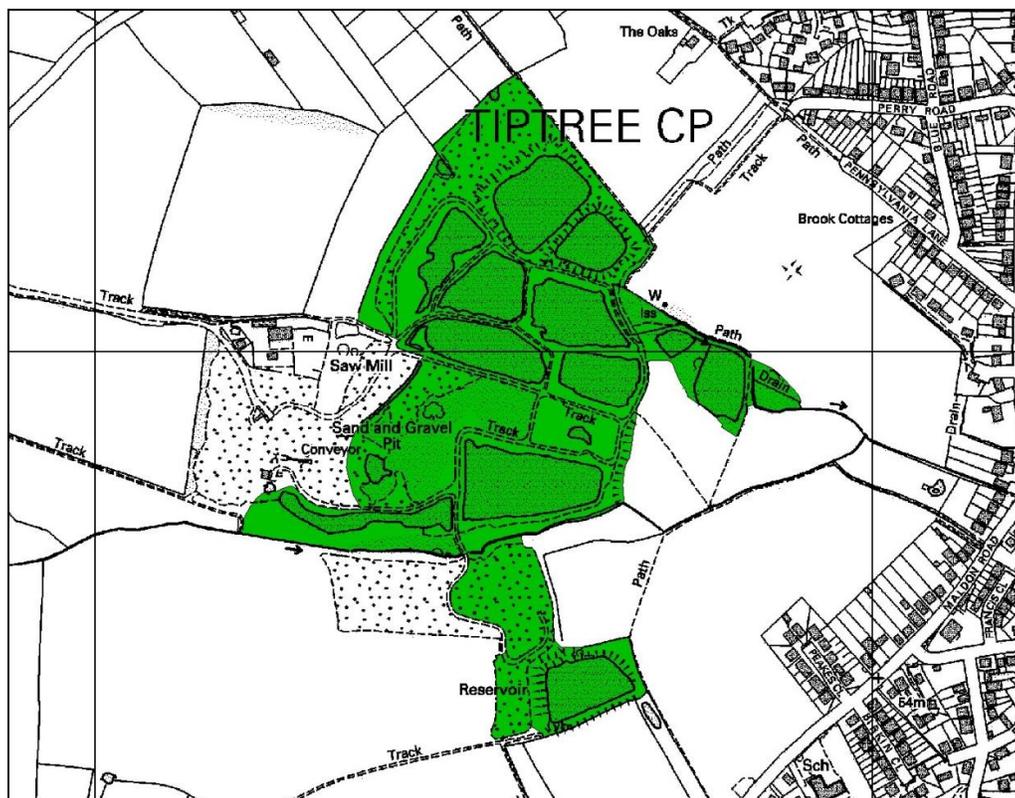


2008 Citation



Reproduced from the Ordnance Survey® mapping by permission of Ordnance Survey® on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright. Licence number AL 110020327

Co10 Inworth Grange Pits (22.5 ha) TL 885159

This series of pits is a mosaic of marsh, grassland, scrub, wood and bare sandy cliffs and banks. Areas of disturbed ground support species such as Common Cudweed (*Filago vulgaris*), Common Centaury (*Centaureum erythraea*), Bristly Oxtongue (*Picris echioides*), Perforate St John's-wort (*Hypericum perforatum*) and Common Bird's-foot-trefoil (*Lotus corniculatus*). Wood Sage (*Teucrium scorodonia*) and Sheep's Sorrel (*Rumex acetosella*) are also present. Damper areas also include Hard Rush (*Juncus inflexus*), Gipsywort (*Lycopus europaeus*) and Water-plantain (*Alisma plantago-aquatica*).

Wet willow (*Salix* spp.) woodland grows in central areas whilst scattered scrub occupies much of the higher ground, with Bramble (*Rubus fruticosus* agg.), Gorse (*Ulex europaeus*), and Broom (*Cytisus scoparius*). Recent Pedunculate Oak (*Quercus robur*) and planted Wild Service-tree (*Sorbus torminalis*) are also present along the southern margins of gravel pit lakes.

The mature ponds and lakes have a flora which includes Soft-rush (*Juncus effusus*), Bulrush (*Typha latifolia*) and Common Reed (*Phragmites australis*), although much of the margins are overhung by willows. The southern lake has sandy vertical banks and Common Spike-rush (*Eleocharis palustris*), an Essex Red Data List species, amongst the marginal plants. The northern lakes have only recently been decommissioned as working pits and have been modified and re-landscaped as part of a restoration scheme to create acid grassland. Here the

lake margins and the dry, cracking ground of a dried lagoon supports locally dominant rushes and tall swamp vegetation including Compact Rush (*Juncus conglomeratus*), Soft Rush, Common Reed, Bulrush and willowherbs (*Epilobium* spp.) amongst willow saplings.

