

NATURE CONSERVATION MANAGEMENT PLAN

for

Cranmer Green

A REPORT FOR LONDON BOROUGH OF MERTON

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LONDON CONSERVATION SERVICES

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LCS carries out work in most areas of nature conservation and wildlife management; such as practical habitat management, advice on management of wildlife, ecological surveys, environmental education and landscape design incorporating ecological improvements and safeguards. It is able to call on the wide range of expertise of the LWT staff and many other professional ecologists and free-lance professionals in the London Area and beyond.

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Introduction

This plan has been complied by London Conservation Services (LCS) under contract to the London Borough of Merton (LBM). The site description was produced by Barry Nicholson following a vegetation survey carried out in February 2001. The plan was then compiled by Alan Scott during March 2001 following site a visit with Martin Boyle of the London Borough of Merton.

The plan covers the majority of the open space known as Cranmer Green (see Map 1) which is to be proposed as a Local Nature Reserve in the near future. The habitats and species present are described and the management require to preserve and enhance the wildlife value of the site is detailed.

Part 1 General Information

1.1 Name

Cranmer Green.

1.2 Location

Cranmer Green is owned by Merton Council and is freely accessible to the public at all times. It lies approximately ½ kilometre south west of Mitcham Town Centre adjacent to Mitcham Common.

1.3 Area

3.0 Hectares (approx.)

1.4 Grid Reference

TQ 279 681 (pond)

1.5 Access

The site is open to the public at all times and a system of footpaths exists round the site. Access can be gained from Madeira Road, Commonside West, King George VI Avenue and Cranmer Road.

The area is well served by buses and the site is only a short walk from Mitcham Junction Railway and Tramlink Station. Parking is available on King George VI Avenue

1.6 Vice County

V17 Surrey

1.7 Map Coverage

BGS 1: 50,000 Sheet 270 South London

OS 1: 50,000 series sheet 176 OS 1:10,000 sheet TQ26NE

1.8 Land Tenure

The freehold of the site is owned by the London Borough of Merton (LBM)

1.9 Status

The Green's pond has been recognised as a site of Local Importance for Nature Conservation for some years, and the Council has just proposed that this designation be extended to include all of that part of Cranmer Green cover by this management plan.

Part of Mitcham Cricket Green Conservation Area within the Merton Unitary Development Plan (UDP).

1.10 Public Rights of Way

No public rights of way exist across the site but it is open to the public at all times.

1.11 Planning Authority:

London Borough of Merton.

1.12 Sources of Information

London Borough of Merton, The Education, Leisure and Libraries Department, The Civic Centre, London Road, Morden, Surrey. 020 8545 3657

1.13 Photographic Coverage

Held in the civic centre, environmental services.

Part 2 Policy Statement

Merton Borough Council recognises the importance of wildlife and green spaces to people living in Merton and pursues policies to defend sites of interest from development, and manages its open spaces with Nature Conservation in mind.

The Unitary Development Plan (UDP) highlights ways in which the natural environment can be protected and enhanced. This document directs how Merton's physical environment will alter over the next decade and provides safeguards that the Council can impose to ensure that the Borough's wildlife is protected from injurious development schemes. To further demonstrate its commitment to nature conservation the Council has already designated a number Local Nature Reserves and intends to declare more in future. It is proposed that Cranmer Green will acquire LNR status, and the production of this management plan is an important part of this process.

PART 3 General Description & History

3.1 General Description

Cranmer Green is a roughly triangular piece of land situated on the western side of Mitcham Common. It is bounded by Cranmer Road to the south, by King George VI Avenue in the north-west and by a railway line in the east. Most of the site is grassland with a strip of woodland along the eastern boundary with railway and a sizeable pond in the south west corner.

The site appears to be used by local people for passive recreation (e.g. dog walking) and several desire line paths exist across the site. The site is generally clean and tidy but some rubbish has accumulated in the woodland.

The site is entirely open to the public. It is securely fenced on the eastern side to prevent access to the railway. The boundary with King George VI Avenue on the west is a low kick rail to exclude vehicle. The southern boundary with Cranmer Road is unfenced but a low bund has been created to prevent vehicle access.

3.3 The History of Cranmer Green

Cranmer Green takes its name from the family which held the lordship of the manor of Mitcham for much of the 18th century. Although the exact extent of their manorial interest is sometimes questioned, the land opposite the pond, now the Wilson Hospital and grounds, was certainly part of their estate. In fact it was their family home, The Cranmers. It therefore seems likely that the family had some proprietorial interest in the green outside their residence.

The earliest evidence for the existence of the pond appears to be Bryant's Map of Surrey, published in 1823. It is absent from a sketch map produced by James Cranmer in 1717. So it can probably be dated sometime from the mid to late 18th century

The majority of ponds in Mitcham were formed as a result of gravel extraction. However, it is possible that this one was created to facilitate the watering of livestock. The assumption for this is twofold; firstly the Cranmer's farmed nearby land and possibly grazed the Green (postcards from the Edwardian period show cattle on the Green) and secondly, it seems unlikely that the lord of the manor, given the extensive gravel deposits elsewhere on the estate, would have allowed a hole to be dug opposite his home unless it was absolutely necessary.

