of each site.

1.3 Qualifications and experience of personnel:

- 1.3.1 Habitat Surveyor and mapping: Paul Losse BSc (Hons), MSc, MCIEEM. Paul is an ecological consultant specialising in botanical and habitat survey, management plan development and environmental training. He was the Regional GIS specialist Natural England and delivered training to members of staff on the use of the MapInfo system. Additionally Paul is currently involved in delivering QGIS training for professionals on behalf of CIEEM.
- 1.3.2 Report author: Denis J Vickers BSc (Hons), FLS, CBiol, MRSB, MCIEEM. Denis is one of the most experienced habitat surveyors in Greater London and particularly skilled in undertaking open space and habitat surveys using the Mayor of London's methodology and deciding which sites should be designated as SINCs.

1.4 Quality assurance

- 1.4.1 Salix Ecology's policy is to maintain an effective and efficient quality assurance process planned and developed in conjunction with all associates, sub-contractors and clients, outlined in a series of policies and procedures which are intended to ensure high quality standards (available on request).
- 1.4.2 The assurance of quality is fundamental for all work undertaken by Salix Ecology and will be implemented by all associates and sub-contractors in their work.

2.0 Methods

2.1 Desk Study

- 2.1.1 A desk study was carried out and the following data sourced where possible in preparation for the survey and SINC review:
 - Georeferenced aerial photographs.
 - Georeferenced base maps.
 - Records of protected and notable species from the last ten years were retrieved from Greenspace Information for Greater London (GiGL) for each site up to and including a 500 m buffer around its perimeter.
 - Details of site ownership.
 - Previous survey reports of the sites
 - Ecology Handbook 21: Nature Conservation in Richmond upon Thames (London Ecology Unit, 1993).
 - Contact with local wildlife organisations/individuals

2.2 Access

2.2.1 Where applicable, access to each site was arranged in advance of each site visit. Where there was no open access provision the Council was approached to attempt to arrange access. Where access was not forthcoming, the site was viewed from its perimeter where possible and past survey information and aerial photographs reviewed

2.3 Open space and habitat survey for Greater London

- 2.3.1 Each parcel and site was subjected to a Habitat Survey. The survey followed the standard Phase 1 survey methodology (JNCC 2010) as modified by the Open Space and Habitat Survey for Greater London, revised survey specification (Mayor of London, 2002). GLA standard habitat survey forms were used to record open space and habitat data / information.
- 2.3.2 The sites identified by the London Borough of Richmond upon Thames (LBRuT) as of potential Sites of Importance for Nature Conservation (SINCs) value were visited at least once in early August 2016 (with the exception of St Michael's Convent where access could not be gained). A description of each site was undertaken. In addition details such as habitat type and percentage coverage, species richness and other categories listed on the GLA survey form were recorded.
- 2.3.3 The percentage cover of each habitat type within each parcel was estimated with the aid of aerial photography.
- 2.3.4 Vascular plants occurring in each habitat parcel were recorded together with an assessment of their abundance using the DAFOR scale. Scientific names followed Stace (2010). This employed the use of a plant species recording form with the 500 most frequent GiGL records of for the London area, developed to allow efficient recording.
- 2.3.5 The location of the following species was target noted with a 10 figure grid reference:
 - Species protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended).
 - Nationally rare species.
 - Nationally scarce species.
 - Red data book species.

- Species of Principal Importance in England. These species were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework (Defra 2012).
- Notable species for the Greater London area. Notable is defined as species which were recorded from 15% or fewer of the 400 two-kilometre recording squares (tetrads) in Greater London in the Flora of the London Area (Burton 1983).
- Trees which are notable because of size or likely antiquity.
- Non-native invasive species listed under schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- Species listed by the London Invasive Species Initiative (LISI) as species of concern in London (London Invasive Species Initiative, 2013).
- 2.3.6 In accordance with best recording practice, each target note for a species included the name of surveyor, determiner (if relevant), scientific name, parcel reference or grid reference (if a notable species) and date.
- 2.3.7 If a site/habitat was judged to be of particular interest for a taxonomic group (e.g. birds, reptiles, invertebrates and lichens) this was recorded.
- 2.3.8 An assessment of the vulnerability of the site was undertaken and potential threats to the integrity of each site recorded where appropriate.
- 2.3.9 Other attributes detailed in the 'revised survey specification' (Mayor of London, 2002) were also recorded during the site survey including:
 - Access, including access mode and entry points, footpaths, cycle paths.
 - Maintenance and management.
 - Facilities including refreshments, litter bins, car parking, play equipment, seating, interpretation.
 - Site use.
- 2.3.10 Site and parcel boundaries of existing sites were mapped and where applicable any changes from previous mapping recorded (mapped and logged in JPEG format).

