

Extended Phase 1 Habitat Survey

Land South of Milton Heights, Grove Farm,
Milton, Oxfordshire

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1 Introduction

- 1.1 Ecoconsult Ltd has been commissioned to carry out an extended phase 1 habitat survey of land south of Milton Heights, Grove Farm, Milton, Oxfordshire.
- 1.2 The following work has been undertaken to inform this report:
- an ecological data search
 - an extended phase 1 habitat survey of the site
- 1.3 Information has been used to describe habitats of nature conservation interest at the site and provide an assessment of potential ecological impacts.



Figure 1: Survey site location and boundary (red line)

2 Survey Methodology

Desk study

- 2.1 A data search was requested from The Thames Valley Environmental Records Centre for the site and 1km radius from the site boundary.
- 2.2 The MAGIC website was searched to provide information regarding international statutory nature conservation sites within 5km from the site boundary.
- 2.3 The site was assessed in relation to Natural England's Sites of Special Scientific Interest (SSSI) Impact Risk Zones (IRZs).
- 2.4 Aerial photographs and 1:10,000 Ordnance Survey maps were used to search for ponds within 500m of the site.

Field surveys

Phase 1 habitat survey

- 2.5 The extended phase 1 habitat survey was carried out on 4th September 2014 and followed the methodology in *Handbook for Phase 1 Habitat Survey* (Joint Nature Conservation Committee, 2003) and *Guidelines for Baseline Ecological Assessment* (Institute of Environmental Management and Assessment, 1995).

3 Results of data search

Statutory Nature Conservation Sites

- 3.1 There are no international statutory nature conservation sites located within 5km of the site boundary.
- 3.2 There are no national statutory nature conservation sites located within 2km from the site boundary.

Site of Special Scientific Interest Impact Risk Zone (IRZ)

- 3.3 The site lies within a Site of Special Scientific Interest Impact Risk Zone. Risks where Natural England should be consulted by the Local Planning Authority are listed as follows:
- air pollution (Pig and poultry units and any other development/ industrial or commercial process that could cause air pollution);
 - combustion (General combustion processes >50MW energy input. Including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion) and
 - discharges (Any discharge of water or liquid waste that is more than 20m³/day. The water needs to either be discharged to ground (ie to seep away) or to surface water, such as a beck or stream. Discharges to mains sewer are excluded).
- 3.4 The proposed development will not result in any of the above and therefore it is assessed that there will be no risk to any Sites of Special Scientific Interest.

Non-Statutory Nature Conservation Sites

- 3.5 There are no designated non-statutory nature conservation sites located within 1km from the site boundary.

Species

Bats

- 3.6 The Thames Valley Environmental Records Centre currently holds records for seven species of bats within 1km from the site boundary including common pipistrelle, soprano pipistrelle, Daubenton's, barbastelle, brown long-eared and noctule bats. The vast majority of the records were for foraging bats and originated from the former Esso Centre, Milton Hill, located c.400m to the west of the site. There are no records for bats within the site boundary.

Badger

- 3.7 The Thames Valley Environmental Records Centre does not currently hold any badger records for the site or within 1km from the site boundary.

Water vole

- 3.8 The Thames Valley Environmental Records Centre currently holds a single water vole record for the Ginge Brook located 1km from the site boundary. There is no suitable water vole habitat within the site or close to the site boundary.

Polecat

- 3.9 The Thames Valley Environmental Records Centre currently holds three records for dead polecats within 1km from the site boundary.

Birds

- 3.10 The Thames Valley Environmental Records Centre currently holds records for ten notable bird species within 1km from the site boundary. Please refer to TVERC Biodiversity Report: *Land at Milton Heights* (30/10/14) for full list.

Reptiles

- 3.11 The Thames Valley Environmental Records Centre does not currently hold any reptile records for the site or within 1km from the site boundary.

Amphibians

- 3.12 The Thames Valley Environmental Records Centre does not currently hold any great crested newt or other amphibian records for the site or within 1km from the site boundary.

Invertebrates

- 3.13 The Thames Valley Environmental Records Centre currently holds records for four notable species of invertebrates within 1km from the site boundary. Please refer to TVERC Biodiversity Report: *Land at Milton Heights* (30/10/14) for full list.

Plants

- 3.14 The Thames Valley Environmental Records Centre currently holds records for two notable plant species within 1km from the site boundary. These include green-winged orchid and bluebell, both of which were recorded in the grounds of Milton Hill House located c.850m southwest of the site.

4 Results of Field Surveys

Local context

- 4.1 The site is located immediately south of Milton Heights in a rural location. Land to the east, south and west is characterised by agricultural fields with the majority being pasture but including some arable. Tree lines and linear areas of planted woodland are frequent within close proximity to the site but no substantial areas of woodland are located within 2km. The busy A34 road runs within 35m of the northeast corner of the site. The central grid reference for the site is: SU 48506 90810.

