

Appendix 5.1

Preliminary Ecological Appraisal

(Part 3 of 3)



Table C5 – Dense Scrub (South West of Site, South of B1)

| Common Name | Latin Name | Frequency (DAFOR) |
|--------------------|----------------------------|--------------------------|
| Hawthorn | <i>Fraxinus excelsior</i> | D |
| Blackthorn | <i>Acer pseudoplatanus</i> | A |
| Goat willow | <i>Crataegus monogyna</i> | A |
| Dog rose. | <i>Tilia sp.</i> | F |
| Bramble | <i>Rumex obtusifolia</i> | F |
| Ash | <i>Sambucus nigra</i> | F |
| Creeping thistle | <i>Cirsium arvense</i> | O |
| Spear thistle | <i>Cirsium vulgare</i> | O |
| Common figwort | <i>Scrophularia nodosa</i> | O |
| Common nettle | <i>Urtica dioeca</i> | O |
| Weld | <i>Reseda luteola</i> | O |

Table C6 – Semi-Improved Grassland (bankside habitat alongside standing water to south of Site)

| Common Name | Latin Name | Frequency (DAFOR) |
|---------------------|------------------------------|--------------------------|
| Cock's-foot | <i>Dactylis glomerata</i> | D |
| Yorkshire fog | <i>Holcus lanatus</i> | D |
| Red fescue | <i>Festuca rubra</i> | D |
| Common vetch | <i>Vicia sativa</i> | A |
| Annual meadow grass | <i>Poa annua</i> | F |
| Horsetail | <i>Equisetum arvense</i> | F |
| Cow parsley | <i>Anthriscus sylvestris</i> | F |
| Common hogweed | <i>Heracleum sphondylium</i> | O |
| Creeping buttercup | <i>Ranunculus repens</i> | O |
| Common teasel | <i>Dipsacus fullonum</i> | O |

| Common Name | Latin Name | Frequency (DAFOR) |
|------------------------|---------------------------------|-------------------|
| Bristly oxtongue | <i>Helminthotheca echioides</i> | O |
| Wood avens | <i>Geum urbanum</i> | O |
| Weld | <i>Euphorbia amygdaloides</i> | O |
| Black mustard | <i>Brassica nigra</i> | O |
| Sterile brome | <i>Anisantha sterilis</i> | O |
| Meadow buttercup | <i>Ranunculus acris</i> | O |
| Dove's foot cranesbill | <i>Geranium molle</i> | O |
| Garlic mustard | <i>Alliaria petiolata</i> | R |
| Spear thistle | <i>Cirsium vulgare</i> | R |
| Common nettle | <i>Urtica dioica</i> | R |
| Mugwort | <i>Artemisia vulgaris</i> | R |
| Common fumitory | <i>Fumaria officinalis</i> | R |
| Lady's mantle | <i>Alchemilla mollis</i> | R |

Table C7 – Tall Ruderal/Scattered Scrub (North West of Site)

| Common Name | Latin Name | Frequency (DAFOR) |
|------------------|-----------------------------|-------------------|
| Goat Willow | <i>Salix caprea</i> | D |
| Ash | <i>Fraxinus excelsior</i> | D |
| Hawthorn | <i>Crataegus monogyna</i> | A |
| Bramble | <i>Rubus fruticosus</i> | A |
| Yorkshire fog | <i>Holcus lanatus</i> | F |
| Dog rose | <i>Rosa canina</i> | F |
| Lesser trefoil | <i>Trifolium dubium</i> | F |
| Creeping thistle | <i>Cirsium arvense</i> | O |
| Herb Robert | <i>Geranium robertianum</i> | O |
| Common vetch | <i>Vicia sativa</i> | F |

