Sites of SSSI near Hillingdon site (UB8 3NN):

**Kingcup Meadows and Oldhouse Wood:**

COUNTY: BUCKINGHAMSHIRE SITE NAME: KINGCUP MEADOWS & OLDHOUSE WOOD

 Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authorities: Buckinghamshire County Council, South Bucks District Council National

Grid Reference: TQ030851

Ordnance Survey Sheet 1:50,000: 176 1:10,000: TQ08 NW TQ08 SW Date Notified (Under 1981 Act): 1992 Date of Last Revision: Area: 13.21 ha 32.64 ac

 Description and Reasons for Notification Kingcup Meadows and Oldhouse Wood constitutes an intimate mosaic of habitats adjacent to the River Alderbourne, which includes woodland, unimproved pastures and semi and unimproved meadowland. The fields are comprised of dry grassland, wet grassland and areas of fen and swampy vegetation. Unimproved grassland and wetland habitats have declined nationally as a result of agricultural improvement and are now very scarce within the county of Buckinghamshire. Oldhouse Wood has been managed in the past as coppice-with-standards and retains a wide range of native trees and shrubs, along with many woodland species indicative of ancient woodland.

Most of the site is situated on gravelly river alluvium and plateau terrace drift. The resulting soils vary from deep stoneless silty soils overlying aeolian drift on the eastern edge of the site to shallow, calcareous or non-calcareous fine to coarse loams.

All of the soils found along this section of the Alderbourne Valley are seasonally waterlogged or affected by ground water for much of the year. The two easternmost fields are managed as pasture and grazed by cattle, whereas the fields adjacent to Oldhouse Wood are drier and support a late annual hay crop with aftermath grazing.

Old anthills are a feature of the unimproved dry grassland. The grasses here include red fescue Festuca rubra and crested dog's tail Cynosurus cristatus, with herbs such as devil's-bit scabious Succisa pratensis, cat's-ear Hypochoeris radicata, common knapweed Centaurea nigra and ox-eye daisy Leucanthemum vulgare. The wetter grasslands support flood pasture communities with a high proportion of grasses such as creeping bent Agrostis stolonifera, cock's-foot Dactylis glomerata and Yorkshire fog Holcus lanatus. Several species of sedge are found including the brown sedge Carex disticha, pale sedge C. pallescens and common yellow sedge C. demissa.

These last two species are of very limited distribution in Buckinghamshire. A range of species characteristic of wet fens also occurs in these waterlogged areas, including marsh marigold Caltha palustris, ragged robin Lychnis flos-cuculi, sneezewort Achillea ptarmica, water mint Mentha aquatica, fen bedstraw Galium uliginosum and the locally uncommon marsh ragwort Senecio aquaticus. Where the ground has been poached and trampled the flora includes celery-leaved buttercup Ranunculus sceleratus, ivyleaved crowfoot R. hederaceus and bristle club rush Isolepis setacea, the latter species being rare in Buckinghamshire. Rushes Juncus articulatus, J. inflexus and J. effusus are abundant throughout the fields where conditions are particularly wet.

Depressions with standing water are characterised by floating sweet grass Glyceria fluitans or common spike rush Eleocharis palustris. Oldhouse Wood rises up from the banks of the Alderbourne. The upper slopes are of ash and field maple, with occasional hazel coppice, while the lower slopes are oak and birch woodland which now dominate a failed conifer crop. The ground flora contains many species indicative of ancient semi-natural woodland including bluebell Hyacinthoides non-scripta, wood anemone Anemone nemorosa, stinking iris Iris foetidissima and early purple orchid Orchis mascula.

The southern end of the wood is situated on very peaty wet soils alongside the river and here alder woodland with birch, willows Salix caprea and S. fragilis, alder buckthorn Frangula alnus and some planted poplar hybrids Populus spp. occur, along with a diverse field layer typical of such wet conditions. Herb Paris Paris quadrifolia, a species characteristic of ancient woods is to be found on these peaty soils in one of its few Buckinghamshire localities. The fauna of the site is poorly known, but the interest of these habitats is indicated by the presence of several species of dragonfly including the banded demoiselle Calopteryx splendens.