From 1891 until the enactment of the Mitcham Urban District Council Act of 1923, Cranmer Green was managed, as part of the Common's of Mitcham, by the Mitcham Common conservators. In 1965 Mitcham was absorbed into the London Borough of Merton. Currently, the authorities Education and Leisure Services Department is responsible for the pond and surrounding land.

3.4 Geology and Topography

The soil consists of gravel over lying London Clay. The site is almost entirely flat except for a low embankment by the road and railway in the south eastern corner and a low bund, constructed to exclude vehicles, along the southern border with Cranmer Road. The land around the pond in the south west corner is slightly lower lying and was under water during the visit in February 2001.

3.5 Past management

No detailed information on this subject has been found. However, the fact that the pond has not reverted back to a terrestrial habitat, is evidence of periodic de-silting /clearance. J. Berry the author of a nature trail booklet can remember the pond containing open water and is of the opinion that vegetation clearance took place in the mid l960's

By the late 1980's the pond had deteriorated into a monoculture of Reedmace *Typha latifolia* with a negligible amount of open water. In the autumn of 1991 LBM's Education and Recreation Department (now Education and Leisure Services Department) undertook restoration works. This involved removing more than 25 tons of accumulated silt and aquatic vegetation from ¾ of the surface area of the pond. This resulted in an increase in Water Crowfoot *Ranunculus aquatilis*, together with an array of other aquatic plants and invertebrates. Furthermore, the pond retained water throughout the summer; thus allowing amphibians to complete their lifecycle. Since then periodic hand clearing of vegetation has kept the pond open and maintained the habitat.

The grassland was until very recently managed as amenity grassland by mowing regularly. Much of it was a football pitch until 1988.

Part 4 The Habitats, Flora and Fauna

An ecological survey of Cranmer Green, Mitcham was carried out by Barry Nicholson. The survey followed standard phase 1 habitat survey methodology, as developed for Greater London by the London Ecology Unit (LEU 1994). Constituent habitats were described and mapped. A plant species list for the site was compiled and an assessment of plant species abundance made.

The survey was carried out on the 14th February 2001. The timing of the survey was considered adequate to characterize the habitats present on the site. However, because the survey was undertaken outside of the growing season, it was not possible to compile comprehensive species lists for the site. It is therefore recommended that an additional survey visit be made in late Spring/early summer.

4.1 Habitat Descriptions

The following habitat types occur within the site:

- Mixed native and non-native broadleaved woodland.
- Scattered trees.
- Improved and semi-improved neutral grassland.
- Acid grassland.
- Standing water (pond).
- Wet marginal vegetation (in pond).

These habitats are described in turn. A habitat plan of the site is shown in figure 1 and a list of plant species recorded is presented in Appendix 1.

4.1.1 Mixed native and non-native broadleaved woodland

A strip of young broadleaved woodland extends along the eastern margin of the site, bordering the railway. English oak *Quercus robur* is the dominant tree in some areas, especially in the south. Other native trees include ash *Fraxinus excelsior*, silver birch *Betula pendula* and wild cherry *Prunus avium*. The principal non-native tree is sycamore *Acer psuedoplatanus*, which is frequent throughout the area. Turkey oak *Quercus cerris* and holm oak *Q. ilex* are also present. Common lime *Tilia x vulgaris* occurs in the south, suggesting that some of the trees within the woodland are of planted origin. Elder *Sambucus nigra*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*, dog rose Rosa *canina* and yew *Taxus baccata* occur in the understorey, together with occasional patches of blackthorn *Prunus spinosa* scrub. Gorse *Ulex europaeus* is also present, especially in the more open areas and along the western margin. Ivy *Hedera helix* forms the main ground cover and grows up many of the trees. Bramble *Rubus fruticosus agg*. is also abundant in the field layer, together with occasional lord's and ladies *Arum maculatum*, lesser celandine *Ranunculus ficaria*, Spanish bluebell *Hyacinthoides hispanica*, garlic

mustard *Alliaria petiolata*, wood avens *Geum urbanum* and male fern *Dryopteris filix-mas*. Tall herbs and rank grasses such as stinging nettle *Urtica dioica*, hogweed *Heracleum sphondylium*, cocksfoot *Dactylis glomerata* and false oat-grass *Arrhenatherum elatius* occur along the margins of the woodland, which together with bramble and gorse form a graded edge zone.

4.1.2 Scattered trees

A group of mature sycamore and maple *Acer sp.* trees occur at the northern apex of the site and a formal avenue of purple plums *Prunus cerasifera 'pissardii'* have been planted on the western margin. A number of trees occur around the pond in the western corner of the site, including some large weeping willows *Salix sp.*, as well as more recent planting of Italian alder *Alnus cordata* and willows *Salix spp.* Of particular note is a large hollow ash tree which is situated just to the east of the pond. A group of planted maple saplings occur nearby.

4.1.3 Improved and semi-improved neutral grassland

Most of the western part of the site is covered by semi-improved neutral grassland. This was used as a football pitch until recently but is now managed as a meadow area, being cut once a year in late summer. The grassland composition reflects the past intensive use of the area, being dominated in large part by perennial ryegrass *Lolium perenne*. However the sward is not uniform and a variety of other common grasses and wildflowers can be found, including cocksfoot, red fescue *Festuca rubra*, creeping bent *Agrostis stolonifera*, ribwort plantain *Plantago lanceolata*, yarrow *Achillea millefolium*, ragwort *Senecio jacobea*, creeping buttercup *Ranunculus repens* and dandelion *Taraxacum officinale agg*, amongst others. In places the sward tends towards a more acid grassland composition (see below).

