Warwick District Local Plan Additional Site Options Ecological Assessment

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull

Warwickshire Wildlife Trust

Ecological Services Warwickshire County Council

December 2015

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INTRODUCTION

Warwick District Local Plan

Warwick District Council commissioned the Habitat Biodiversity Audit (HBA) and Warwickshire Biological Records Centre (WBRC) to assess the ecological implications of the additional sites requirement for the current Warwick District Local District Plan. This report makes reference to the 2008 Warwick District Habitat Assessment (Pullar Sarah and Rowe Gina, 2008) where the additional sites were previously recorded in the 2008 report.

The 2008 report identified 40 land parcels under national planning guidance note Planning Policy Statement 1 (PPS1). This latest report assesses a selection of additional sites identified by WDC refers to the changes to national planning guidnace as set out in the National Planning Policy Framework (NPPF) (Communities and Local Government, 2012). The 2015 report makes use of additional information added to the Phase 1 survey including bio-diversity offsetting distinctiveness score and connectivity mapping.

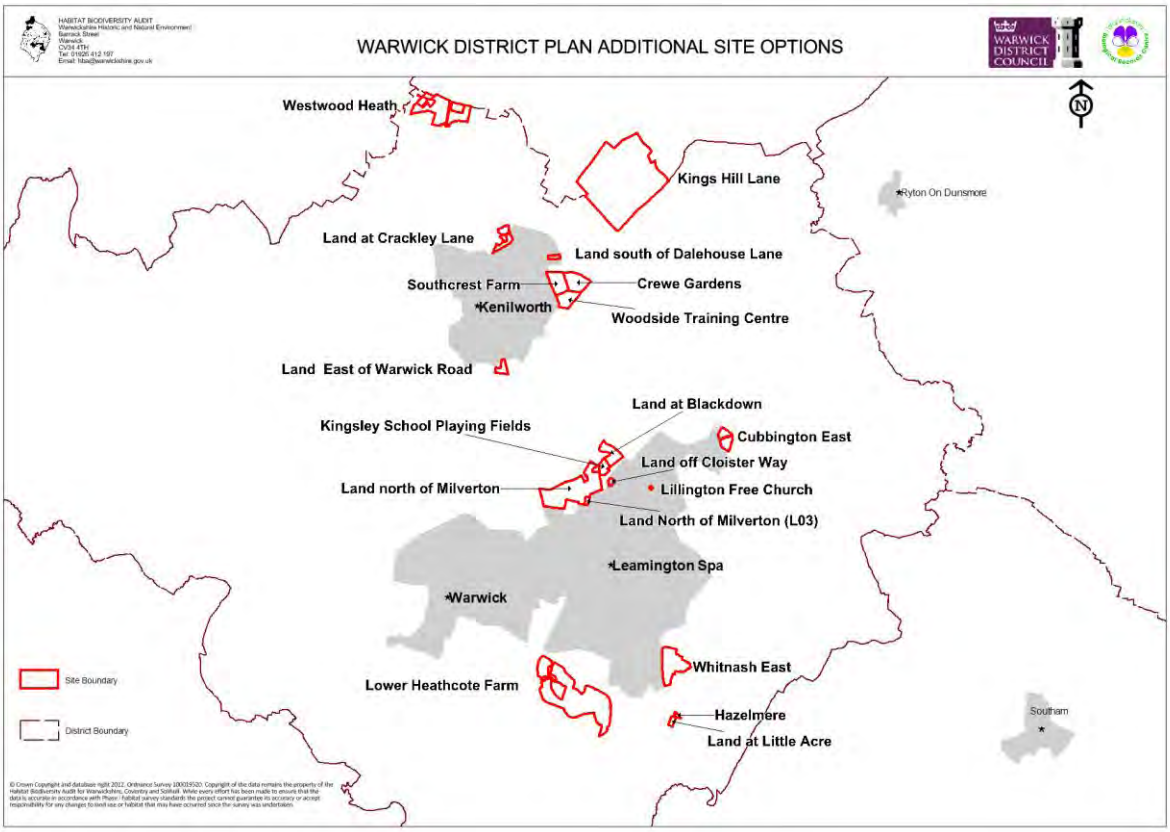
This report also compliments two reports commissioned by Warwick District Council titled *Warwick District Council Landscape Sensitivity and Ecological & Geological Study* (WCC Ecological Services & Habitat Biodiversity Audit.2013) and the *Warwick District Gypsy and Traveller Sites Habitat Assessment* (HBA and Ecological Services WCC, 2013).

Sites Proposed for allocation:

- EAST OF WARWICK ROAD, KENILWORTH
- KINGS HILL LANE, FINHAM
- LAND AT WESTWOOD HEATH
- LAND NORTH OF MILVERTON
- LOWER HEATHCOTE FARM (ADDITIONAL)
- SOUTHCREST FARM, CREWE GARDENS & WOODSIDE TRAINING CENTRE
- CUBBINGTON EAST
- HAZELMERE & LAND AT LITTLE ACRE
- WHITNASH EAST

Sites that maybe proposed for allocation

- LAND OFF CLOISTER WAY, LEAMINGTON SPA
- LILLINGTON FREE CHURCH, CUBBINGTON ROAD, LEAMINGTON SPA
- KINGSLEY SCHOOL PLAYING FIELDS
- LAND AT BLACKDOWN
- LAND AT CRACKLEY LANE, COVENTRY ROAD & PLAYING FIELDS



The Warwickshire, Coventry and Solihull Habitat Biodiversity Audit

The Habitat Biodiversity Audit (HBA) Partnership for Warwickshire, Coventry and Solihull has been surveying and maintaining the Phase 1 habitats mapping for the Warwickshire sub-region since the project's inception in1995. The project is the longest running project of its kind in the country. The partnership includes the local planning authorities, Warwickshire County Council and Warwickshire Wildlife Trust as the lead partners, with advice and support from Natural England and the Environment Agency.