**Black Park**

COUNTY: BUCKINGHAMSHIRE SITE NAME: BLACK PARK Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authorities: Bucks County Council, South Bucks District Council National Grid

Reference: TQ013842

 Ordnance Survey Sheet 1:50,000: 176 1:10,000: TQ08 Date Notified (Under 1981 Act): 1990 Date of Last Revision: Area: 15.3 ha 37.8 ac Other information: Bucks County Council Country Park.

Description and Reasons for Notification Black Park SSSI is situated on the urban fringe of Slough, within Black Park Country Park and Colne Valley Regional Park. The site consists of a variety of habitats comprising dry and wet heath, alder carr, mixed and coniferous woodland and small areas of acid grassland. The heathland and alder carr are of particular importance, as both habitats are very rare in Buckinghamshire. They support specialised communities of plants and animals, including many that are rare or uncommon in the county.

The heathland has developed on acidic glacial gravels and Bunter pebbles. Lowland heathland such as this has declined in area nationally and regionally in recent years, through agricultural improvement, afforestation or urban development. The present heathland at Black Park re-established after a forest fire in 1976 destroyed trees which had been planted over what was once open heathland.

The area is managed by the removal of remaining conifers and the control of invading scrub species such as gorse, birch, sallows and pine. Heather Calluna vulgaris dominates the drier areas of heath with common gorse Ulex europaeus. Dwarf gorse Ulex minor, a species which is very rare in Buckinghamshire (only recorded at 12 sites) is also present.

Other species associated with areas of heathland include tormentil Potentilla erecta and the locally rare trailing tormentil Potentilla anglica, heath wood rush Luzula multiflora, sharp flowered rush Juncus acutiflorus and green veined sedge Carex binervis. In addition to these, species recorded include grasses such as sweet vernal grass Anthoxanthum odoratum, common bent Agrostis capillaris, Yorkshire-fog Holcus lanatus, creeping soft grass H. mollis, wavy hair and tufted hair grass Deschampsia flexuosa and D. cespitosa, and a variety of herbs such as common centaury Centaurium erythraea, common cat's-ear Hypochoeris radicata, wood sage Teucrium scorodonia, barren strawberry Potentilla sterilis, heath speedwell Veronica officinalis and corn mint Mentha arvensis.

Damper areas support ragged robin Lychnis floscuculi, gipsywort Lycopus europaeus, greater bird's foot trefoil Lotus uliginosus and hard and compact rushes Juncus inflexus and J. conglomeratus. In the wetter, peaty areas cross-leaved heath Erica tetralix occurs, together with sharp flowered rush, bulbous rush and heath rush Juncus bulbosus and J. squarrosus, purple moor grass Molinia caerulea and marsh pennywort Hydrocotyle vulgaris, a species rare in Buckinghamshire, and species such as tormentil, common cat's-ear, heath woodrush and perforate St John's wort Hypericum perforatum.

Areas of acidic grassland occur along the tracks and regularly mown, open areas. Here a variety of grasses and rushes dominate including mat grass Nardus stricta which is rare in the county, wavy hairgrass Deschampsia flexuosa, purple moor grass and cross-leaved heath, bulbous, soft and compact rush Juncus effusus and J. conglomeratus. Other species include tormentil, heath bedstraw Galium saxatile, cat's ear Hypochaeris radicata and heather.

Due to its proximity to London, Black Park was a popular haunt with Victorian entomologists. The warm, open conditions of heathland attract and support a rich fauna, including the bug Kleidocerys truncatulus, a species which OVER/ feeds on heather, sun-loving tiger beetles Cicindela campestris which occur in the open heathland and sandy areas, and the common ground hopper Tetrix undulata. The nationally rare Roesel's bush cricket Metrioptera roeseli which is primarily a coastal species, is present in some numbers in the wet heath.

