

4.2.2 Improved Grassland

This habitat formed the vast majority of the grassland habitats present on site (see Figures 3-6). Of note was one of the fields located to towards the north of the Site, which had been sown almost exclusively with sweet vernal grass *Anthoxanthum odoratum*. The remainder of the improved grassland throughout the Site was very species-poor with perennial rye grass being dominant with some Yorkshire fog and common bent *Agrostis capillaris*. Forb species recorded included rare creeping buttercup *Ranunculus repens*, thyme-leaved speedwell *Veronica serpyllifolia*, common ragwort, broad-leaved dock *Rumex obtusifolius*, black medick *Medicago lupulina*, common field speedwell *Veronica persica*, selfheal *Prunella vulgaris*, curled dock *Rumex crispus*, dove's-foot cranesbill and common hogweed *Heracleum sphondylium*.



Figure 3: View of the improved grassland located within Field Parcel B.



Figure 4: View of the improved grassland located within Field Parcel C, sown with sweet vernal grass.



Figure 5: View of the improved grassland located within Field Parcel D, located to the south of the site within the former parkland.



Figure 6: View of the improved grassland located within Field Parcel E, located to the south of the site within the former parkland.

4.2.3 Semi-improved Grassland (species-poor)

This habitat was confined to the improved grassland field parcel verges and small areas adjacent to Field Parcel D (see Figure 7). Species recorded included common bent, Yorkshire fog and cock's foot. Forb species included common sorrel *Rumex acetosa*, common field speedwell *Veronica persica*, soft rush *Juncus effusus*, meadow cranesbill *Geranium pratense*, tufted vetch *Vicia cracca*, white clover, field horsetail *Equisetum arvense*, broad-leaved dock, creeping buttercup and dandelion *Taraxacum officinale* agg.



Figure 7: View of the semi-improved grassland (interspersed with developing scrub) located adjacent to Field Parcel E.

To the far south of the Site, within Field Parcels F & G lay an area dominated by semi-improved grassland (see Figure 8). Species recorded included sweet vernal grass, Yorkshire fog, common bent, perennial rye grass, and cock's foot. Forb species recorded included white clover, creeping buttercup, meadow buttercup *Ranunculus acris*, common sorrel, creeping thistle *Cirsium arvense*, bird's-foot trefoil *Lotus corniculatus*, meadow cranesbill *Geranium pratense* and common ragwort.



Figure 8: View of the semi-improved grassland located within Field Parcels F & G

4.2.4 Arable

This habitat can be confined to an area contained by Field Parcel D (see Figure 9). The arable comprised *Sorghum* sp with some *Triticale* sp. The crop has been sown to provide cover and a drive location for pheasants *Phasianus colchicus* being raised within the secondary woodland located directly to the south.



Figure 8: View of the arable habitat located on Site.

4.2.5 Dense Scrub

This habitat was confined to small areas located within or on the edge (see Figure 7 above) of Field Parcel E (see Figure 10). Species recorded included blackthorn *Prunus spinosa* and hawthorn *Crataegus monogyna*.



Figure 10: View of the dense scrub located within Field Parcel E.

4.2.6 Dense Bracken

This habitat was confined to the Field Parcel edges and located within the centre of Field Parcel E (see Figures 11-14 Appendix 1). Species recorded included dominant bracken *Pteridium aquilinum*.



Figure 11: View of the dense bracken located to the north of Field Parcel A.



Figure 12: View of the dense bracken located to the centre of Field Parcel E.



Figure 13: View of the dense bracken located to the centre of Field Parcel E.



Figure 14: View of the dense bracken located on the northern edge of Field Parcel G.

4.2.7 Pond

Six ponds are located within the Site. Two of these are former quarry sites of some antiquity located within the semi-natural ancient woodland component of the Site (see Figure 15 for northernmost pond). Both of these ponds receive large leaf fall from surrounding trees and are generally heavily shaded. Floating species are restricted to duck weed *Lemna minor* and a few marginal species such as soft rush.



