ECOLOGICAL WALKOVER SURVEY - UPDATE to PHASE 1 HABITAT SURVEY 2009

NORTH GAWBER

HARWORTH ESTATES

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1.0 INTRODUCTION

Extended Phase 1 Habitat Survey Update - 2013

The site was revisited on the 28th of June by Gary Tudor MCIEEM and on the 6th of July 2013 by Rachel Richards, in order to update the 2009 Phase 1 and water vole / amphibian surveys. Both ecologists were involved in the initial surveys undertaken in 2009. Wet ditches and water bodies were also investigated for signs of water vole as the 2009 report suggested the site had moderate potential for this species. Below are notes on any changes observed since the 2009 report was issued. Table 1 lists any new species recorded for the site and Table 2 describes the habitat inspected for Water Voles. Figure 2 illustrates the areas inspected for Water Vole.

Plate 1: a part of the site in July 2013



2.0 PHASE 1 HABITAT SURVEY UPDATE

2.1 Woodland and scrub

As expected, the areas of broad leaved woodland, notably the silver birch woodland and scrub which covers much of the centre of the site, has grown in height over the last 4 years. The last survey recorded the birch woodland as reaching around 3-5m in height. It now averages around 4-6 m. In some habitats, particularly the small areas of acid grassland and heath, the scrub has encroached further into these communities though the heather has also gained some height.

Plate 2: similar view to Plate 1, photograph taken in 2009



2.2 Wetland and water bodies

To date, 2013 has been a very dry year and this is reflected in the wetland habitats present. The 2009 survey was also carried out earlier in the year (late May) as opposed to early July. The pond at target note 7 (TN 7) was completely dry this year and the marshy grassland at TN 8 and other previously wet grassland areas were mostly very dry. Some drains had also been recently dug out so water has been encouraged to flow from around TN 5 south east to TN 15. No doubt contributing to the now dried out pond at TN 7. Much of the habitat marked as marshy grassland along this drainage ditch has now been cleared out to encourage water to flow

across the site and these ditches do now contain a small amount of flowing water. The pool at TN 15 contains some water, though less than the last survey, as does the ditch and wetland around TN 11 & 12. The species composition is much the same, though all marshy grassland habitats were very dry at the time of survey. An additional area of Common cotton grass was recorded at TN18b.

Plate 3: dried pond at TN7



2.3 Grassland and bare ground

Despite 4 years having passed there was little to no obvious changed in the amount of bare ground on the site. The site is still heavily used by locals for dog walking and motor bike riding etc. This combined with the already compact nature of the substrate maintains high levels of bare ground on the site. Grassland communities show little obvious sign of encroaching on these areas or developing a more closed sward but remain quite varied and diverse across the site. The previous survey recorded large numbers of the Southern Marsh Orchid, *Dactylorhiza praetermissa*. These orchids were seen again during this survey though the later timing of the survey meant the spikes visible were going over and large numbers of common spotted orchid (not recorded in the last survey) were also in flower in the same area.

2.4 **Non-natives and invasive plants**

Additional areas of bracken were recorded at TN 4b and 26b and the areas of Red Valerian at TN 24 along with other garden species seemed to be spreading.

2.5 **Fauna**

The varied habitats present, including wetland areas along with the substantial areas of bare ground results in a diversity of ecological niches which supports a wide variety of invertebrate species. On a hot summers day the grassland is full of the calls of grasshoppers, the buzz of bees and the colours of butterflies among the many flowering plants. Seven species of butterfly were recorded during this walk over (12 in total), Small Heath, Meadow Brown, Small Skipper, Speckled wood, Painted Lady, Peacock and Common Blue along with numerous Six-spot Burnet Moths and three Broad bodied Chaser dragonflies.

2.6 **Water Vole** (*Arvicola amphibius)*

Six areas were inspected for signs of Water vole, characteristic signs can include direct sightings of individuals and / or sounds, latrines, tunnel entrances, cropped lawns, feeding stations, paths, runs, and footprints. Those areas inspected are marked on Figure 2 and detailed in Table 2. These include running streams, a dried pond, dry ditches and small water bodies. No signs of water voles were found in any of the areas inspected. Though Water Voles are known to be present south of the site along the River Dearne, the site is not connected to this river by suitable Water Vole habitat. The stream which leaves the site in the South East flows south below tall trees creating heavily shaded habitat unpopular with Water Vole who require water side vegetation.