In addition to the Phase 1 habitat survey project, the HBA also manages the Local Wildlife Sites Project (LWSP) on behalf of the partnership. The LWSP commenced in 2000 and has identified, surveyed and designated over 500 Local Wildlife Sites (formerly known as Sites of Importance for Nature Conservation or SINCs). The process and procedures for the designation of Local Wildlife Sites is documented in The Green Book (Local Wildlfe Sites Project, 2013 rev.ed).

Designated Sites

Under the National Planning Policy Framework section 113 designated sites (Communities and Local Government, 2012), local planning authorities should set criteria based on policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.

Each proposed development site for this report has been assessed for the presence of a wildlife site designation either within the site boundary, adjoining the site boundary or close by the site where habitat connectivity is an important consideration. Designated sites can be considered as core areas as set out in the Lawton Report Making Space for Nature (Lawton D.H., 2010).
The list of designated wildlife areas reported include SSSIs, Local Nature Reserves, Local Wildlife Sites, Local Geological Sites and Ancient Woodlands.

The Warwickshire Sub-Region Phase 1 Habitat Mapping

The HBA Phase 1 habitat survey uses the standard survey methodology as set out in the JNCC Hand book for Phase 1 habitat Survey (JNCC, 2010) with some amendments to suit the Warwickshire sub-region as set out in the HBA Phase 1 Survey Guidance Notes (Habitat Biodiversity Audit, 2012). The HBA Phase 1 habitat survey has been in continuous existence since the first surveys started in 1996. The

survey has remained largely unchanged since 1996 providing an invaluable record of land use change and habitat conservation.

The majority of the Warwick District additional site areas are current having been surveyed in the field within the last five years. Figure 1 and Figure 2 shows a typical Phase 1 habitat map consisting of 47 area land use and habitat categories and 15 linear features based on the OS Master map supplemented by aerial photography commissioned by Warwickshire County Council in 2013.