2.4 Mapping

- 2.4.1 QGIS GIS systems were used to create all maps. Digitisation was over OS MasterMap and aerial photography to ensure accuracy.
- 2.4.2 The maps included site, SINC and parcel boundaries. Where there were new or changed boundaries, these were clearly highlighted.
- 2.4.3 A map for each site was produced. Each map was provided as a jpeg and with north arrow, legend, scale and O.S. copyright information. All maps were produced at an appropriate scale to ensure maximum legibility.

2.5 Limitations

- 2.4.4 The habitat survey was undertaken at the optimum period for vegetation survey (regarded as May to September), and therefore most plant species would have been recorded possibly with the exception of a few early flowering plants. This is not considered to be a significant constraint to habitat assessment. This habitat survey does not constitute a full botanical survey.
- 2.4.5 There was no access to St Michael's Convent. As a consequence the site's ecological value was assessed via a data search. Although the documents reviewed were likely to be accurate this could not be guaranteed.

2.6 Evaluation

- 2.4.6 Sites recommended for designation as SINCs were selected and the grade of each determined using the criteria (and methodology) detailed in the document *Policy, criteria and procedures for identifying nature conservation sites in London* (The London Wildlife Site Board (LWSB) update March 2013):
 - Representation
 - Habitat rarity
 - Species rarity
 - Habitat richness
 - Species richness.
 - Size
 - Important populations of species
 - Ancient character
 - Recreatability

- Typical urban character
- Cultural or historic character
- Geographic position
- Access
- Use
- Potential
- Aesthetic appeal
- Geodiversity interest
- 2.4.7 These criteria were used with professional judgement and with adequate information regarding each site and its position within the local, borough or metropolitan context. This stage of the evaluation process also included:
 - A review of the reasons for assessing a particular site as a SINC and the rational for the grade suggested.
 - Why a site was not recommended for designation as a SINC and the reasons for its rejection
- 2.4.8 Additionally, where it was applicable, the evaluation of each site took account of the following:
 - The distribution of species and habitats of Principle Importance and implications for planning.
 - The impact (where appropriate) of historic and current management and use of each site.
 - A consideration of the vulnerability and potential threats to the integrity of each site.
 - Management or capital works required to maintain or enhance biodiversity value of each site
 - Habitat or linkage creation/restoration.
 - Sites which have particular potential to contribute to the London habitat creation targets. For any sites falling in this category a summary of the actions needed to create or restore these habitats was provided.

3.0 Results

3.1 Overview

- 3.1.1 The following section gives a brief description of each site, where applicable this includes:
 - Grid reference to the centre of the site, the area of site, habitats present e.g. dominant and frequent species, species of conservation interest, notable trees and non-native invasive species;
 - notable species and other features of interest recorded during the survey;
 - results of the GiGL data search and other available information;
 - a list of rare, threatened and notable species for each site;
 - target notes listing each feature of interest with 10 figure grid reference;
 - A map for each site assessed as of SINC value.

3.2 Meadway Orchard (site code 24065/10)

Owner: London Borough of Richmond upon Thames Grid ref: TQ1455873086, Area 0.17 ha

Habitats Present:

Native broadleaved woodland 10% Scattered trees 20% Roughland 68% Bracken 2%

Site description:

The site was predominantly a mosaic of rough grassland, tall herbs and bramble scrub.

The dominant grasses were false oat-grass *Arrhenatherum elatius* and Yorkshire fog *Holcus lanatus*. Tall herbs included frequent broad-leaved dock *Rumex obtusifolius*, common nettle *Urtica dioica*, mugwort *Artemisia vulgaris* and black horehound *Ballota nigra*.

In more open areas ribwort plantain *Plantago lanceolata*, was frequent. Other herbs included occasional meadow crane's-bill *Geranium pratense*, cut-leaved crane's-bill *G. dissectum* and white campion *Silene latifolia*.

There were a number of young planted fruit trees scattered across the site including apple *Malus pumila*, plum *Prunus domestica* and black current *Ribes nigrum*.

A line of sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* trees formed the boundary along Meadow Road.

