# **Hither Green Triangle**

# **Nature Reserve**

# **Management Plan**

2007

Nick Bertrand Caretaker Manager Creekside Education Trust Ltd Creekside Centre 14 Creekside Deptford London SE8 4SA

W www.creeksidecentre.org.uk

E creeksidecentre@yahoo.co.uk

T 020 8692 9922

## Acknowledgements

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### Introduction

Hither Green Triangle is owned by Network Rail and managed with the assistance of Lewisham Council.

It is an area of land enclosed when the railway lines here were constructed in the nineteenth century. The high embankments surrounding the triangle were created then. The land at the base of the embankments is at the original height of the surrounding landscape. A water feature variously described as small stream, ditch or drain cuts through the triangle and its embankments and a pond occurs east of the stream.

It was recognised as a site of nature conservation importance in Lewisham in the eighties. A report was produced by London Conservation Services (LCS) in 1993 and management works were carried out in the early nineties (in 1992 by myself as well), a variety of plantings were undertaken and an interpretation sign was put up facing platform 5.

The LCS report contains details of surveys that had been carried out in 1991 and 1993 which provide a base line to assess what has happened to the site in the intervening period.

The site was also described in the London Ecology Unit Handbook No. 30 published in 2000 thus:

### H: Hither Green station

Grid ref: TO 391 744 Area: 7.7 ha

The Sidcup and Orpington lines diverge at Hither Green station to make two sides of a triangle, the third side of which is formed by engine sheds and sidings. As all of these are on embankments, the land within the triangle appears from platform 5 (which provides the best view) as a large hollow.

The northern slope is largely grassland, with a colourful array of wild flowers including oxeye daisy, common knapweed, wild mignonette and bladder campion. This gives way on the bottom of the hollow to bramble scrub and tall herbs, providing nesting cover for whitethroats and, in some years, lesser whitethroats. Most of the southern edge, adjacent to platform 4, is wooded. A small stream trickles from north to south across the east of the site.

This area had, for many years, been used as a depository for rubbish from station and engine sheds until its nature conservation potential was recognised in 1991. It was formally declared a nature reserve by a partnership of British Rail (as was) and the Borough Council in 1993, and this status is reflected by an informative sign on platform 5. The vegetation now receives periodic management from the Council's Nature Conservation Section to maintain the mosaic of habitats.

The embankments carrying the railway from Hither Green to the north, east and south are vegetated largely with woodland of birch, sycamore and hawthorn, with a few more open areas, and even a small reed bed.

## Site Survey 2007

The site was visited and surveyed on three occasions during the year. Spring summer and late summer. All species found and identified were recorded. Assessment of the site was hampered by the dense vegetation occupying most of the site now. Much of it is impenetrable and had to be viewed from the perimeter. But enough was seen to assess the situation.

The species recorded are in the attached species list.

## The 1993 report

The previous management plan reccomended planting on the Triangle of a variety of native species. Some of this did take place and some have survived through to the present such as cowslip and primrose. Species considered to have been introduced are marked with an "I" in the species list. This planting was unnecesary and has not done anything to enhance the value of the site. It is unfortunate that planting is seen as a universal panacea but as this site demonstrates only too well it is management that is really important.

There was more concern about the spread of Japanese knotweed and common horsetail than sycamore or bramble. But it is the latter species with the able assistance of other trees and shrubs that have done for the open areas. The knotweed and horsetail have not spread to anything like the extent expected and neither are a cause of great concern now. It appears that the Japanese knotweed has not spread to any great extent.

## **Environmental Change**

The number of species recorded in 1993 and 2007 is broadly the same 111 in 1993 and 105 in 2007 and overall, including the 1991 records, the total number of species recorded has increased from 133 in 1993 to 162 now. Superficially much of a muchness probably even an improvement. What has changed considerably is the abundance of species and the habitats they occupy.