Of the spiders which have been recorded in Black Park Episinus angulatus, Mangora acalypha and Agalenatea redii are commonly found on heather and low shrubs. Hypsosinga sanguinea, a spider with a local distribution in southern England, is also present.

Ancient oaks have also been shown to support nationally scarce beetle species indicative of the continuity of the dead wood habitat, including Pedicus depressus and Mycetophagus piceus. Eighteen species of butterfly have been recorded including purple hairstreak, white admiral, small heath and four species of skippers: the small, large, grizzled and Essex skipper.

Dragonflies and damselflies such as the Southern Aeshnea Aeshnea cyanea and large red damselfly Pyrrhosoma nymphula are also common sights feeding along the rides and ditches. An area of alder carr, which is a rare habitat type within Buckinghamshire, is situated along the feeder stream to the lake. Here, water-logged sphagnum bog with Sphagnum palustre and S. recurvum occurs beneath alder (some coppiced) and downy birch.

The ground flora is varied, with the locally common marsh violet Viola palustris and other specialities such as hard fern Blechnum spicata and lesser skullcap Scutellaria minor. It is also the only known site in Buckinghamshire for white sedge Carex curta. Other sedges include common yellow sedge and remote sedge Carex demissa and C. remota. The variety of habitats ranging from open heathland and scrub to woodland provide suitable conditions for a wide variety of breeding and wintering birds. The woodland supports species such as sparrowhawk, coal tit, goldcrest, firecrest and tree creeper, whilst the mosaic of heathland scrub and scattered trees provides suitable song posts and open areas for tree pipits. The hobby and the nightjar, summer visitors to Britain, whose numbers have declined in recent years so that they are now confined to southern counties where they are particularly associated with heathland, have been recorded. Populations of adder, grass snake, common lizard and smooth newt are also present.

**Denham Lock Wood**

County: Greater London Site Name: Denham Lock Wood District: Hillingdon Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authority: London Borough of Hillingdon

 National Grid Reference: TQ 055863

Area: 6.3 (ha) 15.5 (ac) Ordnance Survey Sheet 1: 50 000: 176 1: 10 000: TQ 08 NE Date Notified (Under 1949 Act): - Date of Last Revision: - Date Notified (Under 1981 Act): 1986 Date of Last Revision: - Other Information: A new site; adjoins Fray's Farm Meadows SSSI. Parts are covered by a Tree Preservation Order. Reasons for Notification: Denham Lock Wood is a diverse area of open mire and wet woodland which shows a zonation of wetland habitats occurring rarely in Greater London. The woodland herb flora is particularly varied and reflects subtle differences in topography and drainage.

The site occupies a low-lying and poorly drained area on the floor of the Colne Valley. Generally the water table is at or near the soil surface through most of the year and in parts there is periodic flooding as a result of local variations in topography. These conditions have favoured the establishment of distinctive ecological transitions from open flood plain mire, through willow carr to wet valley alderwood. Woods of alder Alnus glutinosa and crack willow Salix fragilis dominate a major part of the site and also form a scattered understorey within a derelict plantation of poplar. On the more waterlogged ground the willow characteristically occurs as a dense tangle of fallen and leaning trees.

These support assemblages of epiphytic mosses, ferns and herbs and add to the varied woodland structure. In drier parts a shrub layer is present comprising mainly hazel coppice Corylus avellana. Other shrubs such as grey willow Salix cinerea and the locally uncommon guelder rose Viburnum opulus also occur and in places form a transitional carr between the woodland and open mire.

The open areas of flood plain mire are characterised by plant communities typical of a rich fen habitat. A mix of greater pond-sedge Carex riparia and lesser pond-sedge Carex acutiformis is Denham Lock Wood (cont...) widely dominant and locally occurs in association with common reed Phragmites australis and reed canary-grass Phalaris arundinacea. Other well-represented species include meadowsweet Filipendula ulmaria, purple loosestrife Lythrum salicaria, and common comfrey Symphytum officinale.