Habitats

- 4.2 The site is dominated by improved grassland. The habitats are shown on the phase 1 habitat map in Figure 2 below.
- 4.3 The following habitat types are represented on or adjacent to the site:
- improved grassland
 - poor semi-improved grassland
 - dense scrub
 - tall ruderal
 - tree-line

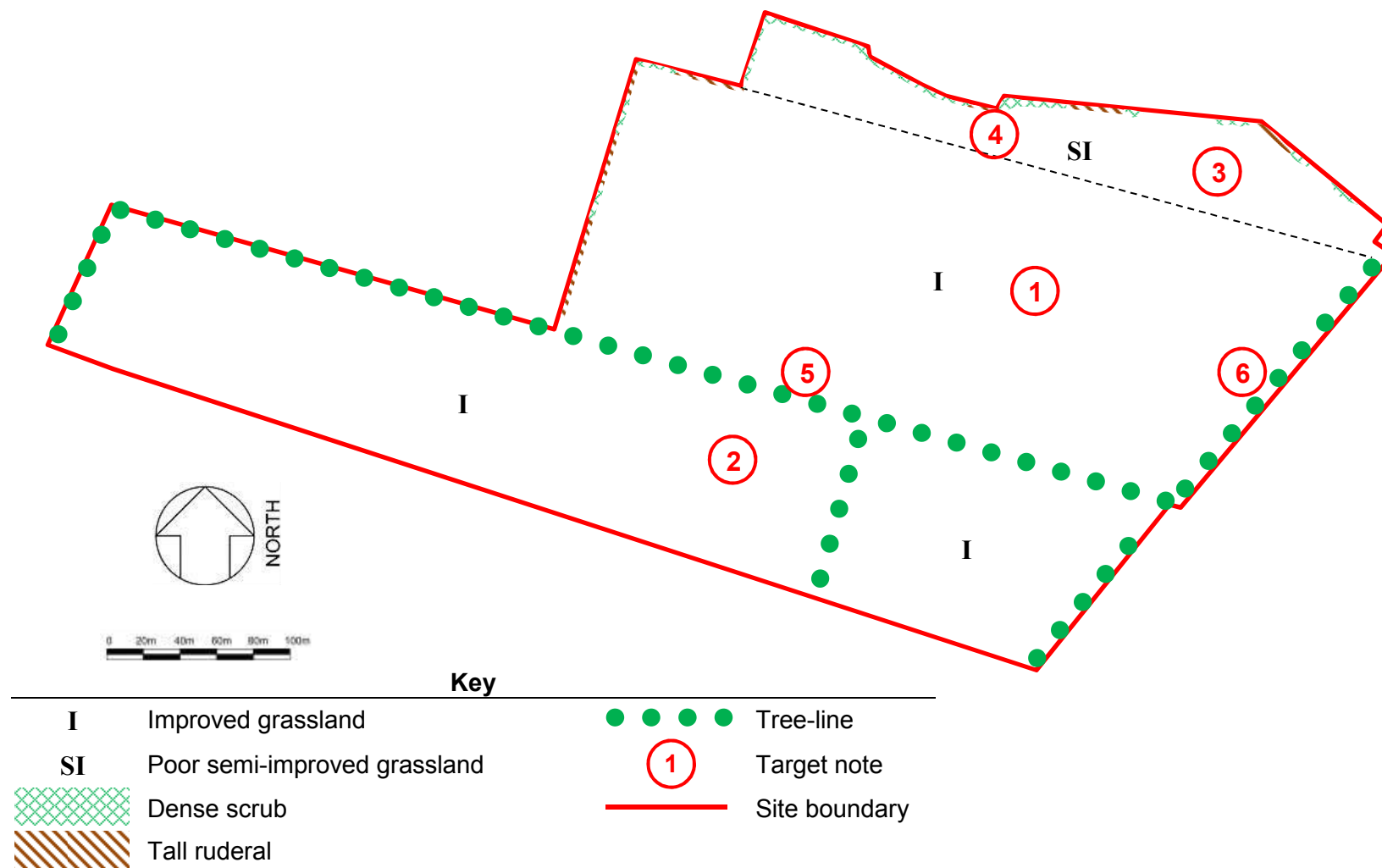


Figure 2: Phase 1 habitat map

Improved grassland

- 4.4 The site is dominated by improved grassland with the largest field having recently been converted from arable to grassland (see Figure 2, target note 1). The field had recently been cut. The sward is dominated by perennial ryegrass *Lolium perenne* with frequent white clover *Trifolium repens* and meadow fescue *Festuca pratensis*. The margins of the field and occasionally areas in the centre of the field retain patches of arable weeds including locally abundant cut-leaved crane's-bill *Geranium dissectum*, barren brome *Anisantha sterilis* and groundsel *Senecio vulgaris*.



- 4.5 The southern section of the site includes two fields of improved grassland that are currently horse grazed (see Figure 2, target note 2). The fields have been fenced off into separate paddocks that are grazed to a very short sward. Poaching is frequent close to entrances and around paddock boundaries (see image to right). The sward supports abundant perennial ryegrass and locally abundant white clover and broadleaved plantain *Plantago major* alongside frequent Italian ryegrass *Lolium multiflorum* and dandelion *Taraxacum officinale*.