Since the early nineties all of the open habitats have been lost to scrub or young woodland. The only routine management that is taking place at the triangle is on the boundaries where growth is cut back to the fence line. It is <u>only</u> on these edges that most of the wildflowers of open habitats have managed to survive. They also survive more abundantly on the sidings of the depot - see the addendum to this report.

The "colourful array of wild flowers including oxeye daisy, common knapweed, wild mignonette and bladder campion" described in the 2000 handbook has gone and must have been in decline then.

Only one hardhead was found and a mere two or three of the other species mentioned.

Over the last year renewed interest has been taken in the reserve and some clearance work has been undertaken by Enviroworks. Network Rail and Lewisham Council are keen to see that the future management of the reserve is a higher priority.

### Recovery

The positive aspect of the situation is that the triangle is not isolated from other wild communities and some species will survive in the seed bank. The situation is recoverable.

There are two phases to the recovery of the habitats here. First radical removal of tree and shrub growth on the slopes of platform 5 and at the base of the triangle.

The key to the future well being of the habitats at Hither Green Triangle is regular informed management.

It is proposed that resources are targetted at the two best flower rich areas that were extant in the nineties. Recovery of these open flower rich habitats will take some time to achieve and stabilise.

## Restoration

### Clearance of scrub and young woodland

To restore the more open nature of the triangle it is neccesary that large areas of scrub and young woodland that have been allowed to take over are cut down. It is reccomended that the last areas to be colonised by woody species are focussed on first these are the areas known as F1 and F3 in the 1993 management plan.

There are three phases to this.

1. Cut down and remove woody species that have colonised.

- 2. Ensure that these species do not regenerate.
- 3. Ensure routine and regular informed management in the long term.

### Arisings.

Considerable amounts of plant material will be generated by clearing the areas proposed. It is vital that adequate consideration is given to how it is treated and where it will go.

Areas within the compartments that are going to be retained as woodland will be located to be receptor sites. Timber can be stacked in compact piles in these areas. Brashings can also be piled in these areas but these are likely to be quite large and it is worth considering chipping this material.

### Use of herbicides

To control regrowth it will be neccesary to use herbicides.

For woody material it is reccomended that Ammonium sulphamate is painted on the stumps of trees and woody shrubs after felling.

For plants like bramble it is recommended that Glyphosate is used. Application can be by the wipe method or if extreme care is taken by spray.

### **Precautions**

Operatives will need to hold a recognised Certificate of Competence and have been trained to satisfy the requirements of national legislation, Network Rail and Lewisham Council.

Herbicides must not be used by the stream without consulting with the Environment Agency.

Every effort must be made to ensure non-target species are not effected.

### Footpaths

The works will reveal the slope down in to the triangle and the opportunity should be taken to formalise access routes into the reserve.

# Programme of works.

## Compartment one.

### In winter period before April.

Mark out area to be cleared mark species to be left (such as the occasional hawthorn, oak and fruit tree but not where they will shade the embankment). It will require some clearance work to establish this.

Locate and assess condition of slope down to base of triangle from the gated entrance on platform 5.

Locate suitable places to place arisings.

Place sign on fence facing platform 5 explaining why trees are being felled.

Clear target trees and scrub including bramble, remove arisings and treat stumps.

Remove as much root of bramble as possible.

Inspect embankment and slope consider hard raking to remove as much leaf litter as possible.

### In late May/June

Inspect treated stumps for regrowth. Treat any that are recovering.

Herbicide any bramble regrowth.

Assess how vegetation is responding and decide whether a cut is required and where. Act as neccesary.

### Mid to late July

Inspect treated stumps for regrowth. Treat any that are recovering.

Herbicide any bramble regrowth.

Assess how vegetation is responding and decide whether a cut is required and where. Act as neccesary.

### End August/September

Inspect treated stumps for regrowth. Treat any that are recovering.

Herbicide any bramble regrowth.

Cut majority of wildflower regrowth. Leave pockets, no more than 2m x 2m long. Remove arisings.

Assess what has happened this year and adjust management to reflect this for following year.