These communities grade into a more open sedge-dominated sward on the waterlogged soils under the carr and woodland. In places where the watertable falls there is a particularly diverse woodland herb flora which shows an interesting pattern of plant associations. Included among the range of species present are bugle Ajuga reptans, male-fern Dryopteris filixmas, herb robert Geranium robertianum, dog's mercury Mercurialis perennis, bramble Rubus fruticosus, red campion Silene dioica and shade tolerant plants of the open mire habitat. Derelict drains support other herbs such as marsh-marigold Caltha palustris, an uncommon species in Greater London due to the decline of similar wetland areas.

**Fray's Farm Meadows**

County: Greater London Site Name: Fray's Farm Meadows District: Hillingdon Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authority: Hillingdon

 National Grid Reference: TQ 057861

 Area: 28.2 (ha) 69.8 (ac) Ordnance Survey Sheet 1: 50 000: 176 1: 10 000: TQ 08 NE Date Notified (Under 1949 Act): 1981 Date of Last Revision: - Date Notified (Under 1981 Act): 1984 Date of Last Revision: - Other Information: Reasons for Notification: Fray's Farm Meadows are one of the last remaining examples of relatively unimproved wet alluvial grassland in Greater London and the Colne Valley.

The meadows contain a variety of grassland communities which range from the grazed grassland of sweet vernal-grass Anthoxanthum odoratum, crested dog's-tail Cynosurus cristatus and perennial rye-grass Lolium perenne through to areas of tall sedge dominated marshy grassland with lesser pond sedge Carex acutiformis and reed-grass Glyceria maxima. The linear features of the site - ditches, hedges and railway embankment - add further habitat diversity, and contribute to the richness of plants and animals present.

In addition to the commoner sedges and grasses the meadows contain a number of species characteristic of old grassland such as lady's smock Cardamine pratensis and large bird's trefoil lotus uliginosus. Also found are plants like ragged robin Lychnis flos-cuculi, and marsh marigold Caltha palustris which are becoming increasingly uncommon in the London area due to habitat destruction. Purple loosestrife Lythrum salicaria and common skullcap Scutellaria galericulata grow along ditch banks while water plantain Alisma plantago-aquatica, water cress Rorippa nasturtium-aquaticum, water forget-me-not Myosotis scorpioides and amphibious bistort Polygonum amphibium are amongst the common plants in the ditches.

The Fray's River has a similar flora to the ditches but also includes arrow-head Sagittaria sagittifolia. The entomological interest of the site is well documented with a good variety of dragonflies and butterflies recorded from this section of the Colne Valley.

The meadows also provide good cover for waders and wildfowl throughout the year and wintering species include Jack snipe, snipe, lapwing, teal and shoveler. With the loss of washland areas throughout London the site becomes increasingly valuable as a relict habitat.

**Old Rectory Meadows**

COUNTY: BUCKINGHAMSHIRE SITE NAME: OLD RECTORY MEADOWS Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authorities: South Bucks District Council

National Grid Reference: TQ033874

 Ordnance Survey Sheet 1:50,000: 176 1:10,000: TQ08 NW Date Notified (Under 1949 Act): 1972 Date of Last Revision: Date Notified (Under 1981 Act): 1982 Date of Last Revision: Area: 7.93 ha 19.6 ac Description and Reasons for Notification An exceptional area on the outskirts of London lying on either side of the River Misbourne on alluvium. It contains a range of grassland types, notably base-rich and poor marsh, wet alluvial meadows and water meadows with grazed wet and damp meadows, as well as alder carr woodland. The soil is a calcareous alluvial gley.