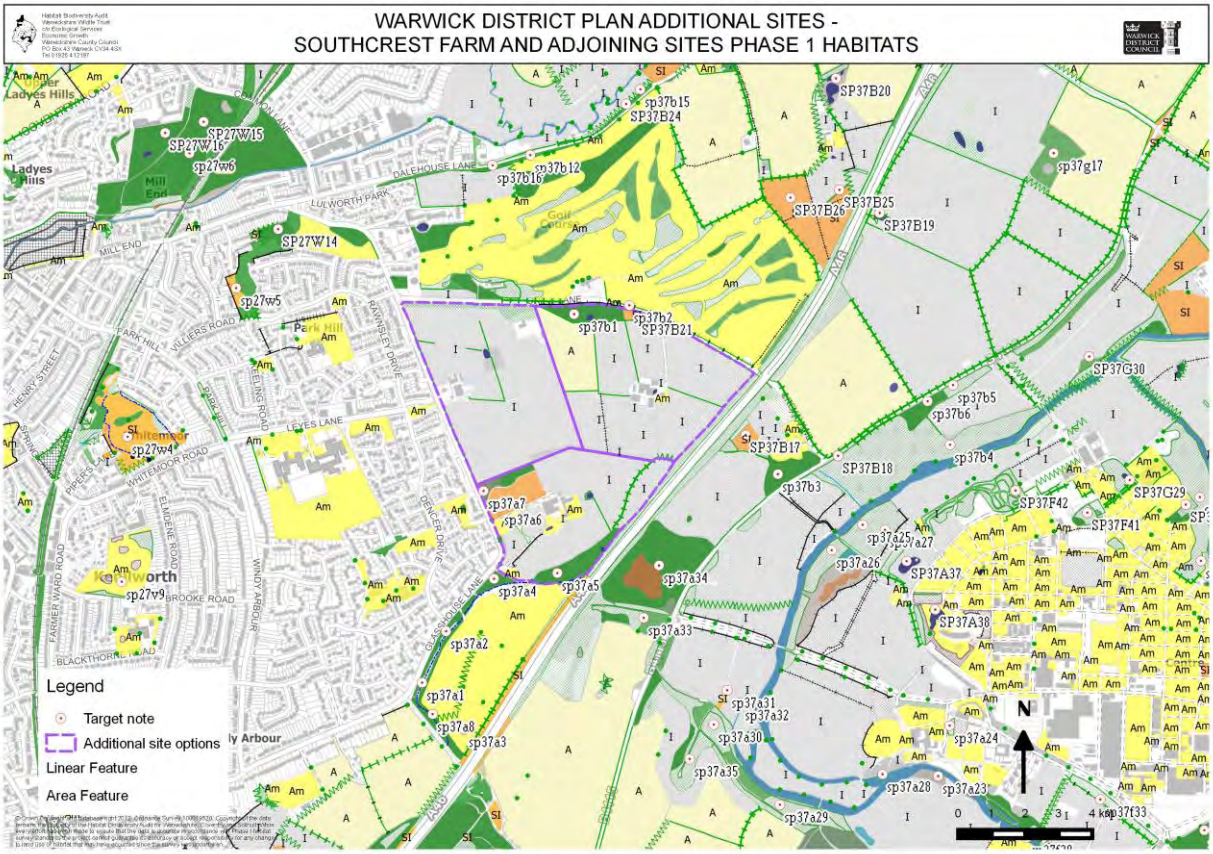


Figure 1 Phase 1 Habitat Map

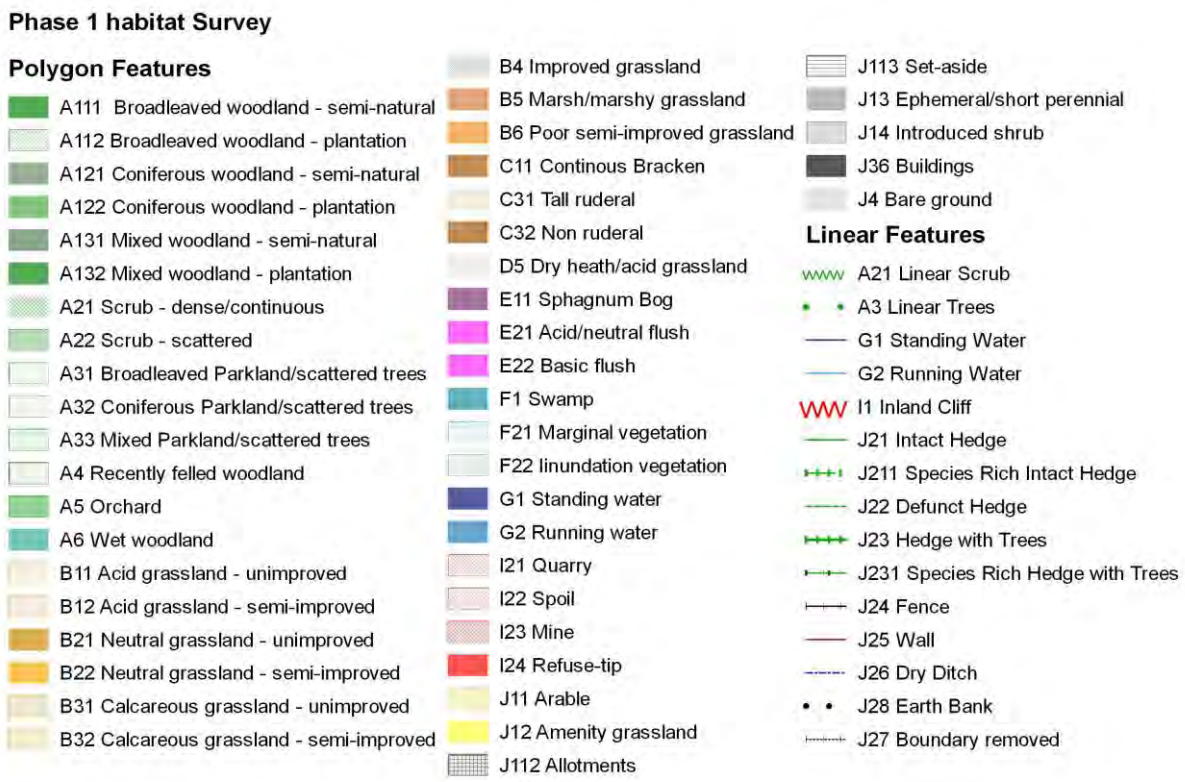


Figure 2 Phase 1 Habitat Key

Phase 1 Target Notes

The Phase 1 target notes have been included in this report for each site as part of the habitat description. Target notes are an essential part of the Phase 1 survey because they provide:

- Supplementary information on habitats and other areas of interest including for example species composition, site structure and site management;
- Information on sites too small to map and on sites where habitat mapping is found to be difficult or doubtful, for example not being able to gain direct access to a site or mixed use areas;
- Information on sites previously surveyed and sites requiring further survey including identifying and recommending potential local wildlife sites or reporting on the condition of an existing local wildlife site.

The target note should always describe; the habitat type or types present together with their dominant plant species; any other species of note including both flora and fauna; and the need for further survey if relevant.

In addition to these the target note may also record where possible a description of the site including topography and substrate; plant communities present; rare plants

and animals; details of ownership if available; site protection and management including any activities detrimental or impacting on the site; and reference to any other surveys or site designations for example Local Wildlife Site or a Local Nature Reserve.

Habitat Distinctiveness Mapping

Warwickshire County Council Ecological Services lead one of the six Defra Biodiversity Offsetting pilots (2012-2014) on behalf of all the Local Planning Authorities within Warwickshire, Coventry and Solihull (the sub-region). This pilot used the HBA and LWSP data as the evidence base to deliver offsetting through a sub-regional Green Infrastructure Strategy. For the pilot study the Phase 1 habitat survey data was scored according to a set of habitat criteria developed by Defra (Defra 2012) and refined by WCC Ecological Services in consultation with partners to create the current set of distinctiveness mapping scores used in this report.

The distinctiveness scoring methodology is available from Defra's at: http://www.defra.gov.uk/environment/biodiversity/uk/offsetting/. The Warwickshire biodiversity offsetting definitions and criteria for are available from Ecological Services Warwickshire County Council (Warwickshire County Council, 2013)