Selection criteria: HCr2(c), HCr5, HCr6(b), HCr13, HCr20, HCr22, HCr26

BAP Priority Habitats: Open Mosaic Habitats on Previously Developed Land (UK);
Brownfield (Essex)

Date of selection: 1991

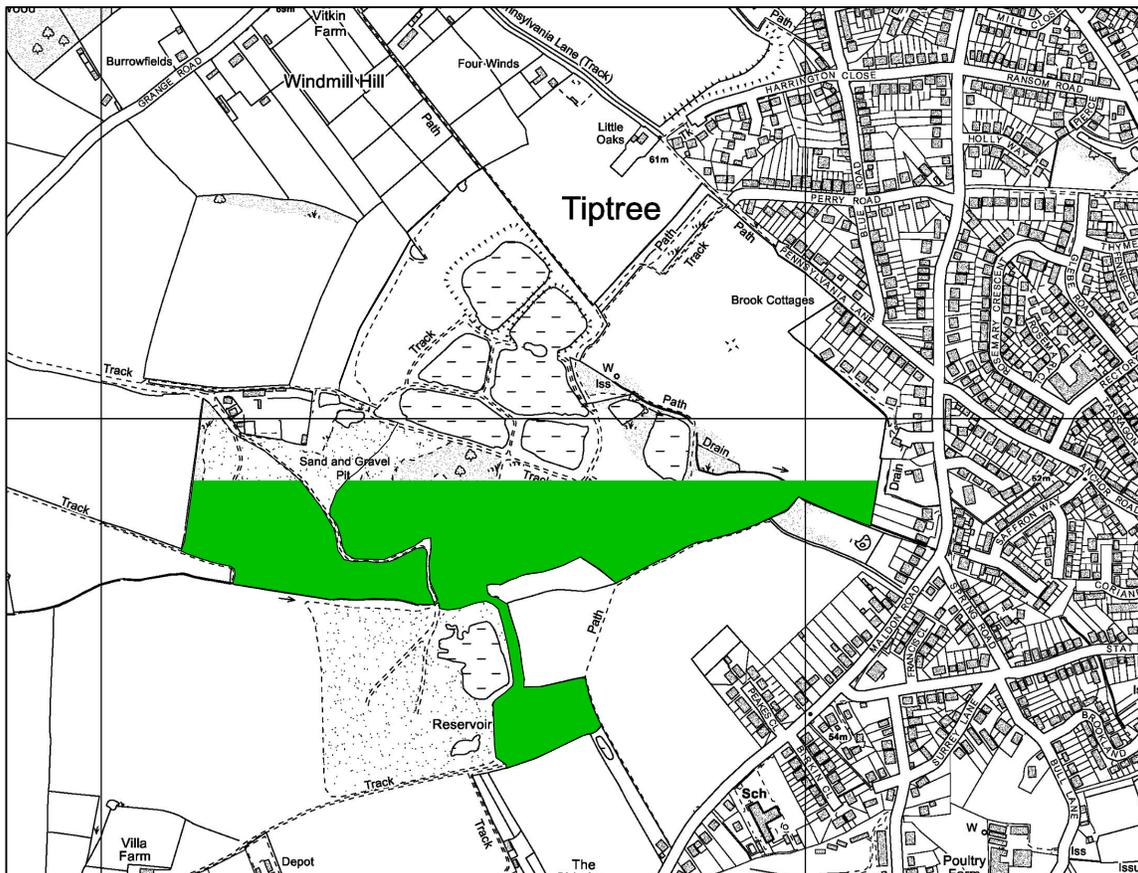
Date of last revision: December 2008

Partial review 2015

A significant extension of grassland habitat with habitat quality demonstrated by recent species records. Areas of post-industrial land also added following the completion of extraction work.

2015 Citation

Co10 Inworth Grange Pits, Tiptree (37.6 ha) TL 885159



Reproduced from the Ordnance Survey® mapping by permission of Ordnance Survey® on behalf of The Controller of Her Majesty's Stationery Office. © Crown Copyright. Licence number AL 110020327

This complex site is focussed on the now disused parts of Tiptree Quarry, comprising wet woodland, ponds, reedbeds and acid grassland, together with an old strawberry field to the east and some smaller meadows.