## **Compartment 2**

### In winter period before April.

Mark out area to be cleared mark species to be left (such as the occasional hawthorn, willow, oak and fruit tree but not where they will cast dense shade). It will require some clearance work to establish this.

Locate suitable places to place arisings.

Clear target trees and scrub including bramble, remove arisings and treat stumps.

Remove as much root of bramble as possible.

Inspect embankment ground conditions consider hard raking to remove as much leaf litter as possible.

Inspect pond consider action required.

### In late May/June

Inspect treated stumps for regrowth. Treat any that are recovering.

Herbicide any bramble regrowth.

Assess how vegetation is responding and decide whether a cut is required and where. Act as neccesary.

Inspect pond consider action required.

### Mid to late July

Inspect treated stumps for regrowth. Treat any that are recovering.

Herbicide any bramble regrowth.

Assess how vegetation is responding and decide whether a cut is required and where. Act as neccesary.

### End August

Inspect treated stumps for regrowth. Treat any that are recovering.

Herbicide any bramble regrowth.

Cut majority of wildflower regrowth. Leave pockets, no more than 2m x 2m long. Remove arisings.

Assess what has happened this year and adjust management to reflect this for following year.

# Addendum

## Hither Green depot sidings

It was impossible to ignore this generally sparsely vegetated area. As a field botanist it immediately attracted my attention. I had no permission to access this area, it was out side my remit but it would be irresponsible not to draw attention to it. I was unable to access the sidings and could only observe them from the edge but those observations were significant.

Rue-leaved saxifrage *Saxifraga tridactylites* was first discovered at Silwood Triangle in Lewisham in 2006. That population was lost when that site was cleared this year. This is the second place it has been found in Lewisham. It is small usually under 3 inches in height red stemmed, glandular and white flowered. It is an early spring annual and this may be why it is taking to railways. It flowers and sets seed before the lines are herbicided in late spring early summer. This has the additional benefit of wiping out any competition. This was an extremely rare plant in London twenty years ago but has spread as it has taken to using railway lines in recent years.

Growing with the saxifrage is a small crucifer common whitlowgrass *Erophilla verna* and this is the second place it has been found growing in Lewisham in some abundance. The other was cleared last year so this is currently the only significant population known of in Lewisham.

Blue fleabane *Erigeron acer* hasn't been seen in Lewisham for some years so it was a delight to find it growing here in the overgrown area behind the buildings see map. In the same area was musk mallow *Malva moschata*, this is now a rare plant in Lewisham and unusually Mediteranean spurge Euphorbis characias is growing wild here as well. But the importrant factor is the wild community of herbaceous plants growing here.

The most unusual species found here, growing in gaps in the paving nearby, is the nationally rare species Jersey cudweed *Gnaphalium luteoalbum*. It is a very rare British plant classified as Critically Endangered in the British Red Data Book of 1999. Curiously it has started to appear in various places where it was unknown in the past. A distribution map of the species can be found at <a href="http://www.bsbimaps.org.uk/atlas/map">http://www.bsbimaps.org.uk/atlas/map</a> page dc4.php?spid=937.0&sppname=Gnaphalium %20luteoalbum&commname=Jersey%20Cudweed

It was found in London for the first time two years ago this is the second London record (Dr Mark Spencer plant recorder of the London area for the London Natural History Society pers comm). It may be that it is responding to climate change and is a plant on the move. Because of this change it was removed from the critically endangered list in the revised red data book list in 2005.

A specimen of the plant was taken and has been pressed and will be going in to the British Herbarium at the Natural History Museum.

Growing in the same area is a plant known as the Marvel of Peru *Mirabilis jalapa*. The first time it has been found growing wild in Lewisham.

Management of these areas could enhance wildlife benefit and yet not effect operational works in the sidings. The obvious management required is the control of woody species and maintaining the open sparse nature of the sidings.

Surveys of the sidings would undoubtedly reveal other unusual species as well. Altogether this area has a most unusual collection of wildflowers this would almost certainly be mirrored in the populations of invertebrates living here as well.

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