4.1.4 Acid grassland

Patches of relict acid grassland occur in places within the improved and semi-improved neutral grassland. Common bent *Agrostis capillaris* is dominant in these areas, whilst herbs include cat's-ear *Hypochoeris radicata* and sheep's sorrel *Rumex acetosella*.

4.1.5 Pond

Cranmer Green Pond is a roughly circular waterbody located in the western corner of the site. It is about 25 metres in diameter and approximately 1 metre deep in the centre. It supports open standing water communities and wet marginal vegetation. A notable feature is the presence of a stand of common club-rush *Schoenoplectus* lacustris in the centre of the pond. Other emergent species include branched burreed Sparganium erectum and reedmace. A variety of other aquatic and marginal plants have been recorded from the pond (M. Boyle 1992, LEU 1998) including: common water crowfoot, mare's-tail Hippuris vulgaris, water starwort Callitriche sp., floating sweet grass *Glyceria fluitans*, broad-leaved pondweed *Potamogeton natans*, yellow flag iris Iris pseudacorus, trifid bur-marigold Bidens tripartita, gipsywort Lycopus europaeus, jointed rush Juncus articulatus, toad rush J. bufonius, marsh cudweed Gnaphalium uliginosum, marsh foxtail Alopecurus geniculatus and common spike-rush *Eleocharis palustris*. A number of large weeping willow trees occur on the banks, together with small patches of bramble and hawthorn scrub. Daffodil bulbs have been planted under the willow trees and these provide a splash of colour in the spring.

4.2 Fauna

The animals of the site have not been recorded in any detail. It would be desirable to carry out surveys of birds and invertebrates in the near future. In addition other groups should be recorded as and when the expertise is available (e.g. local naturalists, volunteers, students, etc.).

The following descriptions are based on the 1994 management plan, observations during the botanical survey in February 2001 and casual observations during the site visits to produce this document.

4.2.1 Mammals

The only mammal seen on the site was the grey squirrel *Neosciurus carolinensis*. However is likely that foxes *Vulpes vulpes*, a variety of small mammals and possibly bats use the site. Further surveys should be carried out if suitable volunteers or resources can be identified. It is particularly important that the large hollow ash tree near the pond should be inspected by a licenced bat worker before any major arboricultural work is undertaken.

4.2.2 Birds

Appendix 2 gives a list of birds seen during the botanical survey in February 2001. This is list is by no means exhaustive. It is likely that the site supports a good range of the commoner urban birds and possible some other more unusual species due to its proximity to Mitcham Common. Bird monitoring would be useful on the site preferably following the London Bird Survey methodology devised for the London Biodiversity Partnership (Dawson 2000).

4.2.3 Amphibians

Smooth newt *Triturus. vulgaris*, Common Frog *Rana temporaria* and common toad *Bufo bufo* have all been recorded breeding in the pond.

4.2.4 Invertebrates

No comprehensive invertebrate survey has been carried out and records relate mostly to the pond. Four species of Odonata have been recorded; emperor dragonfly *Anax imperator*, broad-bodied chaser *Libellula depressa*, common darter *Sympetrum striolatum* and blue-tailed damselfly *Ischnura elegans*. In addition water boatmen and pond skaters have been recorded. Further surveys should be carried out.

5. Evaluation

5.1 Nature Conservation

Cranmer Green Pond is thought to have been dug in the 18th or early 19th century as a livestock watering pond. Old ponds such as this are now rare in London. The pond supports a rich flora, including a several species that are uncommon in Greater London (table 1). It is likely to be an important invertebrate habitat.

Table 1: Notable species recorded from Cranmer Green Pond

Species	% of Greater	
	London tetrads	
	from which	
	recorded*	
Schoenoplectus lacustris	4	
Ranunculus aquatilis	3.25	
Hippuris vulgaris	1.75	

^{*} based on the Flora of the London Area (Burton 1983)

The woodland on the eastern margin contains a variety of tree and shrub species and has a varied structure, including open areas and a graded edge. It provides valuable cover, feeding and nesting habitat for a range of common birds and may also be a valuable invertebrate habitat.

Although botanically unremarkable, the grassland is of nature conservation interest and supports relict patches of acidic grassland. Furthermore its value is likely to increase as a result of the recently adopted sympathetic mowing regime.

5.2 UDP Policies

The U.D.P defines policies relating to ecology and nature conservation and is available for inspection at Merton Civic Centre and most local libraries. The London Ecology Unit handbook "Nature Conservation in Merton" identifies the Green's pond as a Local Site of Importance for Nature Conservation. This designation ensures that the site is protected by Policy EN.4. The production of this management plan is in line with Policy EN.16 – Management of Green Spaces – Conservation Plans.

5.3 General Amenity/Recreation

The main function of the area covered by this plan is for passive recreational pursuits such as dog walking and walking, picnicking. There is open access to the site and it is well served by public transport.

There are a number of desire line pathways around the site which provide access to the majority of areas. Several paths exist through the woodland. To rationalise this and protect the woodland from trampling a single path should be cleared through the woodland and surfaced with wood chips. If funds are available an improved surface (e.g. hoggin or Coxwell gravel) could be put down to allow disabled access.