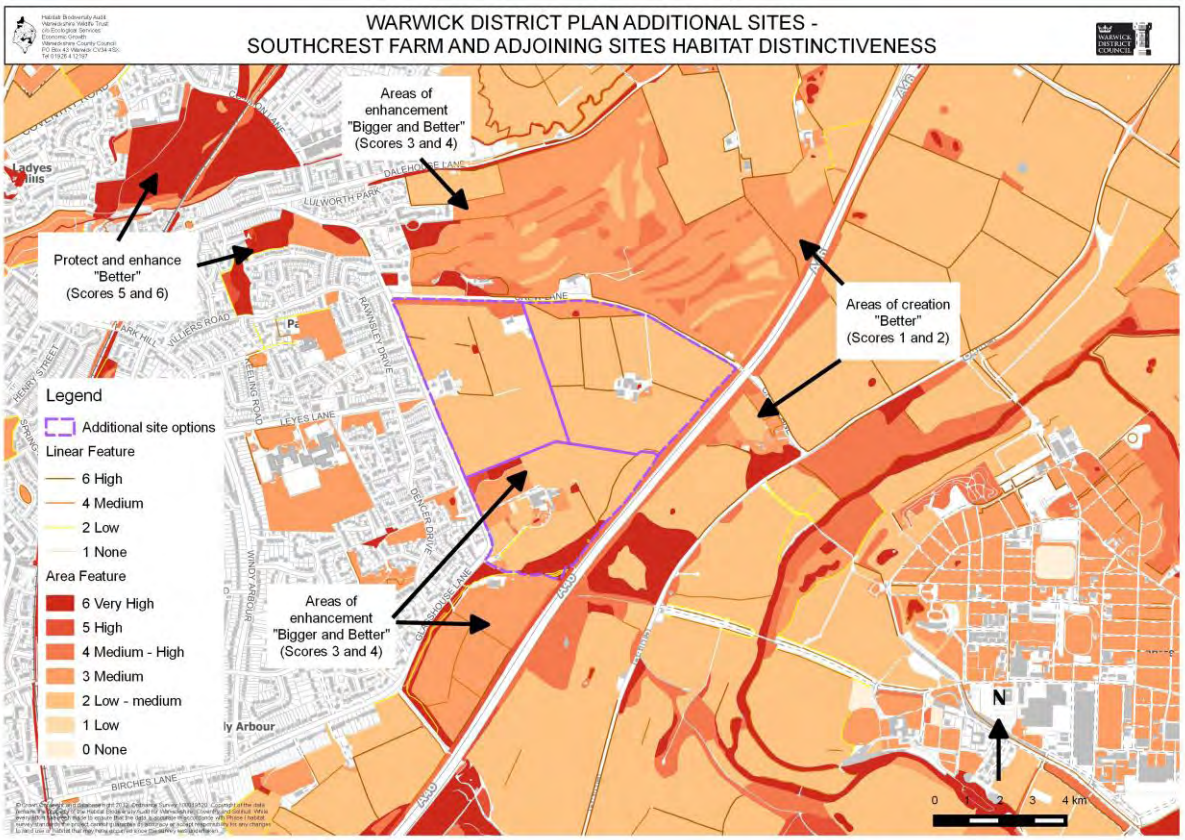


Figure 3 Distinctiveness Scoring Indicating 'Bigger' and 'Better'

Connectivity Mapping

The Warwickshire sub-regional Green Infrastructure Strategy has incorporated habitat connectivity mapping model for woodlands, grasslands, wetlands and hedgerows using the Phase 1 habitats information in partnership with The University of York. York University built the first bespoke connectivity model for the sub-region in 2012 and the current model has been extended to include habitat data from the neighbouring authorities of Staffordshire, Birmingham and Black Country and Worcestershire.

Connectivity mapping can also be referred to as ecological network mapping. In the NPPF sections; 114 (Habitat Networks and Green Infrastructure) refers to ecological networks where Local planning authorities should set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity; Section 117 (Landscape-scale Biodiversity Planning) to minimise impacts on biodiversity and geodiversity, planning policies should identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation.

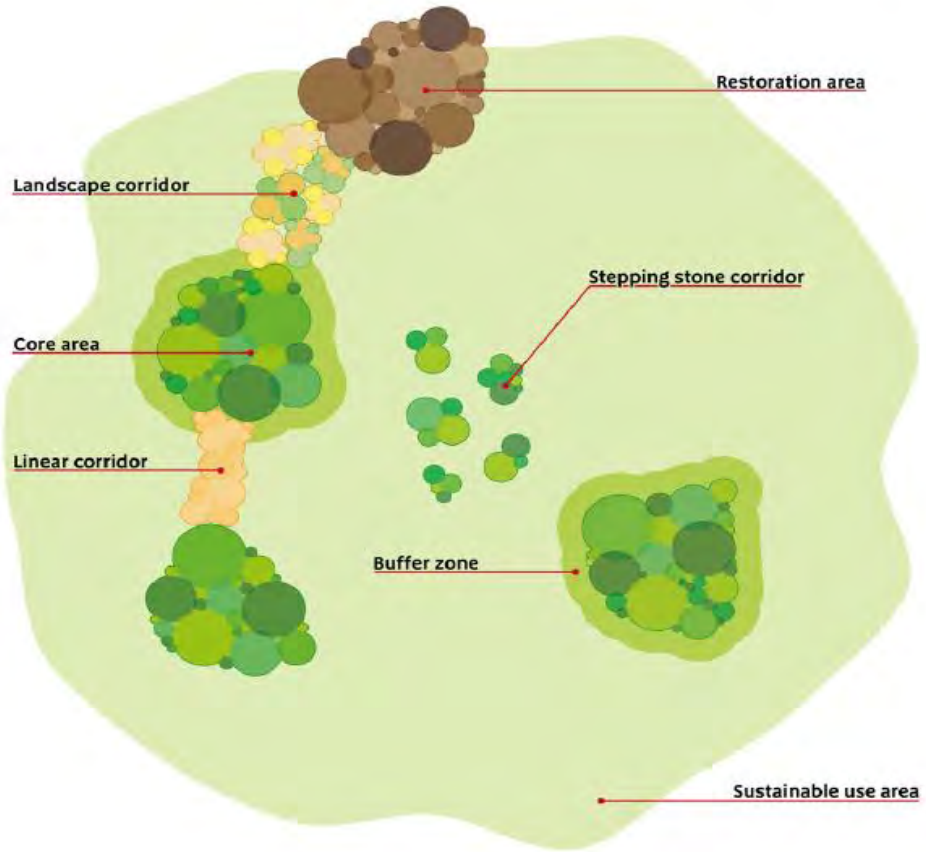


Figure 4 The Components of Ecological Networks - Lawton 2010

The connectivity mapping example Figure 5 illustrates where core areas of combined habitats (the three area categories are established broad-leaved woodlands, priority grasslands and wetlands) shown as deep purple are interconnected to nearby habitats of the same category. The mapped example uses a 500 meter radius or buffer around each habitat (area features) and hedgerows (linear features) to 'connect' to nearby similar habitats. The model returns an accrued score for each of the habitats which are then mapped.