The grassland within the site consists of unimproved wet communities dominated by tufted hair-grass Deschampsia cespitosa, tall fescue Festuca arundinacea, Yorkshire fog Holcus lanatus, sharp-flowered rush Juncus acutiflorus, soft rush J. effusus, common sedge Carex nigra, brown sedge C. disticha and meadowsweet Filipendula ulmaria. Locally purple moor-grass Molinia caerulea, creeping buttercup Ranunculus repens and reed sweet-grass Glyceria maxima are dominant. Amongst other species present in the rich flora are marsh pennywort Hydrocotyle vulgaris, fen bedstraw Galium uliginosum, lesser spearwort Ranunculus flammula, marsh valerian Valeriana dioica and carnation sedge Carex panicea. Several plants that are rare in Buckinghamshire such as marsh arrowgrass Triglochin palustris, bogbean Menyanthes trifoliata and southern marsh-orchid Dactylorhiza praetermissa occur also.

The irregular tussocky structure of the grassland, created by horse and cattle grazing, provides excellent habitats for insects. The large area of woodland south of the river, and several narrow stands along the drains which feed into the river from the north, consist almost entirely of alder; only around the margins are other tree species, primarily crack willow Salix fragilis, present.

The ground flora is dominated by common nettle Urtica dioica, bramble Rubus fruticosus, meadowsweet Filipendula ulmaria, hedge woundwort Stachys sylvatica, yellow iris Iris pseudacorus and broad buckler-fern Dryopteris dilatata.

**Stoke Common**

COUNTY: BUCKINGHAMSHIRE SITE NAME: STOKE COMMON Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authorities: South Bucks District Council, Buckinghamshire County Council

 National Grid Reference: SU985853

 Ordnance Survey Sheet 1:50,000: 175 1:10,000: SU98 NE, SU98 SE Date Notified (Under 1949 Act): 1972 Date of Last Revision: Date Notified (Under 1981 Act): 1984 Date of Last Revision: Area: 83.18 ha 205.54 ac Other information: The entire site is Registered Common Land (cl 12). Description and Reasons for Notification An area of wet and dry heath on glacial gravels over London Clay. Stoke Common is the last remnant of a tract of heathland formerly extending from Iver Heath to Littleworth Common, gradually lost to building, mineral extraction, agriculture and forestry.

Pockets of birch, pine and mixed woodland illustrate classic sequences of plant succession, while more open communities in which mosses predominate show the crucial role of sporadic fires in interrupting this process. There are several ponds on the common. On the open heath the drier areas support ling Calluna vulgaris, with dwarf gorse Ulex minor and occasional bell heather Erica cinerea and petty whin Genista anglica. Bracken Pteridium aquilinum is dominant in places; elsewhere the vegetation is more grassy, with purple moor and wavy hair-grasses Molinia caerulea and Deschampsia flexuosa, and heath rush Juncus squarrosus, interspersed with the more local heath and mat grasses Danthonia decumbens and Nardus stricta, the sedge Carex demissa and the rush Juncus tenuis. Pre-war cultivation of parts of the heath appears to have favoured the establishment of green-winged and heath spotted orchids Orchis morio and Dactylorhiza maculata spp. ericetorum and the adder's tongue fern Ophioglossum vulgatum, all uncommon in the county. Those parts of the heath more permanently waterlogged support a greater abundance of Molinia and rushes (additional species being Juncus bulbosus, J. bufonius and J. acutiflorus, all especially common along paths and rides), as well as cross-leaved heath Erica tetralix. Local plants include creeping willow Salix repens, lousewort Pedicularis sylvatica, marsh speedwell Veronica scutellata and deer-grass Trichophorum cespitosum spp. germanicum. Bog mosses are unusually varied, including Sphagnum palustre, S. rubellum. S. subsecundum, S. comoactum and S. papilosum. Some of these occasionally support sundew Drosera rotundifolia. In all parts of the heath, burning encourages the proliferation of the liverwort Marchantia polymorpha and the mosses Polytrichum juniperinum and P. commune, the last two persisting for several years. Gorse, aspen, alder buckthorn Frangula alnus and birch form dense thickets, the last, as well as Scots pine, occurring also in single-species stands. All of these contribute, with oak, to the areas of mixed woodland which fringe parts of the common. Here too, hazel, holly and rowan occur, and the ground flora includes brambles and common cow-wheat Melampyrum pratense. There is a rich and interesting invertebrate fauna, particularly moths, among which notable species include the beautiful brocade Hadena contigua, chevron Lygris testata and great oak beauty Boarmia roboraria. The dusky cockroach Ectobius lapponicus has been recorded, and the heath is one of the few sites in Buckinghamshire for the bog bush cricket Metrioptera brachyptera. Adder Vipera berus and common lizard Lacerta vivipara are both regularly seen.