5.4 Education

Although the site is small and has relatively few habitats it could be used by local schools, especially the pond which could be used for pond dipping and studying the life cycles of invertebrates, amphibians, etc. Cranmer Green Middle School is very near the site and this School has used the site in the past. They should be contacted again to discuss future use of the site and what facilities would be useful to them.

Interpretative panels and information leaflets indicating some of the habitats and reasons for the maintenance regimes will increase the public's awareness of conservation and explain the contribution of the site in providing a refuge for wildlife.

5.5 Management Objectives

- 1. To manage the area as a Nature Reserve for the benefit of indigenous flora and fauna.
- 2. To provide local people with an accessible place to enjoy nature.
- 3. To maintain and enhance the existing ecological value of the site through the protection, management and enhancement of the water, woodland and grassland habitats.
- 4. To improve and maintain footpaths.
- 5. To provide opportunities for educational use by local schools.
- 6. To provide interpretative panels and information leaflets to improve local awareness of this site's conservation and wildlife value.

5.6 References

Boyle, M. 1992 Plant species list for Cranmer Green Pond. Unpublished.

Boyle, M. 1994 Cranmer Green Pond Management Plan. Unpublished.

Burton, R. M. 1983 *Flora of the London Area*, London Natural History Society, London.

Dawson, D. 2000 *London Bird Survey Instructions for participants*, Greater London Authority, London

London Ecology Unit 1994 *Habitat Survey for Greater London*, London Ecology Unit, London.

London Ecology Unit 1998 *Nature Conservation in Merton*, London Ecology Unit, London.

Part 6 Management

6.1 General principles

6.1.1 General safety

This is a priority as there is free public access to the area. All boundaries, bridges, footpaths and other visitor facilities need to be inspected regularly and any necessary remedial action taken immediately. Regular inspections must also be carried out of all trees near boundaries and footpaths, to ensure they are in a safe condition, i.e. not about to fall over or shed dead branches onto an area frequently used by the public. Appropriate action should be taken but in recognition that standing dead wood is an essential feature of the woodland ecosystem.

6.1.3 Litter

Litter makes a site look untidy and uncared for and can spoil the enjoyment of visitors. Some litter can also be unsafe, or lethal to small mammals and some invertebrates. Litter will be cleared on a regular basis.

6.1.4 Use of herbicides

There will be a presumption against the use herbicides however on occasions it may be necessary to use limited amounts for specific tasks. To meet the requirements of the law, any such treatment must be carried out by a suitably qualified person and herbicide use must accord to all relevant Health & Safety and COSHH guidelines.

6.1.5 Survey and monitoring

It is essential that all management work is recorded and monitored in order to be able to ensure that the work carried out is of benefit to the wildlife on the reserve and to visitors. A system of recording management tasks should be instigated.

It is important to know what species and habitats are already on the site. The vegetation of the reserve has been surveyed in 2001. Vegetation and tree surveys should be carried out every five years.

Animal groups are very under-recorded and this should be redressed if possible. Ideally an invertebrate survey should be undertaken of the site and repeated every 5 years. Regular bird monitoring should also be carried out on an ongoing basis. Other surveys should be carried out as and when the expertise is available (e.g. local naturalists, volunteers, students, etc.).

All surveying should conform to standardised techniques, from which accurate and relevant data can be drawn. Monitoring, likewise, should conform to standardised methodology.

Records of species found on site should be made available to the London Wildlife Trust Biological Recording Project and London Natural History Society.

6.1.6 Review of Management Plan

This management plan is written to cover the next 5 years and should be reviewed at the end of this period. In addition the plan should be briefly reviewed annually to ensure that the work is being carried out and that it is having the desired effect.

6.1.7 Planting and other introductions

Very little planting of trees or other species is recommended in this plan; instead natural regeneration and sympathetic management will allow the habitats to develop (e.g. meadow management of the grass areas will encourage a species rich grassland to develop). However, any planting which does take place should only be of native British species of local provenance. Ideally seeds from the site should be collected, grown on and then planted out. Care must also be taken to avoid introducing any invasive non-native plants into the pond either deliberately or through the movement of spawn.

6.1.8 Dead wood

This is an essential habitat for many species, especially invertebrates, bats, bryophytes and fungi, and is necessary for the continued 'health' of the woodland ecosystem. Standing dead wood is also important for woodpeckers and other birds for feeding and nesting. Removal of dead wood and 'tidying-up' leads to relatively sterile conditions and takes away an essential part of the woodland ecology. The aim is to provide as much dead wood as feasible - lying, standing, and hanging - without compromising other management aims.

However, standing dead wood can be a safety hazard and this must always take precedence in areas of high public use. Consequently any trees which are in a demonstrably unsafe condition must be made safe especially where they are near boundaries or footpaths.

Information should be provided for visitors about the role of dead wood in the reserve and that they should be aware of the potential hazard that it may pose to those who stray off the designated paths.

All wood broken from windblow or cut from management should be left on-site as a habitat – either in large-log piles or scattered as low brash. In some cases it can be used as a material in appropriate management tasks on site (e.g. edging footpaths, building steps, etc.).

