

File ref:

**County:** Nottinghamshire/ North Lincolnshire **Site name:** Misson Training Area

**District:** Bassetlaw/North Lincolnshire

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

**Local Planning Authority:** Bassetlaw District Council/North Lincolnshire Council

**National Grid Reference:** SK 714974 **Area:** 85.0 (ha) 212.5 (ac)

**Ordnance Survey Sheet 1: 50 000:** 112 **1: 10 000:** SK 79 NW

**Date Notified (Under 1949 Act):** **Date of Last Revision:**

**Date Notified (Under 1981 Act):** 28.02.1997 **Date of Last Revision:**

**Other Information:**

**Description and Reasons for Notification:**

Misson Training Area is a redundant military bombing range, forming one of the largest remaining tracts of fenland formerly typical of the Misson/Idle Levels of north Nottinghamshire and Lincolnshire. It supports a diverse range of semi-natural habitats, including standing open water, tall-herb fen, unimproved neutral and acidic grassland, dry oak woodland and nationally restricted wet woodland types. The breeding bird community associated with birch and willow scrub is notable, whilst the site is recognised as supporting a rich invertebrate fauna, in particular its assemblage of moths.

Wet woodland occupies much of the site on thin fen peats overlying Triassic Sherwood Sandstones. Downy birch *Betula pubescens* and grey willow *Salix cinerea*, together with occasional pedunculate oak *Quercus robur* and aspen *Populus tremula*, form what is very often a discontinuous canopy above a ground flora characterised by common reed *Phragmites australis* and purple small-reed *Calamagrostis canescens*. Varying amounts of meadowsweet *Filipendula ulmaria*, soft rush *Juncus effusus*, marsh bedstraw *Galium palustre*, bramble *Rubus fruticosus* agg., lesser pond sedge *Carex acutiformis* and hemp-agrimony *Eupatorium cannabinum* also occur. Patches of bogmoss *Sphagna* are locally developed in wetter, more acidic areas, together with notable populations of twayblade *Listera ovata*. Ferns occur on drier knolls and include narrow buckler-fern *Dryopteris carthusiana* and scaly male-fern *D. affinis*.

On alluvial soils to the west of the site, goat willow *Salix caprea*, almond willow *S. triandra* and osier *S. viminalis* form a dense shrub layer with *S. cinerea*, buckthorn *Rhamnus catharticus* and hawthorn *Crataegus monogyna*. The ground flora is less species-rich and is characterised by an abundance of nettle *Urtica dioica*, cleavers *Galium aparine*, great hairy cont...

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willowherb *Epilobium hirsutum* and bramble. The north-eastern part of the site contains drier woodland on windblown sand deposits dominated by pedunculate oak, downy birch, silver birch *Betula pendula* and an abundance of bracken *Pteridium aquilinum*. An extensive area of the locally uncommon climbing corydalis *Ceratocarpus claviculata* is confined to this community.

Open areas of the site support an intimate mosaic of plant communities, ranging from short acidic grassland, unimproved neutral grassland to tall herb fen. Closely-grazed swards of acid grassland occur along the southern sections of the site, dominated by wavy hair-grass *Deschampsia flexuosa*, heath bedstraw *Galium saxatile*, sweet vernal-grass *Anthoxanthum odoratum* and heath wood-rush *Luzula multiflora*, whilst herbs such as common knapweed *Centaurea nigra*, yellow rattle *Rhinanthus minor*, sneezewort *Achillea ptarmica*, bird's-foot-trefoil *Lotus corniculatus* and rough hawkbit *Leontodon hispidus* characterise areas of dry neutral grassland. Tall-herb fen communities are marked by extensive stands of purple small-reed with common reed, false oat-grass *Arrhenatherum elatius* and meadowsweet. Other fenland plants associated with this grassy fen meadow vegetation include ragged robin *Lychnis flos-cuculi*, yellow loosestrife *Lysimachia vulgaris*, marsh valerian *Valeriana dioica*, southern marsh orchid *Dactylorhiza praetermissa*, fen bedstraw *Galium uglinosum* and common meadow-rue *Thalictrum flavum*.

The interior and boundary drains which dissect the site hold areas of standing water and support interesting aquatic plant communities. Typical species include blunt-fruited water-starwort *Callitriche obtusangula*, opposite-leaved pondweed *Groenlandia densa* and thread-leaved water crowfoot *Ranunculus trichophyllus*. A number of regionally uncommon plants are associated with these ditches such as lesser water-plantain *Baldellia ranunculoides* and floating club-rush *Eleocharis fluitans*, which is found here at its only current Nottinghamshire locality.

The diversity of habitats found on the site supports a rich invertebrate fauna. The assemblage of moths is considered to be exceptional in a county context, supporting an unusually rich range of species associated with fenland habitats. In addition to the many nationally local species, a number of nationally rare and scarce species occur on the site and include the Wicken loosestrife moth *Monochroa conspersella*, dentated pug *Anticarsia sparsata*, cream-bordered green pea *Earias clorana* and angle-striped sallow *Enargia paleacea*. A nationally rare beetle *Corticaria unicolor* is associated with areas of over-mature birchwood.

The breeding bird community associated with birch and willow carr is notable and includes grasshopper warbler *Locustella naevia*, long-eared owl *Asio otus* and tree pipit *Anthus trivialis*, while animals such as grass snake *Natrix natrix* and great crested newt *Triturus cristatus*, with a restricted distribution in Nottinghamshire, occur on the site.