A small area of native broadleaved woodland formed the western boundary, the main species being mature ash trees. To the north, on the bank of the River Crane there was a large Crack Willow *Salix fragilis* and a small alder tree *Alnus glutinosa*. There was also a small stand of bracken *Pteridium aqualinum* and great willowherb *Epilobium hirsutum*.

A map of the site is reproduced in Appendix 1 and photographs in Appendix 2 (photos 1, 2 and 3).

Invasive, rare or otherwise notable species and features of interest: None recorded.

Records of protected and notable species retrieved from GIGL:

A variety of species in this category were found within the 500 m buffer of this site.

House sparrow, starling, song thrush and swift were recorded. The habitats present would support nesting regarding the first three species. Records of house sparrow were particularly frequent.

A number of bats were recorded in the locality including common pipistrelle and soprano pipistrelle. Given the habitats present these were more likely to be foraging or commuting rather than roosting.

Records of stag beetle, common frog and hedgehog were frequent. The latter two species could possibly be resident on site.

3.3 Mereway Nature Park (site code 24201/02)

Owner: London Borough of Richmond upon Thames Grid Ref: TQ 1511673345, Area 1.52 ha

Habitats:

Native broadleaved woodland 35% Scrub 60% Bare artificial habitat 4% Neutral grassland (semi-improved) 1%

Site description:

The woodland canopy was predominantly sycamore Acer pseudoplatanus with occasional ash *Fraxinus excelsior*, pedunculated oak *Quercus robur*, cherry *Prunus* sp., and plum *P. domestica* with Swedish whitebeam *Sorbus intermedia*. Shrubs include frequent hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa* and occasional alder *Alnus glutinosa*.

Much of the site was covered in dense bramble *Rubus fruticosus* agg. scrub which frequent greater bindweed *Calystegia sylvatica*.

There were very small areas of Neutral grassland (semi-improved). Here false oat-grass *Arrhenatherum elatius* was dominant. There was some planting of species such as opium poppy *Papavar somniferum*, meadow crane's-bill *Geranium pratense*, field scabious *Knautia arvensis*, lady's-bedstraw *Galium verum* and common knapweed *Centaurea nigra*. However these areas were being invaded by bramble and hedge bindweed *Calystegia sepium*.

There had also been some planting of wildflowers at the entrance to the site, possibly using a wildflowers seed mix. Species included chicory *Cichorium intybus* and corn marigold *Chrysanthemum segatum*.

A map of the site is reproduced in Appendix 1 and photographs can be found in Appendix 2 (photos 4, 5 and 6).

Invasive, rare or otherwise notable species and features of interest:

Buddleia davidii, listed by the London Invasive Species Initiative (LISI), was recorded on site.

Additionally, Chris Hill in the (undated) document *Plants of the former Mereway Allotments, the Rifle Range, and the Duke of Northumberland's River northwards to the A316* produced for the Friends of the River Crane Environment (Force) reported the presence of a little Japanese knotweed *Fallopia japonica* on site and a little Himalayan balsam *Impatiens glandulifera* by the river.

No rare or otherwise notable species were recorded on site.

Records of protected and notable species retrieved from GIGL:

Many of the species recorded for this site were the same as nearby Meadway Orchard (previously described). Indeed many species records were common to both sites.

Given the habitats present: house sparrow, starling and song thrush could possibly be resident on site.

A number of bats have been recorded in the locality including common pipistrelle and soprano pipistrelle. Given the age of trees and the habitats present these were more likely to be foraging or commuting rather than roosting.

Records of stag beetle, common frog and hedgehog were frequent; there were two records of common toad. Taking into consideration the habitats present the latter three species might possible reside on site.

3.4 St Michael's Convent (site code 24676/01)

Owner: Community of the Sisters of the Church Grid ref: TQ1771172241, Area 1.82 ha:

There was no access to this site; the following passage has been abstracted from the MCRA Report on the Garden at St Michaels Convent:

'The nuns have tended their garden carefully from their arrival in 1949 to the present day. They have avoided the use of artificial pesticides, weed killers and fertilisers, and while maintaining much of the area as open lawn with flower and vegetable gardens they have not been over-tidy, allowing undisturbed thick vegetation and logs from fallen branches to remain in various relatively neglected corners to the benefit of the local wildlife. There are three individual plants which particularly deserve to be preserved: (a) an aged mulberry tree said to be 300 years old (the same age as Orford House, the listed part of the convent building); this tree is very much alive but would benefit from specialist care to reduce the amount of dead wood; (b) a vine also said to be 300 years old (thought to have come from a cutting from Hampton Court); and (c) a fine Holm Oak *Quercus ilex* on the convent forecourt. The most environmentally significant feature of the flora of the garden is the number of mature trees, particularly concentrated in a belt on the convent side of the Martingales Close wall. The following species have been identified in this belt: *Cupressus* sp.; Holly; Honey Locust *Gleditsia triacanthos*; Oak; Lombardy Poplar; Golden poplar *Populus* x *canadensis* 'Serotina aurea'; Sweet chestnut...'