6.2: Habitat Management Proposals

6.2.1 Pond and Margins

The main issues with ponds are to prevent them becoming stagnant and silted up/drying out. The stagnation is often the result of dead vegetation decaying in the pond leading to de-oxygenation. This build-up also leads to the silting up and subsequent drying out. Lack of light caused by shading by trees also leads to stagnation.

To prevent this occurring periodic dredging will be necessary. Every year the dead wood and litter should be removed in the late summer/early autumn using rakes. The reedmace should be controlled at the same time by hand pulling to prevent it spreading beyond its present area of cover. Every 5 years approximately $^{1}/_{3}$ of the area of the pond area should be dredged. This was last done in 1991 and so should be done in the first year of this plan (2001/02).

The trees and bushes should be cut back in the autumn/winter if they over-hang the pond to increase the light reaching the water.

At present no invasive non-native plants have colonised the pond. However the invasive parrot's feather *Myriphyllum aquaticum* is in the nearby Canons pond and many species can be easily transferred from pond to pond either deliberately through the introduction of aquatic vegetation or accidentally when transferring spawn. It is therefore important that the pond is monitored regularly for the presence of any of this or other invasive species and appropriate control measure taken if required.

6.2.2 Meadows (Compartment 2)

In the past the grassland on the site was managed as amenity grassland by regular mowing but this changed to meadow management in 1999. The botanical survey has shown that some areas have an acidic grassland character and that the species diversity and hence the nature conservation value of the site has be significantly increased by this management. Also meadows are attractive in the spring and summer and have improve the area visually.

Traditional hay meadows have been managed by being grazed after the hay crop has been collected until February or March when they are again left for the grass to grow. As grazing is not a possibility here the meadows are managed by mowing annually in August and the cuttings removed. However many invertebrates do not have life cycles that are compatible with this cutting regime so it is therefore suggested that some areas should only be cut every other year. This change in practice may look a little untidy so the purpose behind the change will need to be explained to local people. The biannual cuts should prevent any area becoming smothered by thatch, but this will need to be monitored.

To create a neat and cared for boundary to the site a strip along the side of King George VI Avenue around the planted trees and the area between the bund and

Cranmer Road should be managed as amenity grass by mowing regularly when the land on the other side of King George VI Avenue is cut. The footpath through the grassland should be mown at this time too.

6.2.3 The Woodland (Compartment 3)

Generally speaking the management of the woodland strip along the eastern boundary should consist of non-intervention. The main work will consist of that necessary to ensure safety of visitors, removal of rubbish and to keep paths and glades open.

Some rubbish has accumulated in places and should be cleared out as a matter of urgency. As well as being a potential health and safety risk, it makes the site look uncared for and possibly encourages other unsuitable activities.

The woodland strip is well used by local people and a number of paths exist. It would be beneficial to open up a single path through the woodland to encourage visitors to use this rather than to trample other areas. As the site is flat it would be possible to put a hard surface on the path (e.g. hoggin or Coxwell gravel) to allow disabled access. The vegetation along the edges of the path should be cut back during the spring and summer as necessary to keep the paths clear (probably every month to 6 weeks). In the autumn the vegetation should be strimmed back to a distance of approximately 2m on each side of the path to encourage the development of woodland flowers and improve the area for invertebrates.

The woodland should be inspected annually by the Council Tree Officer to ensure safety and any necessary work carried out. There is now a considerable body of knowledge regarding the value of standing and fallen dead and dying timber for invertebrates, bats and birds (e.g. woodpeckers). Hollow trees are of particularly high value and often more stable than other trees. Normal arboricultural practice is to remove dead or hollow trees for safety reasons. However on a nature reserve they should be retained wherever possible. If safety work is required trees should be cut as far above the ground as possible to leave the hollow trunk standing. Dead wood should not be tidied away or cut from trees unless clearly dangerous. Cut timber should be left lying on the ground preferably in partial shade, and normally simply where it has fallen. Ivy climbing up trees should not be cleared unless there is a real danger of the weight causing the tree to fall. Ivy provides a valuable habitat for invertebrates, a late winter food source for many birds and roosting opportunities for bats and owls.

Bats and nesting birds are protected under the Wildlife and Countryside Act and care must be taken to avoid any disturbance. Woodland work should not be carried out in the bird breeding season (March to July) unless absolutely necessary for safety. Any hollow trees should be checked by a licenced bat worker before any work in carried out.

A number of more open areas dominated by brambles and low scrub (e.g. gorse) exist in the woodland. The main areas ,sub-compartments 3a and 3b, , should be managed to create open glade areas which are important for many invertebrates and birds. They should be strimmed every two years in the autumn with one glade done each year. The cuttings should be piled in suitable spots in the near by woodland.

6.2.4: Trees

Some tree planting has taken place on the boundaries of the site. No further tree planting is recommended. The large willows around the pond should be inspected by the council arboricultural officer annually to ensure safety. If necessary the willows could be pollarded but weeping willows of this nature do not look very attractive when pollarded and so this should only take place if there are strong safety considerations.

The large hollow ash tree near the pond should be inspected regularly for safety. However before any work takes place it is essential that it is checked for bat roosts by a licenced bat worker.