Figure 15: View of the northernmost pond surrounded by dense woodland.

The next two ponds are located within Field Parcel E. Both of these ponds were fenced off from the surrounding grassland and surrounded by dense woody scrub and semi-mature trees (see Figures 16 & 17 respectively).



Figure 16: View of the pond located within Field Parcel E.



Figure 17: View of the other pond located within Field Parcel E.

The final two ponds are associated with a coarse fishing club located towards the south-western part of the Site. Due to presence of presumed carp, the water quality within these ponds is very poor with significant turbidity and a lack of general floating plant species bar a single specimen of white water lily *Nymphaea alba* (see Figures 18 & 19 respectively). These ponds are fed by a natural spring located just to the north of the two ponds, while a piped outflow taking excess water flows to the south underneath the south-western access track directly into a watercourse that flows from the west to the east through the southernmost part of the Site. This causes significant water clarity issues relating to suspended sediment and presumably nitrate impacts to the watercourse (see section 4.2.8).



Figure 18: View of one of the coarse fishing ponds



Figure 19: View of the other coarse fishing pond showing high levels of sediment loading.

4.2.8 Watercourse

A watercourse runs from the west to the east along the southern part of the site (see Figures 20 & 21). This watercourse is semi-natural in nature and has carved a meandering watercourse with relatively steep sides through the broadleaved and semi-natural woodland located within this area. Due to the topography, this area is likely prone to occasional flooding.

As mentioned previously, the water quality is very poor within the site due to the impact from the coarse fishing outflow pipe located at TQ 28897 24268.



Figure 20: View of the watercourse located along the southern Site boundary.



Figure 21: View of the same watercourse showing the high levels of sediment loading.

4.2.9 Broadleaved Plantation Woodland

This habitat was located along the majority of the western, central and part of the southern Site boundary. From studying historical aerial photographs, the western and central broadleaved plantation woodland was of more recent origin being planted in the late 1990s, while the plantation woodland located along part of the southern site boundary was probably planted in the late 1970/80s. All these areas were grassland prior to these plantings taking place. These are discussed in more detail below.

Western Plantation Woodland

This semi-mature woodland has been planted on a grid pattern from pedunculate oak *Quercus robur*, sweet chestnut *Castanea sativa*, ash *Fraxinus excelsior*, silver birch *Betula pendula*, willow *Salix sp*, cherry *Prunus avium*, a single specimen of *Cotoneaster sp.* and a proportion of poplar *Populus sp* (see Figure 22). The ground flora was generally sparse, species-poor and denuded with ground ivy *Glechoma hederacea*, pendulous sedge, common nettle, male fern, light scattered bramble, occasional dog's mercury *Mercurialis perennis* and ground elder *Aegopodium podagraria* with large amounts of bare ground. A large number of earthball fungi *Scleroderma citrinum*, sulphur tuft *Hypholoma fasciculare* and patches of common haircap *Polytrichum commune* were recorded within this woodland.

The woodland also supported a number of rides, presumable to provide vehicular access (see Figure 23). These rides supported an identical species composition to the rest of the plantation woodland ground flora located within this area, with the addition of marsh thistle *Cirsium palustre*, creeping buttercup *Ranunculus repens*, lesser celandine *Ficaria verna*, thin-spined wood sedge *Carex strigosa* and common bent *Agrostis capillaris*.



Figure 22: View of the broadleaved plantation woodland



Figure 23: View of one of the rides located within the plantation woodland

Southern Plantation Woodland

This woodland was comprised of ash with some Poplar species and a limited understorey of scattered hazel (see Figure 24 below). The ground flora was more varied with pendulous sedge, false brome *Brachypodium sylvaticum*, bramble, dense ivy, male fern *Dryopteris filix-mas* and common nettle. The vast majority of the ash had or was in the process of dying from ash die back *Hymenoscyphus fraxineus*. Some self-sown alder *Alnus glutinosa* was located along the watercourse.



Figure 24: View of the southern plantation woodland showing advanced ash die back related death of trees.