**Wraysbury Reservoir**

COUNTY: SURREY SITE NAME: WRAYSBURY RESERVOIR DISTRICT: SPELTHORNE DISTRICT Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended. Local Planning Authority: Spelthorne District Council

 National Grid Reference: TQ 025745

 Area: 205.03 (ha.) Ordnance Survey Sheet 1:50,000: 176 1:10,000: TQ 07 NW Date Notified (Under 1949 Act): – Date of Last Revision: – Date Notified (Under 1981 Act): 26 October 1999 Date of Last Revision: – Reasons for Notification: Wraysbury reservoir regularly supports nationally important numbers of wintering cormorant Phalacrocorax carbo, great crested grebe Podiceps cristatus and shoveler Anas clypeata. Description: Wraysbury Reservoir is an artificially embanked reservoir constructed around 1970. The reservoir also support notable numbers of wintering gadwall Anas strepera.

**Staines Moor**

County: Surrey Site Name: Staines Moor District: Spelthorne Status:

 Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 Local Planning Authority: Spelthorne Borough Council

 National Grid Reference: TQ 040730

 Area: 513.6 (Ha) 1269.1 (Acres) Ordnance Survey Sheet: 1:50,000 : 176 1:10,000: TQ 07 SW, NW, SE Date Notified (Under 1949 Act): 1955 Date of last Revision: 1975 Date Notified (Under 1981 Act): 1984 Date of last Revision: - Reasons for Notification: The site chiefly consists of Staines Moor, a semi-natural stretch of the River Colne which flows through it, and three adjacent reservoirs.

Staines Moor represents the largest area of alluvial meadows in Surrey and supports a rich flora while the reservoirs hold nationally important populations of wintering wildfowl. A pond at the site carries an aquatic flora which is of national importance; this flora includes one plant which is extremely rare in Britain.

The alluvial deposits of Staines Moor Poyle meadows (TQ 033753) and Shortwood Common (TQ 048717) lie above river sands and gravels. There is great variation in terrain and drainage and the alluvial meadows are consequently an intricate juxtaposition of a wide range of grassland types. Several plant species which have a restricted distribution in Surrey are present in the meadows. In addition to the River Colne and the reservoirs open water habitats are represented by a small stretch of the River Wraysbury and by open ditches and ponds.

A belt of scrub, flanked by rough grassland lines the old railway embankment in the west of the site and woodland is present in places. Wintering wildfowl and wading birds use Staines Moor as an alternative ground to the reservoirs and a number of birds breed on the moor.

The alluvial meadows have not been subject to intensive agricultural use in recent years; this factor, combined with the large size of the meadows and the richness diversity of their flora, is responsible for the importance of these grasslands to wildlife.