| Common Name | Latin Name | Frequency (DAFOR) |
|------------------------|---------------------------------|-------------------|
| Changing forget-me-not | <i>Myosotis discolor</i> | F |
| Bristly oxtongue | <i>Helminthotheca echioides</i> | O |
| Hoary willow herb | <i>Epilobium parviflorum</i> | O |
| Common hogweed | <i>Heracleum sphondylium</i> | O |
| Tufted hair grass | <i>Deschampsia cespitosa</i> | F |
| Wood avens | <i>Geum urbanum</i> | O |
| Common spotted orchid | <i>Dactylorhiza fuchsii</i> | O |
| Soft rush | <i>Juncus effusus</i> | O |
| Common daisy | <i>Bellis perennis</i> | O |
| Coltsfoot | <i>Tussilago farfara</i> | F |
| Weld | <i>Reseda luteola</i> | O |
| Common stork's-bill | <i>Erodium cicutarium</i> | O |
| Bulbous buttercup | <i>Ranunculus bulbosus</i> | R |
| Scarlet pimpernel | <i>Anagallis arvensis</i> | R |
| Cut-leaved cranesbill | <i>Geranium dissectum</i> | R |
| Cock's-foot | <i>Dactylis glomerata</i> | O |
| Cow parsley | <i>Anthriscus sylvestris</i> | O |
| Broadleaved dock | <i>Rumex obtusifolius</i> | O |
| Prickly sow-thistle | <i>Sonchus asper</i> | O |
| Field madder | <i>Sherardia arvensis</i> | O |

Table C8 – Tall Ruderal / Scattered Scrub (along Western Site Boundary)

| Common Name | Latin Name | Frequency (DAFOR) |
|------------------|----------------------------|-------------------|
| Bramble | <i>Rubus fruticosus</i> | D |
| Sycamore | <i>Acer pseudoplatanus</i> | D |
| Broadleaved dock | <i>Rumex obtusifolia</i> | A |

| Common Name | Latin Name | Frequency (DAFOR) |
|---------------------------|------------------------------|-------------------|
| Creeping thistle | <i>Cirsium arvense</i> | F |
| Cow parsley | <i>Anthriscus sylvestris</i> | F |
| Wood avens | <i>Geum urbanum</i> | R |
| Common dandelion | <i>Taraxacum officinale</i> | R |
| Weld | <i>Reseda luteola</i> | O |
| Horsetail | <i>Equisetum arvense</i> | O |
| Ribwort plantain | <i>Plantago lanceolata</i> | O |
| Common knapweed | <i>Centaurea nigra</i> | R |
| Common vetch | <i>Vicia sativa</i> | O |
| Common hogweed | <i>Heracleum sphondylium</i> | A |
| Dog rose | <i>Rosa canina</i> | O |
| Ox-eye daisy | <i>Leucanthemum vulgare</i> | O |
| Yorkshire fog | <i>Holcus lanatus</i> | D |
| Common teasel | <i>Dipsacus fullonum</i> | A |
| Common elder | <i>Sambucus nigra</i> | R |
| Creeping cinquefoil | <i>Potentilla reptans</i> | O |
| Common daisy | <i>Bellis perennis</i> | F |
| Bird's-foot trefoil | <i>Lotus corniculatus</i> | O |
| Coltsfoot | <i>Tussilago farfara</i> | A |
| Hawthorn | <i>Crataegus monogyna</i> | A |
| Common nettle | <i>Urtica dioica</i> | O |
| Perforate St. John's Wort | <i>Hypericum perforatum</i> | O |
| Cleavers | <i>Galium aparine</i> | O |
| Sterile brome | <i>Bromus sterilis</i> | O |

Table C9 – Tall Ruderal (North of Site, East to B9)

| Common Name | Latin Name | Frequency (DAFOR) |
|-----------------------|-----------------------------|--------------------------|
| Creeping thistle | <i>Cirsium arvense</i> | D |
| Spear thistle | <i>Cirsium vulgare</i> | D |
| Bramble | <i>Rubus fruticosus</i> | A |
| Common nettle | <i>Urtica dioica</i> | F |
| Red dead nettle | <i>Lamium purpureum</i> | O |
| Sterile brome | <i>Anisantha sterilis</i> | O |
| Cut leaved cranesbill | <i>Geranium dissectum</i> | O |
| Cleavers | <i>Galium aparine</i> | F |
| Common forget-me-not | <i>Myosotis scorpioides</i> | O |
| Common teasel | <i>Dipsacus fullonum</i> | A |
| Dog rose | <i>Rosa canina</i> | O |
| Creeping sow thistle | <i>Cirsium arvense</i> | R |
| Ribwort plantain | <i>Plantago lanceolata</i> | O |
| Hemlock | <i>Tsuga canadensis</i> | F |
| Weld | <i>Reseda luteola</i> | A |
| Common fumitory | <i>Fumaria officinalis</i> | O |
| Scarlet pimpernel | <i>Anagallis arvensis</i> | F |
| Common dandelion | <i>Taraxacum officinale</i> | O |
| Creeping cinquefoil | <i>Potentilla reptans</i> | F |
| Sticky mouse ear | <i>Cerastium glomeratum</i> | O |