A map of the site is reproduced in Appendix 1.

Invasive, rare or otherwise notable species and features of interest:

No information was available regarding invasive species. From the above account the 300 year old mulberry tree is of particular note. A number of other mature trees are recorded on site. There is also an old orchard present – this might possibly qualify as a habitat of principal importance in England.

Records of protected and notable species retrieved from GIGL:

A number of species records were returned for this site and its 500 m buffer:

Birds included house sparrow, swift, song thrush, starling and dunnock. Although this site was not surveyed the information retrieved via the desktop study suggests that suitable habitat was present to support nesting of these species.

Unspecified bat species were recorded including pipistrelle; there were several records of badger and hedgehog. Common shrew, stag beetle and common frog were also noted. Given the habitats reported to be present there is a reasonable possibility that all these species reside on site.

3.5 St Margaret's Residential Grounds

Owner: Trustees of St Margaret's Residential Grounds

This site comprises three parcels: The Lake Grounds, The River Grounds and The Avenue Grounds. Each of these is accounted for in turn below:

3.5.1 The Lake Grounds (site code 24688/01) Grid ref: TQ1680874778, Area 2.69 ha

Habitats:

Non-native broadleaved woodland 10% Scattered trees 43% Scrub 5% Amenity grassland 15% Wet marginal vegetation 2% Standing water 20%

Site description:

Non-native broadleaved woodland composed of planted trees and dense understorey of introduced shrubs including snowberry *Symphoricarpos albus*. Amenity grassland areas were regularly cut. Perennial rye-grass *Lolium perenne* dominated with frequent greater plantain *Plantago major*, ribwort plantain *P. lanceolata*, yarrow *Achillea millefolium* and white clover *Trifolium repens*.

The scattered trees included a number of mature and ancient trees including copper beech *Fagus sylvatica* 'Purpurea', pedunculated oak *Quercus robur*, and London plane *Platanus x hispanica*. There is also a large dead peduculate oak monolith which is likely to be of high value for invertebrates.

A large lake ran the entire length of the parcel. There was little floating or submerged vegetation. Marginal vegetation included branched bur-reed *Sparganium erectum*, yellow iris *Iris pseudacorus*, purple loosestrife *Lythrum salicaria*, lesser pond-sedge *Carex acutiformis*, great willowherb *Epilobium hirsutum* and a small stand of flowering rush *Butomus umbellatus*. Most marginal vegetation had been planted.

There was a small area which had been seeded with a wildflower mix.

A map of the site is reproduced in Appendix 1 and photographs of the parcel appear in Appendix 2 (photos 7, 8 and 9).

Invasive, rare or otherwise notable species and features of interest:

There was a severe problem with *Symphoricarpos albus*; some *Prunus laurocerasus* was also present. Both species are listed by the London Invasive Species Initiative (LISI).

A number of notable (mature / veteran) trees and other species were present, these include the following examples:

Asculus octandra: TQ1582374928. *Quercus robur*. living TQ1677374964, standing deadwood TQ1681774848. *Platanus x hispanica* (five specimens): TQ1682374900, TQ 1682174854, TQ1681174729, TQ1681574651 and TQ1684974715 *Lythrum salicaria*: TQ1684574900 *Butomus umbellatus*: TQ1681574651

3.5.2 The River Grounds (site code 24689/01)

Grid ref: TQ1702674887, Area 1.68 ha

Habitats: Scattered trees 40% Planted shrubbery 5% Native hedge 5% Amenity grassland 50%

Site description:

Amenity grassland was dominated by perennial rye-grass *Lolium perenne* with frequent ribwort plantain *Plantago lanceolata*, ground ivy *Glechoma hederacea*, white clover *Trifolium repens*, red clover *T. pratense*, autumn hawkbit *Scorzoneroides autumnalis* and cat's-ear *Hypochaeris radicata*.

A hedgerow of hawthorn formed the north-eastern boundary of the site.