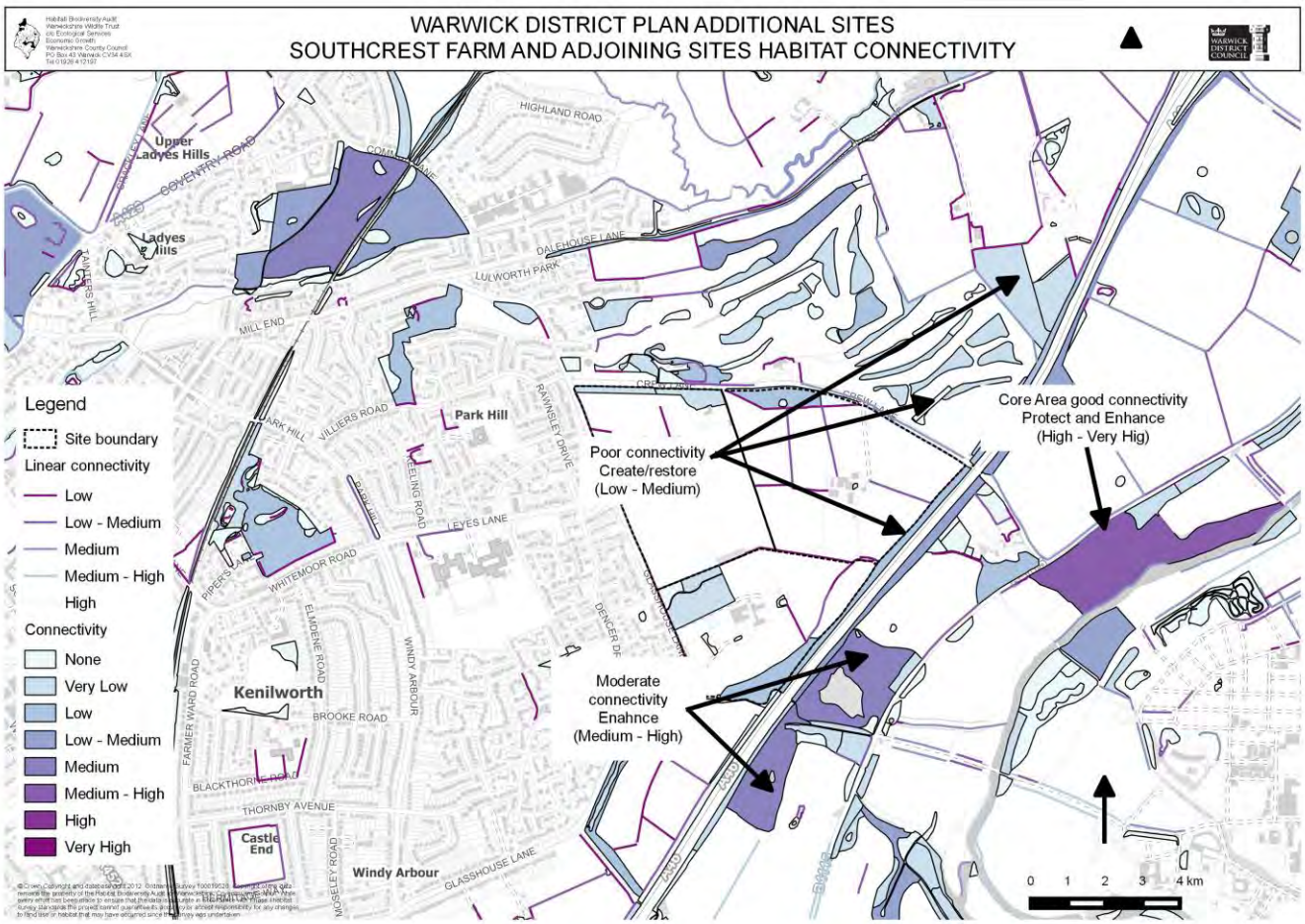


Figure 5 Habitat Connectivity Mapping Principles

Species Records

Species information is based on existing records within the Warwickshire Biological Record Centre. For this report EU and UK protected species, UK Biodiversity Action Plan, local Biodiversity Action Plan species and rare and endangered species have been noted where records are held digitally. These records have been used with local knowledge to provide spatial interpretation for each site.

This interpretation is based on data and information available at the time of preparing this report. Please note that lack of records may well indicate that no survey work

has yet been undertaken, and does not indicate that species are necessarily absent. Protected species may be using the site and surrounding area and appropriate survey work may be required to establish their presence and to inform mitigation measures to ensure that they are not impacted by any proposed works.

