

THE MERSEY GATEWAY PROJECT

ORCHID SURVEY 2011 MANCHESTER SHIP CANAL BANK LOCAL WILDLIFE SITE

INTERIM REPORT SEPTEMBER 2011

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Introduction

1.1 Part of the Manchester Ship Canal bank Local Wildlife Site falls into the construction zone and potential access route for construction traffic. Orchid colonies and other grassland species including Grass Vetchling have been recorded in previous surveys to establish the baseline ecological information for the Project.

1.2. As part of the existing planning condition, a vegetation survey has commenced to update the existing baseline. Orchids, Grass Vetchling and other important plant species are being recorded to establish a protocol for their protection through appropriate fencing and / or their translocation prior to the start of the construction period. Where they are found they will be protected using protective fencing. Where protection is not practicable, such plant species will be translocated to a suitable receptor site elsewhere along the canal bank or in Wigg Island LWS following preparation of the relevant translocation sites. Vegetation containing larval food plants for butterflies and invertebrates and which is likely to be affected by construction of the Project will be translocated to a suitable receptor site.

1.3. This activity is a requirement of the COPE (ref section 3.4, Appendix 3 of the BDMP, pp136), which is subject to the discharge of Planning Condition 7.

Methodology

2.1. The survey site has been divided into 5 zones, for recording purposes, with each zone based on the distance from the route of the New Bridge. The 5 zones are:

- Zone 1E: 0-50m east of the route
- Zone 2E: 50 -100m east of the route
- Zone 3E: 100 – 150m east of the route
- Zone 1W: 0-50m west of the route
- Zone 2W: 50-100m west of the route.

To the east of the route, the Local Wildlife Site continues beyond 150m as a mix of grassland with developing scrub. To the west, the LWS continues as planted woodland. The woodland was included in the survey for possible helleborine species which have been recorded on nearby Wigg Island on sporadically on highway verges.

2.2. A brief description was given to each zone:

Zone	Description
Zone 1E	Semi-improved grassland with spreading brambles and some 3-4 year old oak saplings. There is a 1 metre scrub line at the top of the bank. There is a build-up of thatch in the grassland, due to lack of recent management. This combination of grassland, brambles and scrub is an ideal butterfly habitat.
Zone 2E	Distinguished from the adjacent zone by a desire line leading from the top path into the grassland. Semi-improved grassland, saplings spreading into the area, with a wider band of scrub extending up to 3 metres into the grassland.
Zone 3E	Semi-improved grassland, with evidence of shrub moving in. Less alder saplings than adjacent Zone 2E. Finer grasses and less thatch than other areas.
Zone 1W	Plantation woodland, approximately 15 - 20 yrs old. There are signs of the original stakes; the trees were planted as semi-mature standards, presumably as part of an industrial screening exercise, including fast growing species such

	as Sycamore and Ash. The remaining grassland is now disappearing under brambles and the tree canopy.
Zone 2W	Continuation of plantation woodland. Some change of species, including elm suckers and a self seeding apple tree.

2.3 In each zone, the number of flowering spikes of orchids were noted, along with other botanical species of note.

2.4 A number of photographs were taken to provide background documentary evidence.

<p>Photo 1: overview of site</p> 	<p>Photo 2: marsh orchid spp. May 2011</p> 
<p>Photo 3: bee orchid June 2011</p> 	<p>Photo 4: fragrant orchid July 2011</p> 

Survey results 2011

3.1 Seven survey visits were carried out between 25th May and 1st September 2011. The results are included in Table 1.

Date	Zone 1E: 0-50 metres	Zone 2E: 50-100 metres	Zone 3E: 100-150 metres	Zone 1W: 0-100 metres	Zone 3W: 100-150 metres
25/05/2011	No orchid spikes were observed	A single flowering spike from a Marsh orchid species	10 flowering spikes, Marsh orchid ssp.	no orchid species	Whitethroat singing
31/05/2011	5-6 flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F)	8 flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F)	40+ flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F)	no orchid species	An escaped parrot (eastern Rosera) calling from the canopy!
09/06/2011	8 flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F)	9 flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F)	65+ flowering spikes, Marsh orchid ssp. A single Bee Orchid in flower. Birdsfoot Trefoil (F)	no orchid species	Speckled wood butterfly
16/06/2011	7 flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F). In addition, Large Skipper and Common Blue butterflies were observed.	4 flowering spikes, Marsh orchid ssp. Birdsfoot Trefoil (F). Signs of emerging Yellow-wort	65+ flowering spikes, Marsh orchid ssp. 4 Bee Orchid in flower. Birdsfoot Trefoil (F). Burnet moth in cop.	no orchid species	Speckled wood butterfly
08/07/2011	Single bee orchid in flower	No new flowering spikes. Yellow-wort and Ribbed mellilot in flower	11 flowering spikes, Fragrant Orchid	no orchid species	Woodland birds present, including Long Tailed tit and wren
19/07/2011	Common fleabane about to flower (F). Birdsfoot trefoil (F)	Yellow-wort (7 flowering spikes) and Ribbed mellilot in flower. Red clover emerging in flower. Bramble spp in flower (O)	14 flowering spikes, Fragrant Orchid. Meadow Vetchling emerging (O)	no orchid species	
01/09/2011	Common fleabane in flower Frequent	red clover (F). Creeping thistle (F)	yellow-wort, 2-3 plants still in flower. Common blue butterfly	no orchid species	