Of particular note were the number of mature and veteran trees including pedunculated oak *Quercus robur*, black walnut *Juglans nigra*, copper beech *Fagus sylvatica* 'Purpurea', cherry *Prunus* sp., and hornbean *Carpinus betulus*.

There were a number of younger trees scattered across the site.

Photographs of the parcel appear in Appendix 2 (photos 10, 11 and 12).

Invasive, rare or otherwise notable species and features of interest:

Robinia pseudoacacia is frequent and *Prunus laurocerasus* occasional. Both species are listed by the London Invasive Species Initiative (LISI).

A number of notable (mature / veteran) trees were present, these included the following examples:

Prunus avium: TQ1707174871 Carpinus betulus: TQ1706574860 Juglans nigra: TQ1698974901 Fagus sylvatica 'Purpurea': TQ1695374970 Quercus robur: TQ1688875005

3.5.3 The Avenue Grounds (site code 24690/01)

Grid ref: TQ1699474715, Area 0.93 ha

Habitats:

Scattered trees 60% Planted shrubbery 10% Amenity grassland 30%

Site description:

Amenity grassland was dominated by perennial rye-grass Lolium perenne with abundant white clover Trifolium repens.

The parcel is of note for its mature trees, particularly a veteran sweet chestnut *Castanea sativa*, mature oak *Quercus* sp. and London Plane *Platanus* x *hispanica*.

A map of the site is reproduced in Appendix 1 and photographs of the parcel appear in Appendix 2 (photos 13, 14 and 15).

Invasive, rare or otherwise notable species and features of interest:

A little *Quercus cerris* and *Prunus laurocerasus* are present. Both species are listed by the London Invasive Species Initiative (LISI).

A number of notable (mature / veteran) trees were present, these included the following examples:

Castanea sativa: TQ1697374761. *Quercus* sp. with bat potential woodpecker holes, TQ169867476.

Records of protected and notable species retrieved from GIGL for all three parcels: A number of records have been returned for St Margaret's Residential Grounds.

Birds include grey heron, little egret, kingfisher, willow warbler, common redpoll, tawny owl, grey wagtail, house sparrow, starling and song thrush. All these species could occur on site with regards foraging and or commuting. There is a reasonable likelihood that the last five species might also be resident and possibly breeding.

A number of records of bats were returned from GiGL. As well as unspecified species the bats noted included common and soprano pipistrelles, noctule and Daubenton's. Given the range of mature trees (some with decay holes) and buildings associated with the site there is a high probability that some bats roost on site.

Common frog, common toad, stag beetle and hedgehog were recorded from within the 500 m buffer. There is a likelihood that these species occur on site as there is suitable habitat present.

3.6 The Rifle Range (site code 24044/01)

Owner: London Borough of Richmond Upon Thames. Leased to Twickenham Rifle and Pistol Club Grid ref: TQ1541473461, Area 1.05 ha

Habitats: Scattered trees 2% Scrub 50% Bare artificial habitat 10% Neutral grassland (semi-improved) 30% Amenity Grassland 5%

Site description:

The extensive areas of neutral grassland (semi-improved) were dominated by false oatgrass *Arrhenatherum elatius* with occasional creeping thistle *Cirsium arvense*, greater bindweed *Calystegia sylvatica*, ragwort Senecio *jacobaea* and horseradish *Armoracia rusticana*. Common knapweed *Centaurea nigra* was also recorded. Some areas supported abundant red fescue *Festuca rubra*. Dense bramble scrub covered much of the site although there were small areas of elder *Sambucus nigra* scrub with plum *Prunus domestica* trees.

There was a small internal hedgerow of hawthorn *Crataegus monogyna*, field maple *Acer campestre*, dogwood *Cornus* sp. and privet *Ligustrum ovalifolium* and *L. vulgare* which bordered part of the entrance track.

There were regularly mown strips of neutral grassland (semi-improved) for the external firing range. Those areas had frequent ribwort plantain *Plantago lanceolata* and yarrow *Achillea millefolium*. Arisings were not collected.

A map of the site is reproduced in Appendix 1 and photographs of the site appear in Appendix 2 (photos 16, 17 and 18).

Invasive, rare or otherwise notable species and features of interest:

There was frequent *Buddleia davidii*, and the odd specimen of *Quercus cerris* and *Prunus laurocerasus*. These species are listed by the London Invasive Species Initiative (LISI).

No rare or otherwise notable species were recorded on site.