Poor semi-improved grassland

- 4.6 A narrow area of poor semi-improved grassland is present immediately adjacent to the large field of improved grassland in the north of the site (see Figure 2, target note 3). The grassland has been neglected and is tussocky with tall ruderal species beginning to develop. The grassland will be grazed



by sheep in late 2014. Currently the sward supports abundant to locally abundant cock's-foot *Dactylis glomerata*, red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus* and broadleaved dock *Rumex obtusifolius*, alongside frequent to locally frequent false oat-grass *Arrhenatherum elatius* and meadow fescue.

Scrub

- 4.7 Narrow patches of scrub are present along the northern boundary of the site along the edge of the poor semi-improved grassland adjacent to residential properties (see Figure 2, target note 4) and also partway along the western boundary. The majority of the scrub is dominated by bramble



Rubus fruticosus with locally frequent blackthorn *Prunus spinosa* and elder *Sambucus nigra* and infrequent hawthorn *Crataegus monogyna*.

Tall ruderal

- 4.8 Small linear patches of tall ruderal habitat are present along the northern boundary of the site associated with scrub habitat (see Figure 2, target note 4) and also partway along western boundary (see Figure 2). Common nettle *Urtica dioica* and cleavers *Galium aparine* are locally abundant.

Tree-line

- 4.9 Five lengths of tree-line are present on site dominated by single species including non-native alder *Alnus* sp, poplar *Populus* sp and a single length supporting plum *Prunus domestica* (see Figure 2). The longest of the tree-lines measures 660m and includes 160m of mature poplar (see image to right),



200m of young to mid-aged poplar and 300m of alder (see Figure 2, target note 5). The central mature section of poplar includes an understorey of abundant hawthorn and occasional pedunculate oak *Quercus robur* and dog rose *Rosa canina*.

- 4.10 A second tree-line measuring 200m long runs partway along the western boundary of the site (see Figure 2, target note 6 and image to right). The tree-line supports locally abundant plum and non-native alder with infrequent hawthorn. There is no understorey present. The field-layer includes abundant common nettle, cleavers and frequent false oat-grass.



Species***Bats***

- 4.11 There are no buildings present on site. Trees associated with tree-lines are in good condition with no obvious access / roosting points present for bats. There is no suitable bat roosting habitat present on site.
- 4.12 Bats will use the site for foraging and commuting, particularly along tree-lines.

Badger

- 4.13 No badger setts were recorded within the site boundary or within close proximity to the site boundary. It is likely that badgers forage and commute through the site.

Brown hare

- 4.14 A brown hare was recorded in the improved grassland. Brown hare is a UK Biodiversity Action Plan (BAP) Priority species.

Amphibians

- 4.15 No ponds are present within the site boundary or within 250m of the site boundary. A total of three ponds are located within 500m of the site boundary including two fishing ponds 300m and 350m south of the site and a pond 410m to the north of the site. The two fishing ponds support large populations of coarse fish and therefore are unlikely to support great crested newts. The pond to the north is located on the opposite side of the busy A34 road which acts as a significant dispersal barrier to newts if present in the pond. The site is dominated by pasture that is regularly grazed and therefore provides sub-optimal habitat for newts. It is highly unlikely that great crested newts will be affected by the proposals.

Reptiles

- 4.16 Potential reptile habitat is currently present in the north of the site in poor semi-improved tussocky grassland and scrub / tall ruderal habitat adjacent to the grassland. The remaining site is dominated by closely grazed improved grassland and therefore does not provide suitable habitat for reptiles. As the site is relatively isolated from other significant areas of suitable reptile habitat, it is considered unlikely that reptiles are present at the site.

Birds

- 4.17 A number of bird species were recorded during the phase 1 habitat survey. The following Red listed Birds of Conservation Concern were recorded: house sparrow and starling. The following Amber listed Birds of Conservation Concern were recorded: green woodpecker, red kite and meadow pipit.

Invertebrates

- 4.18 The site is dominated by improved grassland with non-native tree-lines and is therefore unlikely to support significant assemblages of notable invertebrates.

5 Conclusions

- 5.1 An ecological data search and extended phase 1 habitat survey have been carried out for land south of Milton Heights, Grove Farm, Milton, Oxfordshire.

Nature conservation sites

- 5.2 There are no likely impacts to nature conservation sites.

Habitats

- 5.3 The site is dominated by improved grassland that has either been recently seeded or is closely grazed by horses. There are no UK Biodiversity Action Plan Priority Habitats present on site.

Species

Reptiles

- 5.4 The poor semi-improved grassland located to the north of the site currently supports suitable reptile habitat although, due to the isolation of this area from other suitable reptile habitat, it is considered unlikely that reptiles are present. It is recommended that the grassland is maintained as short grazed grassland up to the start of development grazed to a very short sward (to create suboptimal habitat for reptiles).

Nesting birds

- 5.5 Habitats present on site that provide suitable nesting bird habitat include scrub/tall ruderal, tree-lines and farmland. Nesting birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). Disturbance to nesting birds should be avoided by carrying out site clearance works outside the main nesting season. The main nesting season is generally March to August.

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