The plant communities of the alluvial meadows are complex but range from dry grassland dominated by red fescue Festuca rubra, sweet vernal grass Anthoxanthum odoratum, bent grass Agrostis capillaris an sheep's sorrel Rumex acetosella to wet communities with marsh fox-tail Alopecurus geniculatus, tussock grass Deschampsia cespitosa, hard rush Juncus inflexus and floating sweet-grass Glyceria fluitans. Depressions with a permanently high water table occur throughout the meadows and support a fen-type flora with reed sweet-grass Glyceria maxima, reed canarygrass Phalaris arundinacea and yellow flag Iris pseudacorus. These alluvial meadows support one plant which is uncommon in Britain: small water-pepper Polygonum minus. Several other plants which occur are uncommon in the County, these include brown sedge Carex disticha, southern marsh orchid Dactylorhiza praetermissa, marsh stitchwort Stellaria palustris, strawberry clover Trifolium fragiferum, marsh arrowgrass Triglochin palustris, meadow rue Thalictrum flavum and upright chickweed Moenchia erecta. Three other plants which are scarce in Surrey occur on Shortwood Common, these are wormwood Artemisia absinthium wild clary Salvia verbenaca and Bermuda grass Cynodon dactylon. Scrub on the old railway embankments consists of hawthorn Crataegus monogyna, sallow Salix cinerea, birch Betula pendula and pedunculate oak Quercus robur.

The adjacent rough grassland is dominated by cocksfoot Dactylis glomerata, tall fescue Festuca arundinacea, tussock grass Deschampsia cespitosa and thistles. Woodland is present along Bonehead ditch and at the southern end of the old railway; these woodlands consist of crack willow Salix fragilis, sycamore Acer pseudoplatanus, birch and pedunculate oak. Mature hedgerows of hawthorn, oak and crack willow line the drains south of Lower Mill Farm (TQ 035741) and are present in Poyle meadows.

The areas of open water support a rich and varied flora. The rivers carry stands of tall fen vegetation with common reed Phragmites australis, rushes Juncus species and yellow flag Iris pseudacorus. Water crowfoot Ranunculus peltatus, an uncommon plant in Surrey, occurs in this stretch of the River Colne.

The ditch flora includes stands of tall fen vegetation and small aquatic plants such as arrowhead Sagittaria sagittifolia, water-cress Rorippa nasturtium-aquaticum and thread-leaved water-crowfoot Ranunculus trichophyllus. The ponds carry a tall fen flora which includes common reed, rushes, yellow flag, trifid burmarigold Bidens tripartita and great reedmace Typha latifolia; plants of open water which are present include white waterlily Nymphaea alba, water fern Azolla filiculoides and waterstarworts Callitriche species. A number of uncommon plants occur in the ponds at this site including one of only three known British localities of the brown galingale Cyperus fuscus. Other plants which have a restricted distribution nationally are orange foxtail grass Alopecurus aequalis, needle spike-rush Eleccharis acicularis and sharp-leaved pondweed Potamogeton acutifolius. Several other aquatic plants are scarce in Surrey including sweet flag Acorus calamus, alternate-flowered water-milfoil Myriophyllum alterniflorum and greater bladderwort Utricularia vulgaris. Although the flora of the reservoirs is of limited interest their large expanse of open water and the bare muds on their margins provide the ideal habitat for some birds, particularly wildfowl and waders.

The reservoirs carry over 1% of the total British wintering populations of tufted duck, pochard, goosander and shoveler; the numbers of shoveler are also internationally significant. Other birds which winter on the reservoirs in large numbers include wigeon, teal, garganey, goldeneye and great crested grebe. Staines Moor regularly supports a large flock of wintering golden plover and redshank, ruff, snipe and dunlin are other wading birds which travel between the moor and the reservoirs in winter.

In recent years Staines Moor has carried up to six wintering short-eared owls and other raptors, such as buzzard and hen harrier, have been recorded on passage. Birds which regularly breed on Staines Moor include yellow wagtail, lapwing and meadow pipit. In all 130 species of bird have been recorded from the site in recent years. Although Staines Moor has not been well studied for invertebrates it does support the oldest known anthills of Lasius flavus in Britain; some of these anthills are estimated to be 180 years old and they have considerable research value.

In addition over sixty species of mollusc have been recorded from the meadows and ditches while the areas of open water and fen support several species of dragonfly.