Table C10 – Tall Ruderal (South of Site)

| Common Name | Latin Name | Frequency (DAFOR) |
|--------------------|------------------------|--------------------------|
| Creeping thistle | <i>Cirsium arvense</i> | D |
| Spear thistle | <i>Cirsium vulgare</i> | D |

| Common Name | Latin Name | Frequency (DAFOR) |
|-----------------------|------------------------------|-------------------|
| Common nettle | <i>Urtica dioica</i> | A |
| Teasel | <i>Dipsacus fullonum</i> | A |
| Weld | <i>Reseda luteola</i> | F |
| Colt's-foot | <i>Tusillago farfara</i> | F |
| Common hogweed | <i>Heracleum sphondylium</i> | F |
| Creeping sow thistle | <i>Cirsium arvense</i> | O |
| Cow parsley | <i>Anthriscus sylvestris</i> | O |
| Red dead nettle | <i>Lamium purpureum</i> | O |
| Sterile brome | <i>Anisantha sterilis</i> | O |
| Cut leaved cranesbill | <i>Geranium dissectum</i> | O |
| Cleavers | <i>Galium aparine</i> | F |
| Common forget-me-not | <i>Myosotis scorpioides</i> | O |
| Dog rose | <i>Rosa canina</i> | O |
| Ribwort plantain | <i>Plantago lanceolata</i> | O |
| Common dandelion | <i>Taraxacum officinale</i> | O |
| Creeping cinquefoil | <i>Potentilla reptans</i> | F |
| Sticky mouse-ear | <i>Cerastium glomeratum</i> | O |

Table C11 – Marginal Vegetation (Section of Reedbed around edge of Northern Waterbody)

| Common Name | Latin Name | Frequency (DAFOR) |
|-------------|-----------------------------|-------------------|
| Common reed | <i>Phragmites australis</i> | D |
| Yellow iris | <i>Iris pseudacorus</i> | A |
| Reedmace | <i>Typha latifolia</i> | O |

Table C12 – Marginal Vegetation (Reedbed South of Waterbody adjacent to Clough Lane)

| Common Name | Latin Name | Frequency (DAFOR) |
|-------------|-----------------------------|-------------------|
| Common reed | <i>Phragmites australis</i> | D |
| Yellow iris | <i>Iris pseudocorus</i> | O |
| Reedmace | <i>Typha latifolia</i> | R |

Table C13 – Amenity Grassland (East of Clough Lane)

| Common Name | Latin Name | Frequency (DAFOR) |
|---------------------|----------------------------|-------------------|
| Perennial rye-grass | <i>Lolium perenne</i> | D |
| Cock's foot | <i>Dactylis glomerata</i> | D |
| Common daisy | <i>Bellis Perennis</i> | A |
| Red clover | <i>Trifolium pratense</i> | O |
| Ribwort plantain | <i>Plantago lanceolata</i> | O |

Table C14 – Other Habitat (Circular Patch East of Waterbody to the North of Site)

| Common Name | Latin Name | Frequency (DAFOR) |
|------------------------|-------------------------------|-------------------|
| Bramble | <i>Rubus fruticosus</i> | D |
| Hard rush | <i>Juncus inflexus</i> | A |
| Weld | <i>Reseda luteola</i> | F |
| Common teasel | <i>Dipsacus fullonum</i> | O |
| Yarrow | <i>Achillea millefolium</i> | O |
| Yellow wort | <i>Blackstonia perfoliata</i> | R |
| Changing forget-me-not | <i>Myosotis discolor</i> | R |