Records of protected and notable species retrieved from GIGL:

Most species recorded for this site were the same as nearby Mereway Nature Park (previously described). Indeed many species records were common to both sites.

Given the habitats present: house sparrow, starling and song thrush could have been resident on site.

Common pipistrelle and soprano pipistrelle are amongst the bats recorded. These were more likely to be foraging or commuting rather than roosting given the age of trees and habitats present.

Frequent records of stag beetle, common frog and hedgehog were returned. Records of common toad were also recorded. Considering the habitats present the latter three species were likely to be resident on site.

4.0 Evaluation

4.1 Overview

4.1.1 Tables 1 to 5 below details the SINC selection criteria for each of the sites considered in this document. Comments on the performance of each site against these criteria are also given. This information was employed in the selection of SINCs and to determine potential grade of each. The selection methodology using these criteria follows that detailed by the London Wildlife Site Board (2013).

Criteria	Comments
Representation	Typical unmanaged area in the process of scrub invasion.
Habitat rarity	No rare habitats present
Species rarity	None identified
Habitat richness	Average
Species richness	Average
Size	0.17 ha (small)
Important populations of species	None recorded
Ancient character	None
Recreatability	10 years with the exception of one large crack willow near the River Crane
Typical urban character	Typical of undermanaged urban sites
Cultural or historic character	Was planted as an orchard area in recent past
Geographic position	Next to the River Crane
Access	Free
Use	Nature area and orchard but unmanaged and underused
Potential	High, introducing a suitable grass cutting regime will increase the biodiversity value and compliment the many habitats which currently comprise the adjacent River Crane SINC
Aesthetic appeal	Is unmanaged and generally uninviting to the public
Geodiversity interest	None

4.2 Table 1: SINC selection criteria - Meadway Orchard

Criteria	Comments
Representation	Typical area of poorly managed woodland, scrub and grassland
Habitat rarity	None
Species rarity	None known
Habitat richness	Average
Species richness	Poor to average
Size	1.52 ha (small)
Important populations of species	None recorded
Ancient character	None
Recreatability	Estimated 25 years – contains a number of semi-mature / mature trees
Typical urban character	Uncommon, non-native species typical of urban wastelands have been recorded here in the past (Friends if the River Crane Environment - FORCE). This is likely to still be the case.
Cultural or historic character	Has had involvement by FORCE
Geographic position	Is located at the confluence of and adjoins the Duke of Northumberland River and the River Crane
Access	Free
Use	Nature area
Potential	High, site is next to the Duke of Northumberland River, introducing a suitable cutting regime for grassland areas and scrub management will increase biodiversity value and compliment the many habitats which currently comprise the adjacent River Crane SINC
Aesthetic appeal	FORCE* state 'Such a rich tapestry of plant communities within an otherwise urbanised area is unusual, and includes both developing and relictual woodland/hedgerow communities incorporating species with a rural ambience such as hedge garlic <i>Alliaria petiolata</i> and native bluebell <i>Hyacinthoides non-scripta</i> .'
Geodiversity interest	None known

4.3 Table 2: SINC selection criteria – Mereway Nature Park

*Hill C R (undated)

4.4 Table 3: SINC selection criteria - St Michael's Convent

Criteria	Comments
Representation	Typical of older religious establishments (retreats, convents etc) with gardens.
Habitat rarity	An old orchard present – this might possibly qualify as a habitat of principal importance in England, the 300 year old mulberry tree could be considered ancient.
Species rarity	Of local note are badgers and bat species including daubenton's.
Habitat richness	Average, contains scattered trees, orchards, grassland and small ponds
Species richness	Average to rich, a good range of trees and birds has been recorded as well as amphibians (it seems not great crested newt) and invertebrates.
Size	1.82 ha (small)
Important populations of species	None known
Ancient character	300 year old Mulberry tree
Recreatability	Mostly not recreatable within a human life time
Typical urban character	Not typical
Cultural or historic character	There is a 300 year old vine and black mulberry tree on site, Orford House is listed and of a similar age.
Geographic position	This site is an important part of the River Thames to Richmond Park Green Corridor.
Access	None
Use	Convent, but in the process of being sold off by the owners
Potential	Would have great potential as a limited access public open space
Aesthetic appeal	Was a regular retreat frequented by the public by prearrangement up until summer 2016.
Geodiversity interest	None known

NB. No access was gained to this site thus it was not surveyed. The information above was gleaned from a number of documents, maps and aerial photographs retrieved via the desktop study.