Conclusion

4.1 The survey results are the first of 2 years of recording and are interim observations.

4.2 Zone 1E. This is the zone most affected by shading and construction working. By July 19th, the grass sward appeared denser than the other grassland zones. The numbers of flowering spikes were quite limited compared to survey reports from 10 – 15 years ago. This decline is likely to be associated with the dense thatch of grasses that is building up due to a lack of management by either cutting or grazing.

4.3 Zone 2E. There is a slightly less build up of thatch, allowing more gaps in the sward to support a number of marsh orchid species and some bee orchids.

4.4 Zone 3E. The only zone with a good population of fragrant orchids, along with increased numbers of bee and marsh species.

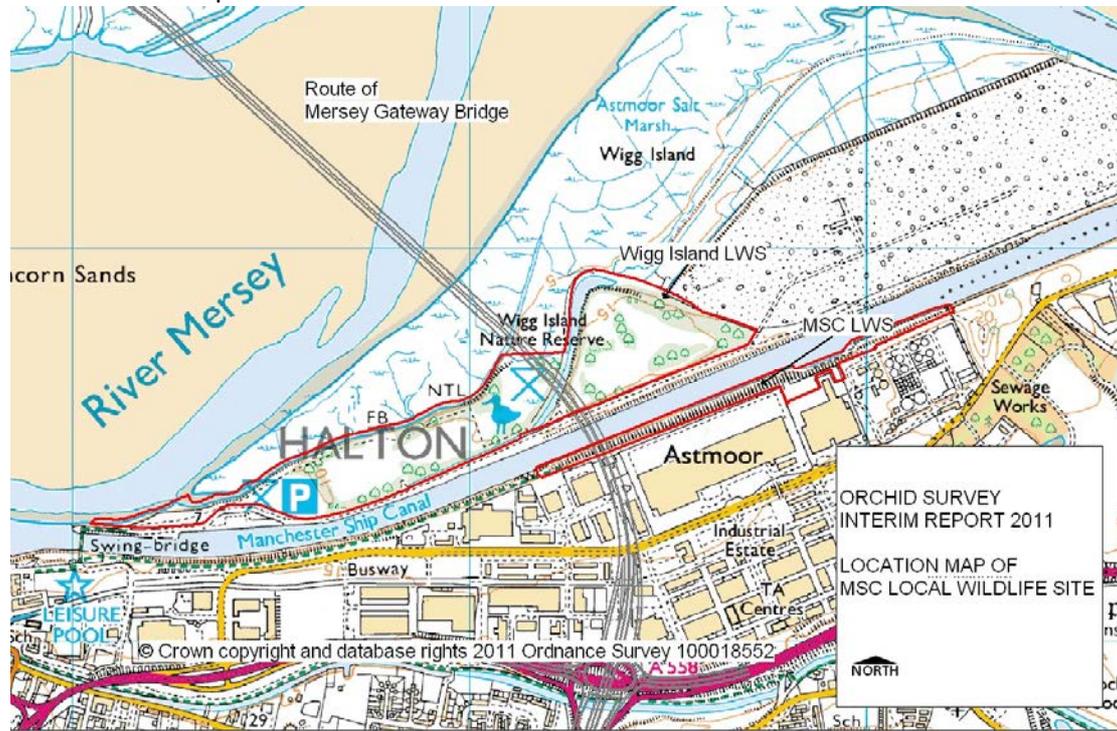
4.4 Zone 1W. No helleborine species were observed.

4.5 Zone 2W. No helleborine species were observed.

4.6 The second year of surveying will be important to determine the amount of translocation action, as orchid species are notorious for varying from year to year. There are certainly signs that the orchid species are reducing in number from a lack of grassland management. This raises the option of addressing management issues, as well as the issue of translocation, for areas of the LWS which are not affected by long term shading and which will be part of the Mersey Gateway project area.

Appendix 1. Maps showing area of Local Wildlife Site affected by the route of the New Bridge and the survey zones

A. Location Map



B. Survey Zone Map