Appendix D

TARGET NOTES

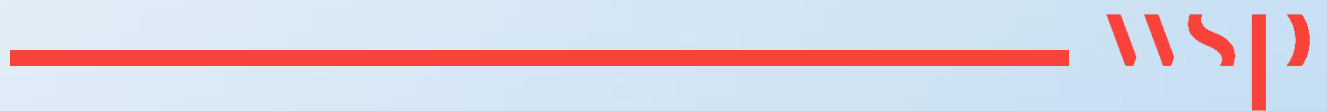


Table D1 - Target Notes

| Target Note Number | Target Note Description |
|---------------------------|---|
| TN1 | Scattered pieces of metal adjacent to earth bank. |
| TN2 | Accumulation of plastic pipes, barrels and other abandoned material scattered in the south west of the Site. Could provide basking and refuge for reptiles. |
| TN3 | Earth bank with active sand martin burrow and three rabbit burrows at bottom, in use. |
| TN4 | Two very small circular waterbodies to the south of the site within tall ruderal habitat. |
| TN5 | Woodpigeon nest, inactive within dense scrub to the north of the site |
| TN6 | Mammal gate within dense scrub/fence line to the north of the site. No obvious signs of recent use. See Photograph 25. |
| TN7 | Possible mink <i>Neovison vison</i> droppings on ledge in waterbody to the north of the Site. |
| TN8 | Culvert in standing water just off Clough Lane. |
| TN9 | Mammal paths through scrub |
| TN10 | Pedunculate oak with low bat roosting suitability as stated (see Table D2 and Photograph 8). |
| TN11 | Common toad found in dense scrub. |
| TN12 | Badger sett with approximately three entrances within dense scrub in the south of the site just north of the swamp. |
| TN13 | Bare earth mounds with rubble pile to the south west of the Site. |
| TN14 | Circular section of 'other habitat' with hard rush, bramble and accumulation of rubble |

Table D2 - Bat Tree Target Notes and Level of Roosting Suitability

| Bat Target Note Number | Tree Species | Tree Description | PRF No. and Type | PRF Height (m) | PRF Aspect | PRF Description | PRF Suitability Category |
|------------------------|--------------|---|------------------|----------------|------------|--|--------------------------|
| T1 (TN10) | Oak | Mature tree on bank by ditch and road with loose ivy coverage | 1: Ivy | N/A | N/A | Ivy coverage is not likely to provide features itself but may obscure features (However, healthy condition of tree suggests this is not likely), see Photograph 8. | Low |

Table D3 - Bat Structure Target Notes and Level of Roosting Suitability

| Bat Target Note Number | Bat Target Note Description | Bat Roost Suitability |
|------------------------|--|-----------------------|
| Building 1 | <p>Rectangular redbrick flat roof structure.</p> <p>PRF 1 – Timber framed window shutter with gaps between.</p> <p>PRF 2 – Some gaps in masonry between brick work on southern elevation – shallow cavities</p> <p>PRF 3 – Missing brick 7 cm x 4 cm gap in south east corner at approx. 6 m height</p> | Low |
| Building 4 | <p>Small red brick single storey substation with flat roof.</p> <p>PRF 1- slight gap in missing masonry between brickwork – 1 cm wide extending in horizontally</p> | Low |
| Building 5 | <p>Redbrick rectangular single storey structure with flat roof.</p> <p>PRF 1 - Concrete plinths separate internal rooms with concrete lintel – gap between each lintel (Photograph 7).</p> <p>PRF 2 – gap in brickwork above blue door</p> <p>PRF 3 – Large gap in central section where roofs join together on lintel and plinth – extends back into structure</p> <p>PRF 4 – Several gaps where concrete is missing – tight crevices 1cm x 4/5cm</p> | Moderate |
| Building 6 | <p>Single storey red brick structure – slight duo pitched roof with corrugated material (potentially asbestos). Building is separated into</p> | Low |