6.3 Management by Compartments

6.3.1 Compartment 1

Description

This compartment is the pond and margins in the western corner of the site. It is about 25 metres in diameter and approximately 1 metre deep in the centre. It supports open standing water communities and wet marginal vegetation including a stand of common club-rush in the centre of the pond. Other emergent species include branched bur-reed and reedmace together with a variety of other aquatic and marginal. A number of large weeping willow trees occur on the banks, together with small patches of bramble and hawthorn scrub. Several large logs have been placed around the margins of the pond.

Objective

To manage the pond to maximise its value to aquatic and semi-aquatic fauna and flora.

To prevent the pond becoming silted up or over grown with vegetation.

To maintain a safe attractive resource for local people.

Management

The pond should be cleared of dead wood, accumulated litter etc. annually in the late summer/early autumn using rakes. The area of reedmace should be controlled at the same time by hand pulling to prevent it spreading to other parts of the pond.

In addition approx. $^{1}/_{3}$ of the area of the pond area should be dredged every 5 years in late summer/early autumn. This was last done in 1991 and so should be done in the first year of this plan (2001/02).

Over hanging branches of trees and shrubs should be cut back as necessary in the autumn/winter.

Regular monitor of the pond should be carried out to check for invasive plants e.g. parrots feather and control as necessary

The bramble bed on the eastern bank is useful shelter for birds, amphibians and invertebrates and should be retained. The annual meadow cutting will prevent it spreading to other areas.

The large logs provide both informal seating for visitors and shelter for invertebrates, amphibians, etc. They should be retained and new ones added once these have decayed.

An information board telling people about the pond, its flora and fauna, history and management should be erected near the pond.

6.3.2 Compartment 2

Description

Most of this compartment is semi-improved neutral grassland on an old football pitch. The grassland composition reflects the past intensive use of the area, being dominated in large part by perennial ryegrass with some other common grasses and wildflowers, including cocksfoot, red fescue, creeping bent, ribwort plantain, yarrow, ragwort, creeping buttercup and dandelion, amongst others. In places the sward tends towards a more acid grassland composition. Patches of relict acid grassland occur in places with common bent and some herb such as cat's-ear and sheep's sorrel.

Objective

To manage the area as a traditional hay meadow to maximise the diversity and number of species present.

To increase the value of the area to invertebrates by cutting some grassland on a biannual cut to leave over-wintering areas.

To provide a neat formal edge to the reserve by maintaining a regularly mown strip along the southern and western boundaries.

To allow access along regularly mown footpath following desire lines.

Management

The main central area of grassland (Compartment 2) should be managed by cutting annually at a height of 10cm in late summer. All cuttings should be removed from the site and disposed of in a suitable manner, preferably in a composting scheme.

The area of grassland adjacent to the woodland (sub-compartments 2a and 2b) on a bi-annual rotation with 50% cut each year. In 2000/01 sub-compartments 2a should be cut and in 2001/02 2b.

The areas of grass on the southern and western borders of the site (sub-compartment 2c) should be managed as amenity grass by cutting regularly at the same time as the amenity grassland on the adjacent site on the opposite side of King George VI Avenue.

The paths should be mown at the same time as 2c following the existing desire lines. The bund at the southern end of the site should be cut and arisings removed annually in late summer

6.3.3 Compartment 3

Description

This is an area of young mixed native and non-native broadleaved woodland which extends along the eastern margin of the site, bordering the railway. English oak is the dominant tree with other native trees including ash, silver birch and wild cherry and non-native tree such as sycamore, turkey and holm oak. Elder, hawthorn, holly, dog rose, blackthorn and yew occur in the understorey. Gorse is also present, especially in the more open areas and along the western margin. Ivy forms the main ground cover and grows up many of the trees. Bramble is also abundant in the field

layer, together with other woodland species such as lord's and ladies, lesser celandine garlic mustard, wood and male fern.

Tall herbs and rank grasses such as stinging nettle, hogweed, cocksfoot and false oat-grass occur in two small glades (3a and 3b) and in places on the woodland edge, which together with bramble and gorse form a graded edge zone.

Quite a lot of litter and rubbish has accumulated in places, especially near the roadside in the south. Several informal paths exist through the woodland.

Objective

To allow the habitat to develop as a semi natural woodland habitat with a minimum of management intervention.

To open up and maintain small glades within the woodland.

To clear the rubbish and maintain the area litter free.

To open up a path through the woodland.

Management

The woodland should be managed largely by non-intervention. The main exception is any work required to ensure the safety of the public. The area should be inspected annually by the council tree officer and any necessary work carried out. Where possible this should consist of making trees safe, leaving standing dead timber. All felled timber should remain on site.

The rubbish and litter should be removed as a matter of urgency and regular litter clearance instigated on at least a monthly basis.

The glade areas (3a and 3b) should be strimmed in the autumn, one glade each year, and the cuttings stacked in the woodland.

One main path should be cleared to encourage people to use this rather than wandering elsewhere. In the short term this could be surfaced with wood chips but if funds it could be surfaced with hoggin or a similar material to allow disability access. Management of this path should consist of regular safety checks to ensure that there are no trip hazards, dead trees, etc. and cutting back the sides as necessary to keep the path open. In addition in the autumn the sides should be cut back to approximately 1m each side to open the edges to encourage a diversity of wildflowers.