Protected, threatened, declining and/or notable species present within or close to the development parcels that require due care and consideration include;

an unidentified myotis (Myotis spp.)
badger (Meles Meles)
Brandt's (Myotis brandtii)
brown long-eared (Plecotus auritus)
brown long-eared (Plecotus auritus)
common frog (Rana temporaria)
common frog (Rana temporaria)
common lizard (Zootoca vivipara).
common pipistrelle (Pipistrellus pipistrellus)
common toad (Bufo bufo)
Daubenton's (Myotis daubentonii)
dyer's greenweed (Genista tinctoria)
grass snake (Natrix natrix)
great crested newt (Triturus cristatus)
harvest mouse (Micromys minutus)
hedgehog (Erinaceus europaeus)
hedgehog (Erinaceus europaeus),
house martin (Delichon urbicum),
Japanese knotweed (Fallopia japonica)
kingfisher (Alcedo atthis)
Leisler's (Nyctalus leisleri)
natterer's (Myotis nattereri)
noctule (Nyctalus noctula)
noctule (Nyctalus noctula)
otter (Lutra Lutra)
pipistrelle sp. (Pipistrellus sp.)
quaking grass (Briza media)
red kite (Milvis milvis),
redwing (Turdus iliacus),
serotine (Eptesicus serotinus)
skylark (Alauda arvensis)
slow worm (Anguis fragilis)
small heath (Coenonympha pamphilus)
smooth newt (Lissotriton vulgaris)
soprano pipistrelle (Pipistrellus pygmaeus)
soprano pipistrelle (Pipistrellus pygmaeus),

swift (Apus apus),
tormentil (Potentilla erecta),
unidentified bat (Chiroptera spp.)
water vole (Arvicola amphibius)
white-clawed crayfish (Austropotamobius pallipes)
white-letter hairstreak (Satyrium w-album)
willow warbler (Phylloscopus trochilus)

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LAND EAST OF WARWICK ROAD, KENILWORTH

Area: 5.7 hectares

Overview

A development parcel contains two large dwellings and two sports pavilions of the Kenilworth Cricket and Bridge Club. The open and undeveloped parcel comprises of previously improved grassland which has been left un-managed developing into poor semi-improved grassland. This parcel of grassland lies immediately north of an arable field, which too lies within the development parcel. The parcel lies south of residential properties off Newey Drive, Gardner Way and Swift Close bounded on the east by the Coventry to Leamington Railway Line and the ancient woodland of Bullimore Wood. To the south, the development parcel is fringed by another large arable field separated by a hedge with trees. The Warwick Road sandwiches the development parcel against the Coventry to Leamington Railway Line with residential properties immediately across from the main entrance.

Key Features

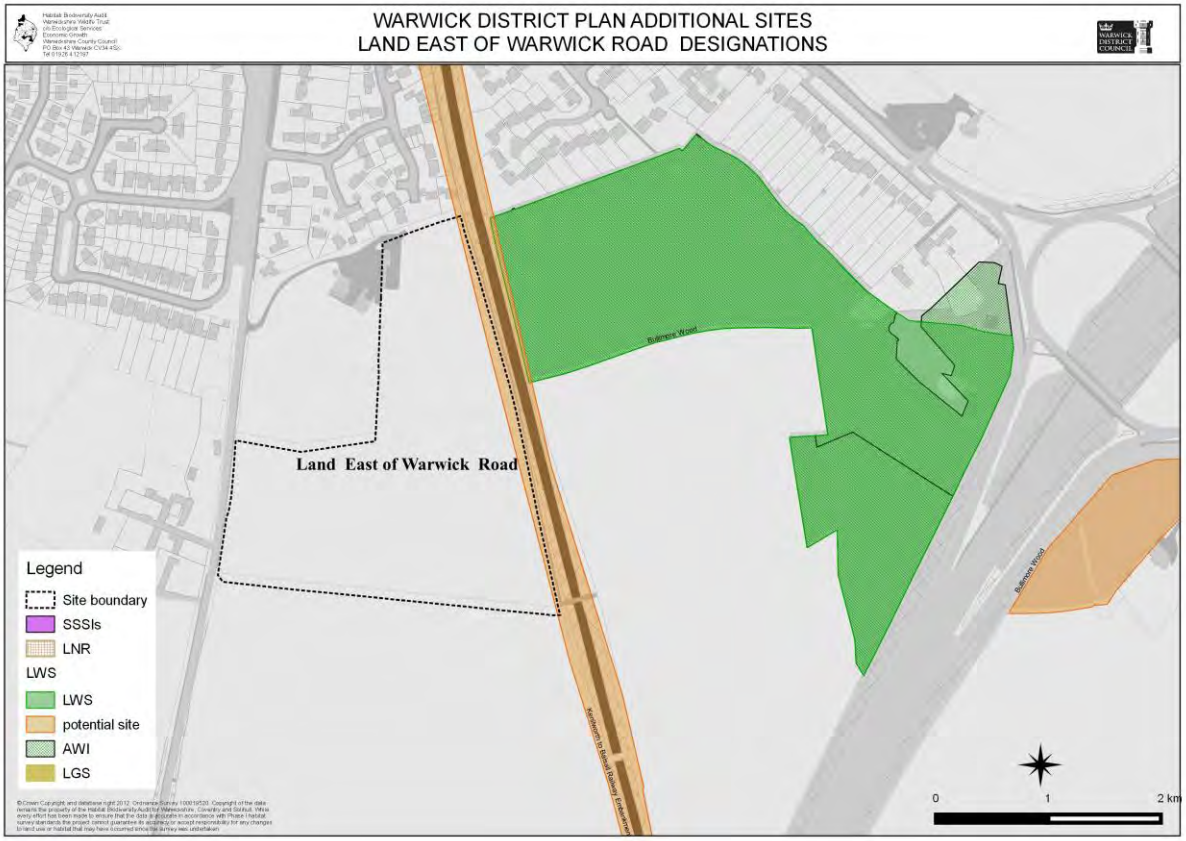
- Amenity grassland
- Arable farmland
- Hedge with trees
- Linear & Dense scrub
- Poor semi-improved grassland
- Veteran trees

Recommendations

It is preferential that the development be incorporated into the existing curtilage of the site, as to facilitate the principal goal to improve access to existing green infrastructure in the locality and to mitigate landscape impacts from other developments. This should be achieved by the retention of the existing veteran trees and mature boundary features surrounding the development parcel, retaining viable parcels of agricultural land and the planting of trees to enhance connectively along the Coventry to Leamington Railway Line with the margins of Bullimore Wood. The proposed change of land use should use sensitive management and design and incorporate appropriate native planting which will retain Site biodiversity and create and enhance wildlife corridors. The creation of field margins along existing

boundaries of the existing site together with the surrounding arable farmland will provide important buffers for nesting and foraging birds as well as coverage for reptiles and amphibians.