Table 1 New species records for North Gawber

Latin name	English name
Forbs	
Centaurium erythraea	Common Century
Hieraceum sp. (poss. sect Cerinthoidea?)	Hawkweed sp.
Hypericum perforatum	Perforated St-John's-wort
Ononis repens	Restharrow
Pulicaria dysenterica	Common Fleabane
Rumex acetosella	Sheep's Sorrel
Grasses, Rushes and sedges	
Anthoxanthum odoratum	Sweet Vernal Grass
Carex obtrubae	False fox sedge
Carex spicata	Spiked sedge
Invertebrates	
Aphantopus hyperantus	Ringlet
Maniola jurtina	Meadow Brown
Thymelicus sylvestris	Small Skipper
Zygaena filipendulae	Six-spot Burnet
Libellula depressa	Broad-bodied Chaser (dragonfly)

Table 2 Habitat areas inspected for signs of Water vole

Location	Habitat description
1	Small plank cross a ditch < 1m wide with running water. Stony substrate in steep banks. Inspected 2 m each side of bridge in dense vegetation, brambles, nettles and willow herbs. Banks heavily shaded by vegetation.
2	15 m stretch of stream inspected. Very overgrown with tall vegetation resulting in heavy shading.
3	Recently cleared stretch of ditch edged on south side by vegetation. Hard substrate.
4	A completely dried up pond with open vegetation including Reedmace, Yellow Iris and some Reeds and Rushes. The longer vegetation to the north of the pond and a 2 m stretch of a dried ditch leading to the pond was also inspected.
5	The ditch which runs across the site North west to South East which has recently been cleared out was inspected in a number of locations. A few pools of water are present and small stands of Reedmace, Rushes, Reeds etc remain along with areas of bear ground.
6	Reedmace and grasses stand in a few centimetres of water which is flowing west to east. The margins of this small pool and the stream that leaves it to the east were inspected.