6.4: General Management Proposals

6.4.1 Footpaths

Footpaths are essential to allow access to visitors and must be kept in a safe condition. In the meadow areas mown tracks should be created along the desire lines kept open by mowing at the same time as the amenity grassland one the boundaries.

A second type of footpath is that found in the woodland in Compartment 3. This should be surfaced with woodchip. It will be necessary to replace the woodchip at interval as it rots down. Alternatively a hard surface such as hoggin could be put down to improve the disabled access. Management of this path should consist of regular safety checks and cutting back the sides as necessary to keep the path open. In addition in the autumn the sides should be cut back to approximately on each side.

6.4.2 Litter

All rubbish should be removed as soon as possible. It is both unattractive and can be dangerous. The site should be litter picked at least every month and preferably more regularly.

6.4.4 Interpretation

Provision of intrepretive signboards is very important to tell the public about the aims of the management of the site. These should be produced as soon as possible.

PART 7 Work Programme

7.1 5 year work programme

Financial Year

	2001/02	2002/03	2003/04	2004/05	2005/06
Compartment 1					
Hand dredge the pond to remove dead leaves, wood etc. in the autumn	1	1	1	1	1
Dredge ¹ / ₃ of pond every 5 years	1				
Cut back tree branches and shrubs shading the pond in autumn	1	1	1	1	1
Erect information board	1				
Clear litter regularly	✓	•	~	•	•
Compartment 2					
Mow meadows in late summer and remove arisings	2, 2a	2, 2b	2, 2a	2, 2b	2, 2a
Mow bund in late summer and remove arisings	2	2	2	2	2
Mow access paths regularly during spring and summer	•	•	•	•	~
Mow grass areas around boundary regularly	2c	2c	2c	2c	2c
Clear litter regularly	•	~	•	•	~
Compartment 3					
Carry arboricultural safety inspection annually and carry out any necessary safety work to trees	•	•	~	•	~
Strim glades in autumn and remove cuttings	3a	3b	3a	3b	3a

Open up footpath through woodland and surface with woodchip	3				
Re-surface footpath with wood chip			As nece	essary	
Re-surface footpath with hoggin	If funds allow				
Cut back vegetation along paths to distance of 1m each side in autumn	3	3	3	3	3
Remove accumulated rubbish	3		As necessary		
Clear litter regularly	~	✓	~	•	•
General					
Carry out review of habitat survey					✓
Carry out review of management plan					•

7.2 Annual Work Programme Financial Year 2001/02

Management Task	<u>Compartment</u>
Quarter 1 April – June	
Mow paths through grassland monthly	2
Mow grass areas around boundary regularly	2c
Open up footpath through woodland and surface with woodchip	3
Remove accumulated rubbish	3
Clear litter regularly	throughout
Quarter 2 July – September	
Mow meadows and remove arisings	2, 2a
Mow bund and remove arisings	2
Mow grass areas around boundary regularly	2c
Carry out arboricultural safety inspection	3
Cut back vegetation to keep paths open	2,3
Erect information board	1
Clear litter regularly	throughout
Quarter 3 October – December	
Hand dredge pond to remove dead leaves, wood etc. in the autumn	1
Dredge ¹ / ₃ of pond	1
Cut back tree branches and shrubs shading the pond	1
Carry out any necessary tree safety work	3
Strim glades and remove cuttings	3a
Cut back vegetation along paths to distance of 1m each side	3
Clear litter regularly	throughout
Quarter 4 January – March	
Collect litter on a regular basis	Throughout

Appendix 1: Plant Species List

Dryopteris filix-mas (Linnaeus) Schott) (Linnaeus) Taxus baccata Ranunculus aquatilis (Linnaeus) Ranunculus repens (Linnaeus) Ranunculus ficaria (Linnaeus) Urtica dioica (Linnaeus) Quercus cerris (Linnaeus) Quercus ilex (Linnaeus) Quercus robur (Linnaeus) Betula pendula (Roth) Alnus cordata (Lois.) Duby) Stellaria graminea (Linnaeus) Persicaria amphibia (Linnaeus) Gray) Rumex acetosella (Linnaeus) Rumex sanguineus (Linnaeus) Rumex obtusifolius (Linnaeus) Tilia x vulgaris (Hayne) Malva sylvestris (Linnaeus) Populus sp. Salix spp. Alliaria petiolata (M.Bieb.) Cavara & Grande) Cardamine pratensis (Linnaeus) Sedum spectabile (Boreau) Geum urbanum (Linnaeus) Rubus fruticosus agg. Potentilla anserina (Linnaeus) Rosa canina (Linnaeus) Prunus spinosa (Linnaeus) Prunus avium (Linnaeus) Linnaeus) Crataegus monogyna (Jacq.) Crataegus sp. *Trifolium repens* (Linnaeus) *Ulex europaeus* (Linnaeus) Lythrum salicaria (Linnaeus) (Linnaeus) Holub) Chamerion angustifolium *Ilex aquifolium* (Linnaeus) Acer platanoides (Linnaeus) Acer pseudoplatanus (Linnaeus) Acer sp.

Appendix 1 (cont.)

Hedera helix (Linnaeus)

Anthriscus sylvestris (Linnaeus) Hoffm.)

Heracleum sphondylium (Linnaeus)

Lycopus europaeus (Linnaeus)

Hippuris vulgaris (Linnaeus)

Callitriche sp.