| Bat Target Note Number | Bat Target Note Description | Bat Roost Suitability |
|------------------------|---|-----------------------|
| | several rooms mostly open on one elevation. Lots of swallow nests within rooms of building. Small shallow gaps between top of brick walls and between sheets. | |
| Building 7 | <p>Disused two-storey building, constructed of red brick with metal sheet cladding placed around top floor. Flat roofed building, with small single storey extension on northern side.</p> <p>PRF 1 - Some windows were open or missing but internal side boarded up or with mesh covering.</p> <p>PRF 2 – Gap above metal shutter door on south side – full access into inside of building but appears to be limited roosting locations within structure</p> | Low |
| Building 8 | <p>Single storey red brick structure (substation building) with concrete flat roof – approx. 6 m x 5m.</p> <p>PRF 1 – Wooden door with missing section in top corner providing potential access point into structure</p> <p>PRF 2 –Missing brick on south elevation – low down (20 cm off ground) leading inside structure</p> | Low |
| Building 9 | <p>Derelict single storey red brick structure in fenced off area. Small building – approx. 3 m x 5 m. No roof present so completely open.</p> <p>PRF 1 - gap between brickwork above doorway – approx. 5 cm x 1.5 cm which likely extends in 5 cm</p> | Low |

NB: Buildings assessed as having negligible suitability for roosting bats have been omitted from the table above but can be seen on Figure 5

Appendix E

PHOTOGRAPHS



Table E1 - Photographs

Features with Roosting Suitability (See Figure 5)

Photograph 1 – Building 1



Photograph 2 – Building 4



Photograph 3 – Building 5



Photograph 4 – Internal of building 6



Features with Roosting Suitability (See Figure 5)

Photograph 5 – Building 7



Photograph 6 – Building 8



Photograph 7 – Building 9



Photograph 8 – Tree 1



Features with Roosting Suitability (See Figure 5)

Photograph 9 – Missing brick in Building 8



Photograph 10 – Missing concrete in Building 5



Site Photographs

Photograph 11 – Hardstanding and dense scrub to south west of the site (photograph orientation: south)



Photograph 12 – Hardstanding and tall ruderal habitat with successional dense scrub habitat behind (photograph orientation: south east)



Site Photographs

Photograph 13 – Hardstanding, tall ruderal, dense scrub and scattered broadleaved trees along Clough Lane/Entrance D to south of site (photograph orientation: south)



Photograph 14 – Bare Ground in south west of site with waste material/metal (TN3) in foreground and dense scrub behind (photograph orientation: south west)



Photograph 15 – Hardstanding to the west/centre of the Site with stationary vehicles in the background



Photograph 16 – Waterbody to north of the site with dense scrub and marginal vegetation around perimeter (photograph orientation north east)



Site Photographs

Photograph 17 – Tall ruderal habitat to north of the site, east of B9 (photograph orientation: south west)



Photograph 18 – Tall ruderal habitat to the north west of the site, with scattered scrub fringe in the foreground and dense scrub and B8 in background (photograph orientation: east)



Photograph 19 – Earth bank with sand martin burrows in the south west (photograph orientation: north west)



Photograph 20 – Waterbody in the south of the Site, adjacent to Clough lane with swamp and dense scrub in the background, marginal vegetation in the foreground and dense scrub to the east (photograph orientation: north)



Site Photographs

Photograph 21 – standing water drain perpendicular to Clough Lane to the south of the Site with dense scrub on each side and scattered broadleaved trees in the background (photograph orientation: west)



Photograph 22 – Circular parcel of ‘other habitat’ in the north of the Site with stationary vehicles in the background (photograph orientation: south)



Photograph 23 – Standing water to the south east of the Site along the southern boundary with semi-improved grassland habitat either side (photograph orientation: east)



Photograph 24 – Dense scrub habitat to the north of B1 (photograph orientation: south)



Site Photographs

Photograph 25 – Target note 6, mammal gate along northern boundary of Site (photograph orientation: north)



Photograph 26 – Hardstanding and building to the east of the Site with scattered broadleaved trees adjacent (photo orientation: east)





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