Designated Sites:



Local Wildlife Sites:

Bullimore Wood LWS SP27V1 Designated: 2006 Area 7.8 hectares

Ancient woodland that has been partly cleared and disturbed by road development and housing. It is located between the A46 and the southern edge of urban Kenilworth. The north-western section of the wood is semi-natural woodland whilst the south-east has been re-planted with Pine and Larch. This last area also contains an area of open grassland and pond. The wood was last surveyed on the 20/04/2005.

North-west

The north-western block is ancient semi-natural woodland. The vegetation in the southern two-thirds of the wood is typical of NVC type W10 (a) Quercus roburr-Pteridium aquilinum-Rubus fruticosus (Pedunculate Oak-Bracken-Bramble) woodland. The canopy is rather open with frequent Oak (Quercus robur), Silver Birch (Betula pendula) - some quite mature but mostly young, with some mature

Rowan (Sorbus aucuparia) and Sycamore (Acer pseudoplatanus). The southern edge is lined with mature planted Beech (Fagus sylvatica). The understorey is patchy and thin with occasional to locally frequent Hazel (Corylus avellana) especially in the south east corner, also rare Holly (Ilex aquifolium), Elder (Sambucus nigra) and regenerating Sycamore. The field layer is dominated by Bluebell (Hyacinthoides non-scripta) which forms a near continuous carpet, occasional to locally frequent Bramble (Rubus fruticosus agg.), Bracken (Pteridium aquilinum), occasional Wood Anemone (Anemone nemorosa), Broad Buckler-fern (Dryopteris dilatata), Honeysuckle (Lonicera periclymenum), rare/locally frequent Red Campion (Silene dioica), with rare Foxglove (Digitalis purpurea), Pignut (Conopodium majus) and Male Fern (Dryopteris filix-mas).

The vegetation in the northern third of the woodland has affinities with W8 Fraxinus excelsior-Acer campestre-Mercurialis perennis, (Ash-Field Maple-Dogs Mercury) woodland community. The canopy is dominated by mature even aged Ash (Fraxinus excelsior) and Sycamore. The understorey contains frequent regenerating Sycamore, with occasional Hawthorn (Crataegus monogyna), Elder and Holly. The ground flora again is mostly dominated by Bluebell, but with occasional Lords and Ladies (Arum maculatum), rare to locally frequent Lesser Celandine (Ranunculus ficaria) and Ground Ivy (Glechoma hederacea), and with rare Wood Avens (Geum urbanum). The ground along the northern boundary which is bordered by residential gardens is disturbed with patches of bare ground, locally abundant Nettle (Urtica dioica), piles of garden rubbish, compost bins, and garden escapees such as Garden Daffodil (Narcissus sp) and cultivated Yellow Archangel (Lamiastrum galeobdolon spp argentatum).

South-east

The south-eastern part of wood has been replanted with conifer species with separate stands of Scots Pine (Pinus sylvestris) in the south, Larch (Larix sp) in the west, and mixed areas of both Pine and Larch particularly in the eastern part of the area.

Areas of Pine dominated plantation are found particularly in the far south of the site where the closed canopy of pine covers an understorey of frequent elder. The field layer is very patchy but includes occasional to locally frequent patches of Bluebell and Foxglove. Extensive areas of bare ground with thick layer of pine needles, also heavily disturbed in places by rabbit activity with extensive system of burrows covered in places by locally abundant Nettle.

In the west Larch is the most abundant tree in rather open canopies that in places also contain frequent Silver Birch together with rare Oak and Sycamore. The understorey is generally sparse but with rare to locally frequent Elder, rare Holly, Hawthorn and some old coppice Hazel in places. The ground flora is dominated by

Bluebell, with occasional/locally frequent Bracken, Foxglove, occasional Bramble and Red Campion. The ground is heavily disturbed in places with plenty of rabbit activity with the vegetation including locally frequent Nettle.

The central to northern area is dominated by a raised mound. The top is quite open but shrub is developing particularly around the margins with very young Oak, Hawthorn and Hazel. The ground is very wet due to impeded drainage and the vegetation is dominated by damp grassland with frequent Tufted Hair-grass (Deschampsia cespitosa) with herb species such as Marsh Thistle (Cirsium palustre), Spear Thistle (Cirsium vulgare), Nettle, Common Ragwort (Senecio jacobaea), Selfheal (Prunella vulgaris), Great Willowherb (Epilobium hirsutum), Soft Rush (Juncus effusus), Hard Rush (Juncus inflexus) and some Bramble (Rubus fruticosus agg.). There is also an extensive ground cover of Bryophytes.

This part of the site includes a pool that lies in a deep hollow. It has some marginal vegetation including locally abundant Bulrush (Typha latifolia) with Great Willowherb, Gypsywort (Lycopus europaeus) and Bittersweet (Solanum dulcamara).