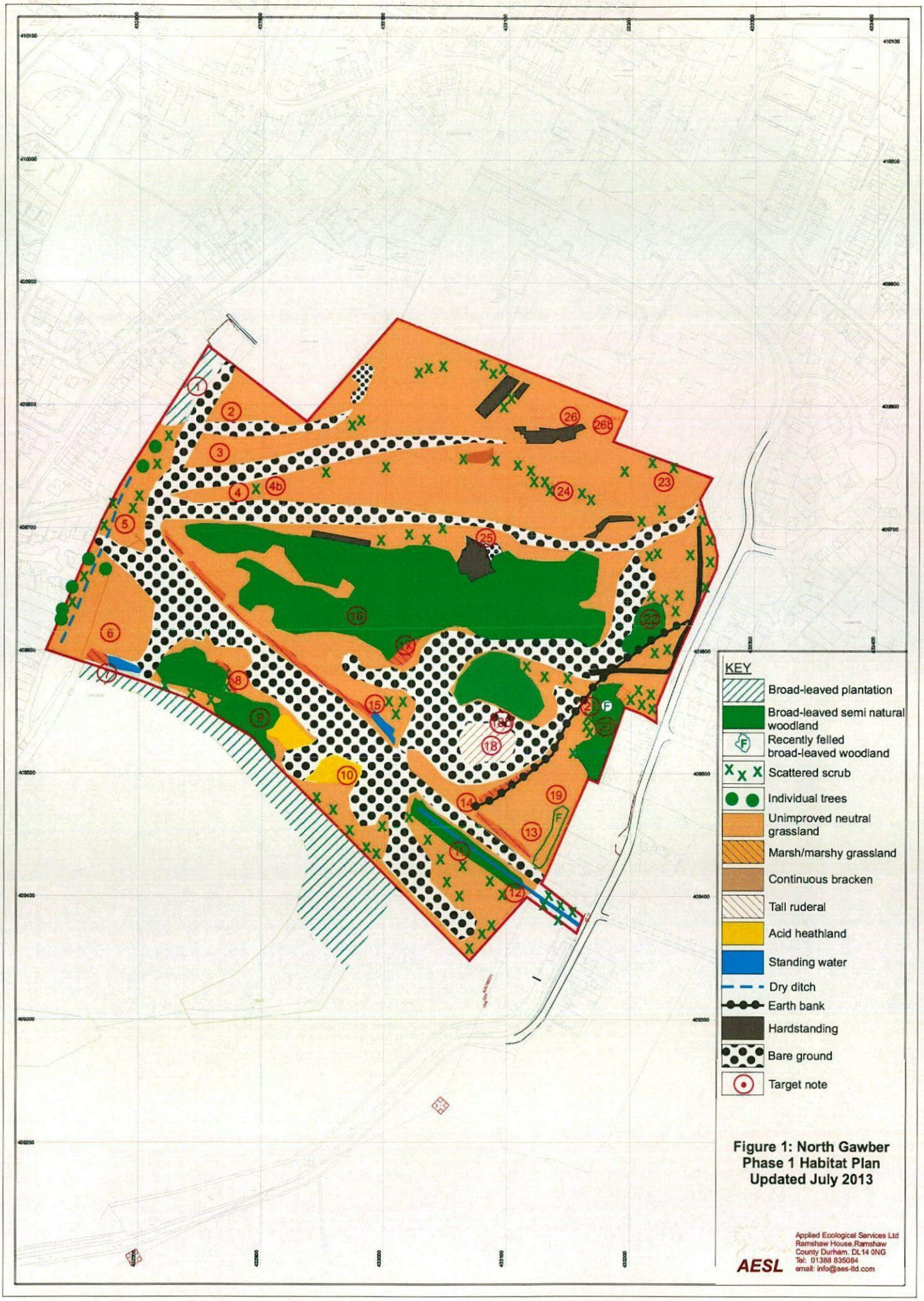
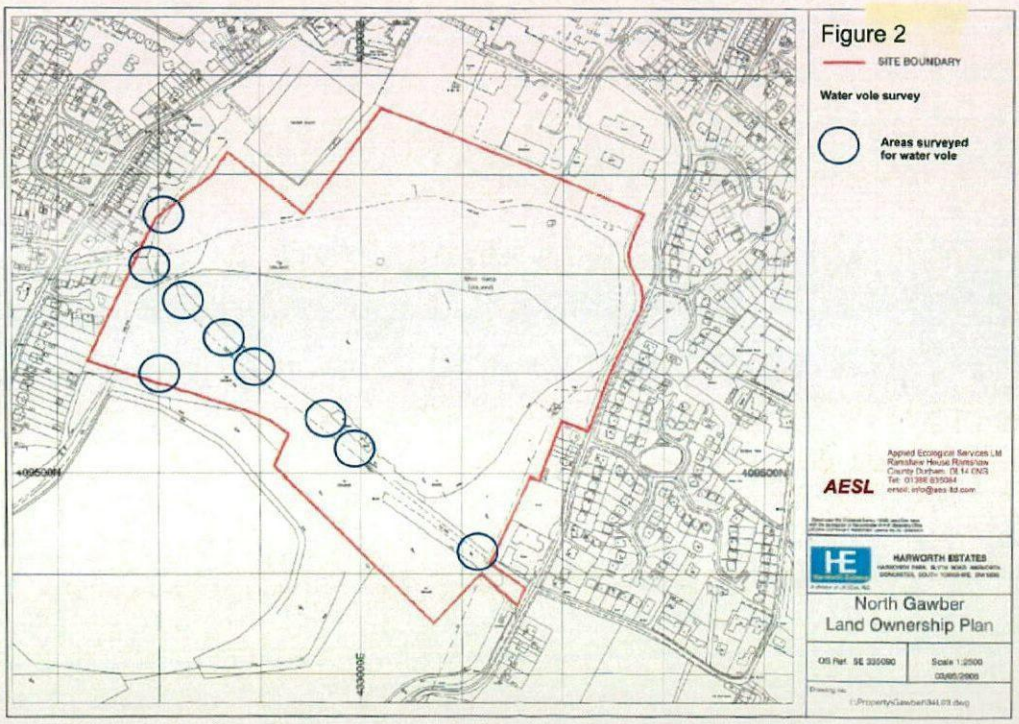


Figure 1: North Gawber Phase 1 Habitat Plan Updated July 2013

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Figure 2
SITE BOUNDARY
Water vole survey
Areas surveyed for water vole
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HARWORTH ESTATES
North Gawber
Land Ownership Plan