Plantago lanceolata (Linnaeus)

Fraxinus excelsior (Linnaeus)

Galium aparine (Linnaeus)

Sambucus nigra (Linnaeus)

Arctium minus (Hill) Bernh.)

Cirsium arvense (Linnaeus) Scop.)

Cirsium vulgare (Savi) Ten.)

Hypochaeris radicata (Linnaeus)

Taraxacum officinale agg.

Gnaphalium uliginosum (Linnaeus)

Conyza canadensis (Linnaeus) Cronq.)

Achillea millefolium (Linnaeus)

Tripleurospermum inodorum (Linnaeus) Schultz-Bip.)

Senecio jacobaea (Linnaeus)

Bidens tripartita (Linnaeus)

Potamogeton natans (Linnaeus)

Arum maculatum (Linnaeus)

Lemna minor (Linnaeus)

Juncus articulatus (Linnaeus)

Juncus bufonius (Linnaeus)

Eleocharis palustris (Linnaeus) Roem. & Schult.)

Schoenoplectus lacustris (Linnaeus) Palla)

Cyperus longus (Linnaeus)

Festuca rubra (Linnaeus) .

Lolium perenne (Linnaeus)

Dactylis glomerata (Linnaeus)

Glyceria fluitans (Linnaeus) R. Br.)

Arrhenatherum elatius (Linnaeus) P.Beauv.)

Agrostis capillaris (Linnaeus)

Agrostis stolonifera (Linnaeus)

Alopecurus geniculatus (Linnaeus)

Phleum bertolonii (DC.)

Sparganium erectum (Linnaeus)

Typha latifolia (Linnaeus)

Hyacinthoides hispanica (Mill) Rothm.)

Iris pseudacorus (Linnaeus)

Appendix 2: Bird Species List

Canada Goose Branta canadensis

Mallard Anas platyrhynchos

Moorhen Gallinula chloropus

Black Headed Gull Larus ridibundus

Wood Pigeon Columba palumbus

Wren Troglodytes troglodytes

Blackbird Turdu merula
Long-tailed Tit Aegithalos caudatus
Blue Tit Parus caeruleus
Great Tit Parus major
Rook Corvus frugilegus

Corvus corone

Crow

Appendix 3: Site Description from Nature Conservation in Merton Handbook

Me.L 11 Cranmer Green Pond

Cranmer Green is an area of close-mown grass on the north side of Cranmer Road. The Green was pant of Mitcham Common until 1924. The Cranmer family held the lordship of the Manor of Mitcham from the mid-17th until the early 19th century, and in the 17th and early 18th century the family home was situated just south of Cranmer Road, where Wilson Hospital is now.

Cranmer Green Pond is in the corner of Cranmer Green, alongside king George VI Avenue and Cranmer Road. Evidence from maps shows that it dates from some time between 1717 and 1823. It was probably created to enable livestock to drink since, although most of the ponds in the area were the result of gravel extraction, it seems rather improbable that the Cranmers would have allowed gravel to be dug out right opposite their family home.

The pond is roughly circular, with a diameter of some 25 metres and a maximum depth of one metre. Rainfall, either direct or via road run-off, is the main source of water for the pond but the water quality remains quite good. It has always dried out on hot summers but by the late 1980s it was heavily silted and had declined into a situation where great reed mace covered almost the entire water surface. If left, the pond would have disappeared, but in 1991 restoration work took place, which involved removal of vegetation from 75% of the pond's surface area, as well as large quantities of accumulated silt.

Great reedmace is still in evidence on the western side of Cranmer Green Pond, but more impressive is the stand of common club-rush that reaches some two and a half metres above the water surface. In spite of its name it is not at all common in London, and although being unrelated and bearing little resemblance to one another, great reedmace. and common club-rush share an alternative English name: bulrush. Yellow iris also grows here. The pretty white-and-yellow flowers of common water-crowfoot can be seen at their best in May as they peep out of the water. The bright green fronds of mare's-tail rise a short way above the surface, and other floating vegetation here includes water-starwort, floating sweet-grass, broad-leaved pondweed and branched bur-reed.

The banks support a range of plants. Trifid bur-marigold is particularly profuse; the seeds have small hooks by which they stick to the hair or feathers of passing animals, ensuring distribution. Gypsywort is also found here; this is used to produce a strong black dye that is said to have been used by gypsies to darken their faces. Silverweed, which has silvery leaves and yellow flowers, jointed rush, toad rush, marsh cudweed, marsh foxtail and common spike-rush can all be observed along the margin.

Large numbers of toads and frogs breed here, as do smooth newts. Invertebrates seen include emperor, common darter and broad-bodied chaser dragonflies and blue-tailed damselflies. As the pond is still liable to dry out in a warm summer following a dry winter (even though it is now deeper and has a greater area of standing water), no fish are present; however, this is no bad thing as the aquatic invertebrates and amphibians, which form such an important population here, would become seriously depleted if predators such as fish became established. The amphibians spend most of their life on dry land and return to the water to breed, so they prefer a seasonal to a permanent water body, provided it retains water long enough for tadpoles to develop.

Apart from the occasional clearance to prevent succession to marsh, the greatest benefit to this fine pond would come from allowing more of the surrounding area to grow naturally - thus providing habitat for the amphibians and some of the invertebrates