The quarry part of the site is made up of a series of lagoons, some containing deeper standing water, some shallower with broad fringes of Common Reed (*Phragmites australis*), emergent willow (*Salix* sp.) scrub and floating mats of pondweed (*Potamogeton* sp.), and some with different aged stands of wet willow woodland. Emergent and marginal plants species include Bulrush (*Typha latifolia*), Gipsywort (*Lycopus europaeus*), Soft-rush (*Juncus effusus*) and Water-plantain (*Alisma plantago-aquatica*) with the Essex Red Data List species Common Spike-rush (*Eleocharis palustris*). The fringes of the larger lagoons are now mostly shaded by willows.

Between the lagoons, the topography is varied with banks of exposed substrate, hummocks and hollows, which should provide good conditions for invertebrates. In the northwest part of the site is an extensive area landscaped to produce acid grassland, including an enclosure with introduced Heather (*Calluna vulgaris*). Other open parts support sparse swards and rough grassland, depending on their age and soil profile. Acid grassland species include Sheep's Sorrel (*Rumex acetosella*), Wood Sage (*Teucrium scorodonia*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Cudweed (*Filago vulgaris*), Common Centaury (*Centaureum erythraea*), Red Bartsia (*Odontites vernus*), Creeping Cinquefoil (*Potentilla reptans*) and parsley-piert (*Aphanes* sp.).

In places there is scattered scrub, with Bramble (*Rubus fruticosus* agg.), Gorse (*Ulex europaeus*), birch (*Betula* sp.) and Broom (*Cytisus scoparius*) amongst young Pedunculate Oaks (*Quercus robur*). There are some small areas of young oak woodland, planted in the 20th Century, and also scattered older oaks predating the quarry.

The former strawberry field to the east and the meadows to the south support unimproved grassland, albeit of recent origin. Six species of orchid have been recorded across this area including a significant population of Green-winged Orchid (*Orchis morio*) with smaller numbers of Bee Orchid (*Ophrys apifera*), Southern Marsh Orchid (*Dactylorhiza praetermissa*), Pyramidal Orchid (*Anacamptis pyramidalis*), Common Spotted Orchid (*Dactylorhiza fuchsii*) and Common Twayblade (*Neottia ovata*). The sward is dominated by Yorkshire-fog (*Holcus lanatus*) and bent (*Agrostis* sp.) and dense growth of willows. Other species in the meadows include Hope Trefoil (*Trifolium campestre*), Smooth Tare (*Vicia tetrasperma*), Fleabane (*Pulicaria dysenterica*) and Common Centaury (*Centaureum erythraea*).

The site also supports a good assemblage of breeding birds including in recent years more noteworthy species such as Pochard, Lapwing, Little Ringed Plover, Cuckoo, Skylark, Song Thrush, Cetti's Warbler, Willow Warbler and Linnet.

Ownership and Access

The site is in private ownership. Restoration activity still occurs in some areas and access is restricted to public footpaths along the southern and eastern edges of the quarry. The meadows have no public rights of way, but are heavily used by local residents.

Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land

Selection Criteria

HC3 – Other Priority Woodland Habitat Types on Non-ancient Sites

HC11 – Other Neutral Grasslands

HC13 – Heathland and Acid Grassland

HC27 – Post-industrial Sites

HC28 – Small-component Mosaics

SC1 – Vascular Plants

Rationale

Much of this site could be classed as post-industrial and it includes a wide range of features that are likely to be of significant benefit to invertebrates, although there is a lack of records to confirm this at present. Within the post-industrial area there are also clear examples of acid grassland and wet woodland communities that would meet HPIE descriptions. The meadows outside of the quarry area are essentially unimproved, despite a recent origin and their conservation value is sufficient to justify their selection, but here the Other Neutral Grasslands criterion is primarily used to define the extent of the habitat that is supporting the significant Green-winged Orchid population.

Condition Statement

Mostly favourable.

Management Issues

The field and its orchid populations are vulnerable to inappropriate management or the lack of it. Willow has become dominant over large parts of the field, although it has been cut during this review period. The field has also been proposed as a site for housing development. The habitats in the quarry part of the site will decline naturally as succession takes place and so management will be necessary to slow this process if the diversity of habitats and species is to be maintained.

Review Schedule

Site Selected: 2008

Reviewed: 2015 (extended)