4.5 Table 4: SINC selection criteria, St Margaret's Residential Grounds

Criteria	Comments
Representation	Residential grounds such as this are of scattered occurrence in Greater London and are of typically associated with residences of more recent origin.
Habitat rarity	Ancient trees with plentiful decay wood
Species rarity	Stag beetle (a globally threatened species) is known to inhabit the site's Spinney.
Habitat richness	High, comprises a wide range of habitats
Species richness	Average regarding plants however a wide-range of bird species have been recorded on site.
Size	5.3 ha (small to medium)
Important populations of species	Has a range of native and non-native ancient and veteran trees. Some of the non-native species are not frequently encountered. Bats are said to be plentiful but no formal survey appears to have been undertaken.
Ancient character	Contains a number of ancient and veteran trees
Recreatability	Not recreatable within a human life-time
Typical urban character	Not typical
Cultural or historic character	The numbers of ancient and veteran trees within this site reflect its historic nature.
Geographic position	South of the River Thames
Access	Residents only.
Use	Residential grounds.
Potential	Relax mowing regime in appropriate places, erect bird and bat boxes in suitable locations
Aesthetic appeal	High, very pleasant ambience.
Geodiversity interest	None known.

NB. The three parcels which comprise this site are considered together here.

4.6 Table 5: SINC selection criteria, The Rifle Range

Criteria	Comments
Representation	With the exception of the corridors in vegetation kept clear for shooting purposes this is a typical unmanaged area in the process of scrub invasion.
Habitat rarity	None
Species rarity	None recorded
Habitat richness	Average
Species richness	Poor to average.
Size	1.05 ha (small)
Important populations of species	None recorded
Ancient character	None
Recreatability	10-15 years
Typical urban character	Typical of undermanaged urban sites.
Cultural or historic character	Outside of its use as a shooting range, none known.
Geographic position	Next to River Crane
Access	Club members.
Use	Firing range.
Potential	High, introducing a suitable grass cutting and scrub management regime will increase the biodiversity value and compliment the many habitats which currently comprise the adjacent River Crane SINC.
Aesthetic appeal	Appears neglected but still has a certain rural appeal.
Geodiversity interest	None known

5.0 Recommendations

5.1 Meadway Orchard

- 5.1.1 This small site adjoins the River Crane. It has ample scattered trees, some native woodland and abundant roughland. The most common species include sycamore, ash, bramble, nettle, false oat-grass and Yorkshire fog. This would be attractive to a variety of birds including various tits, blackbird, robin and thrushes, and the butterflies: speckled wood, green-veined white, red admiral, peacock and small tortoiseshell.
- 5.1.2 The habitats present on site and the records retrieved from GiGL indicate that house sparrow, song thrush, common frog and hedgehog could possibly be resident on site. A number of bat species including common pipistrelle and soprano pipistrelle could also use the site for foraging or commuting.
- 5.1.3 In the light of the above the area is not exceptional and the survey indicates it contains no species of particular note in London or beyond. Despite this rather average value for wildlife, the site was considered to have high potential as a nature conservation area if managed more appropriately. Additionally, the species assemblage is similar to some terrestrial parts of the River Crane SINC which it adjoins. Therefore it is recommended that Meadway Orchard be integrated into the River Crane SINC.

5.2 Mereway Nature Park

- 5.2.1 This rather small site sits at the confluence of the Duke of Northumberland's River and the River Crane. The site is well wooded with sycamore, ash, oak, cherry and dense bramble scrub. A little semi-improved neutral grassland occurs which has species present indicative of wildflower mix seeding. These habitats are likely to be attractive to a number of common bird and invertebrates.
- 5.2.2 The results of the GiGL data search and the chief habitats present indicate that house sparrow, starling and song thrush could possibly be resident on site. A number of bats have been recorded in the locality including common and soprano pipistrelles which are likely to forage over the site. Common frog and hedgehog and common toad might be resident.
- 5.2.3 Overall, the wildlife value of the site is average but could be much higher if managed more appropriately. The current habitats are of a similar nature to some terrestrial parts of the river SINC and contiguous with the river. Therefore it is recommended this area be integrated into the River Crane SINC.

5.3 St Michael's Convent Garden

5.3.1 There was no access to the historic St Michael's Convent Garden. The desktop study found it to be an important part of the River Thames to Richmond Park Green Corridor. It contains a wide variety of native and non-native tree species. Most notable is a 300 year old black mulberry which (evidently) is in relatively good condition. Forty five species of birds have been recorded using the site including song thrush, house sparrow, tawny owl, sparrowhawk, kestrel and cuckoo (some of which are Red List species). A number of bats also commute across the site

including Daubenton's bat. An old orchard present – this might possibly qualify as a habitat of principal importance in England.

- 5.3.2 A number of species records were returned from the GiGL data search e.g. birds included house sparrow, swift, song thrush, starling and dunnock the information retrieved via the desktop study suggests that suitable habitat was present to support nesting of these species. Unspecified bat species were recorded including pipistrelle; there were several records of badger and hedgehog. Common shrew, stag beetle and common frog were also noted. There is a reasonable possibility that all these species reside on site.
- 5.3.3 There is a risk this site will be sold for future development. If this happens the green corridor it sits within will be seriously fragmented. It is strongly suggested that the site is surveyed and its quality confirmed. Subject to this confirmation it is recommended that this potentially important site be designated as Borough Grade 2 SINC.

5.4 St Margaret's Residential Grounds

- 5.4.1 St Margaret's Residential Grounds comprises three parcels of mature parkland: The River Grounds, The Lake Grounds and The Avenue Grounds. A wide range of non-native and native species of trees are present including veteran pedunculated oak and significant specimens of sweet chestnut, black walnut, hornbeam, copper beech and London plane. A lake runs the entire length of The Lake Grounds, its marginal vegetation includes branched bur-reed, yellow iris, purple loosestrife, lesser pond-sedge, great willowherb and a small stand of flowering-rush. Grassland areas are generally dominated by perennial rye-grass and regularly cut. The trees and lake associated with this site would undoubtedly provide habitat for a variety of birds and bats. The globally threatened stag beetle has been recorded here.
- 5.4.2 The GiGL data search returned a number of records from the locality of the grounds. Birds included grey heron, little egret, kingfisher, willow warbler, common redpoll, tawny owl, grey wagtail, house sparrow, starling and song thrush. All these species could occur on site with regards foraging and or commuting. There is a reasonable likelihood that the last five species might also be resident and could possibly breed. Additionally, a number of records of bats were returned from GiGL. As well as unspecified species, those specifically noted included common and soprano pipistrelles, noctule and Daubenton's bats. Given the range of mature trees (some with decay holes) and buildings associated with the site there is a high probability that some of these bats roost on site.
- 5.4.3 Overall this site is of considerable importance to the borough therefore it is recommended this site be designated as Borough Grade 2.

5.5 The Rifle Range

5.5.1 This rather small site adjoins the River Crane. It has extensive areas of unmanaged grassland dominated by false oat-grass with the occasional creeping thistle, greater bindweed, ragwort and horseradish. Some areas are becoming colonised with bramble scrub with a little elder and plum. A short length of internal native hedge comprising hawthorn, field maple, dogwood and privet is found near

the site entrance. It is a relatively undisturbed area which would provide suitable habitat for birds, butterflies and reptiles.

- 5.5.2 The records returned from GiGL and the habitats present suggest house sparrow, starling and song thrush could be resident on site. Common and soprano pipistrelles are amongst the bats recorded in the locality. These would more likely to be foraging or commuting rather than roosting given the age of trees and the habitats present. Frequent records of stag beetle, common frog and hedgehog were returned common toad was also recorded. There is a reasonable probability that latter three species might be resident on site.
- 5.5.3 This site cannot qualify as a local site as there is no public access but it is not of sufficient quality to be designated as a borough site in isolation. However, it sits next to the River Crane. Additionally it has a high potential to respond to positive conservation management and the current habitats present are similar to and contiguous with some terrestrial parts of the river SINC. Therefore it is recommended that the Rifle Range is added to the River Crane SINC.

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Appendix 1: Site maps

- Map 1: Meadway Orchard
- Map 2: Mereway Nature Park
- Map 3: St Michael's Convent
- Map 4: St Margaret's Residential Grounds
- Map 5: The Rifle Range



Map 1: Meadway Orchard



Map 2: Mereway Nature Park



Map 3: St Michael's Convent



Map 4: St Margaret's Residential Grounds



Map 5: The Rifle Range

Appendix 2: Photographs












Photo 6: Mereway Nature Park

Note verge with species present that are likely to have been sown e.g. chicory



Residential (Avenue) Grounds















Photo 15: St Margaret's Residential (River) Grounds

Note large veteran oak to the left with substantial rotholes