Potential Local Wildlife Sites:

Kenilworth to Balsall Railway Embankment (SP27Li9n) 38 hectares

Immediately adjacent to the Kenilworth Cricket Club along the eastern boundary of the development parcel sandwiched between Bullimore Wood lies the embankments of the active Coventry to Leamington Railway Line.

Habitat Description:

The development parcels comprises of 1.5 ha of poor semi-improved grassland (B6) and 4.1 ha of arable farmland (J11).

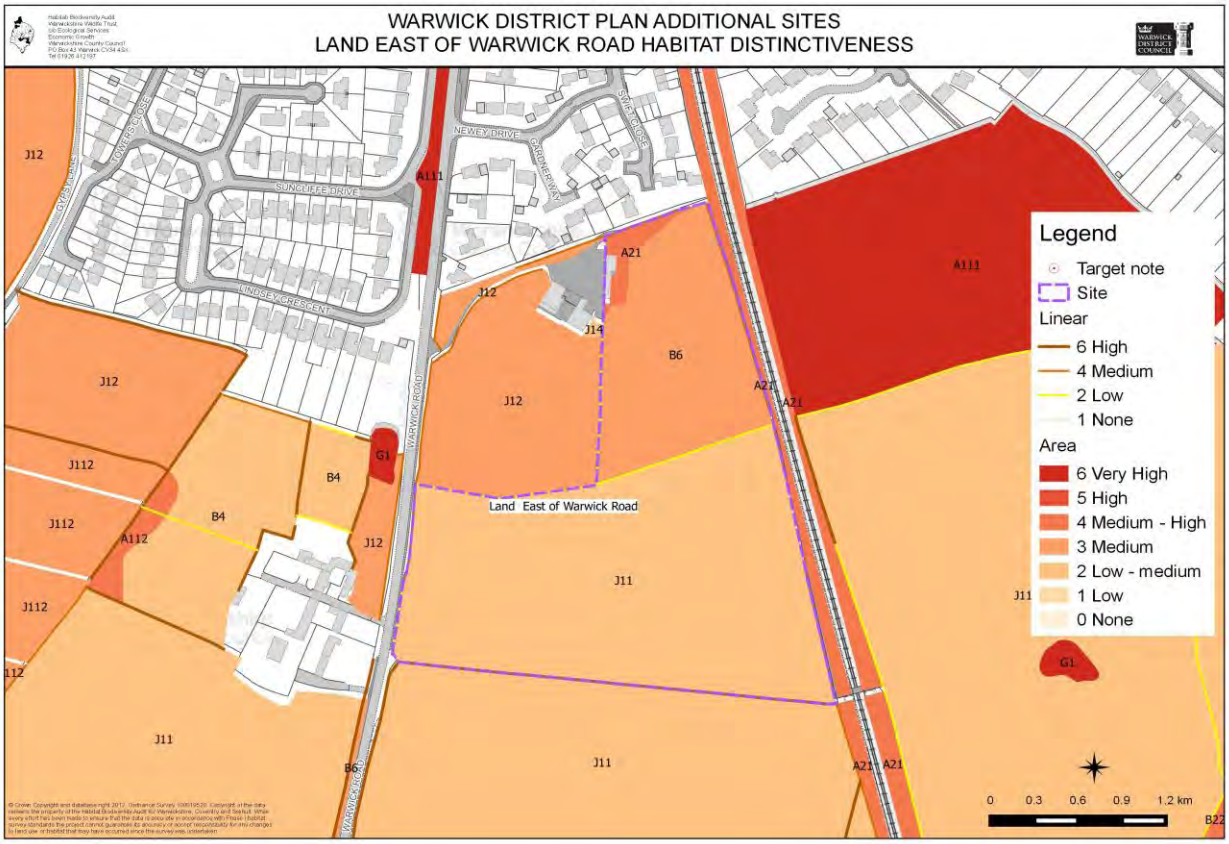
The rank poor semi-improved grassland (B6) comprises of coarse and tussocky grasses of false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata) and red fescue (Festuca rubra) and creeping bent (Agrostis stolonifera). Common forbs persist within the sward including ribwort plantain (Plantago lancelota), curled (Rumex crispus) and broad-leaved dock (R. obtustifolius), spear thistle (Cirsium vulgare), common nettle (Urtica dioica), cleavers (Galium aparine), hogweed (Heracleum sphondylium), creeping buttercup (Ranunculus repens) and a willowherb (Epilobium spp.) interspersed with 2 developing oak saplings (Quercus robur).

Scattered trees of silver birch (Betula pendula) and bird cherry (Prunus padus) border the amenity and general use areas of the Kenilworth Cricket Clubhouse.

Bullimore Wood holds trees of predominately oak (Quercus robur), ash (Fraxinus excelsior) and silver birch (Betula pendula) with an understorey of holly (Ilex aquifolium), hazel (Corylus avellana), blackthorn (Prunus spinosa) and ivy (Hedera helix).

A mixture of bramble (Rubus fruticosus agg.), common nettle (Urtica dioica) and blackthorn (Prunus spinosa) scrub (A21) separates the development parcel from the active Coventry to Leamington Railway Line.

A badger (Meles meles) run transverses the poor semi-improved grassland from a blackthorn thicket bordering the Railway Line to the Cricket Pitch which provides suitable foraging habitat. The accompanying sett could indeed abound the immediate bank of the Railway Line or continue across and in all likelihood be present within the broad-leaved semi-natural woodland (A111) of Bullimore Wood. Immediately south of both the amenity grassland (J12) of the Cricket Club and the poor semi-improved grassland (B6) lies an arable field (J11) fringed on the southern side by a well-developed hedge with maturing trees (J23) of alder (Alnus glutinosa) and ash (Fraxinus excelsior).



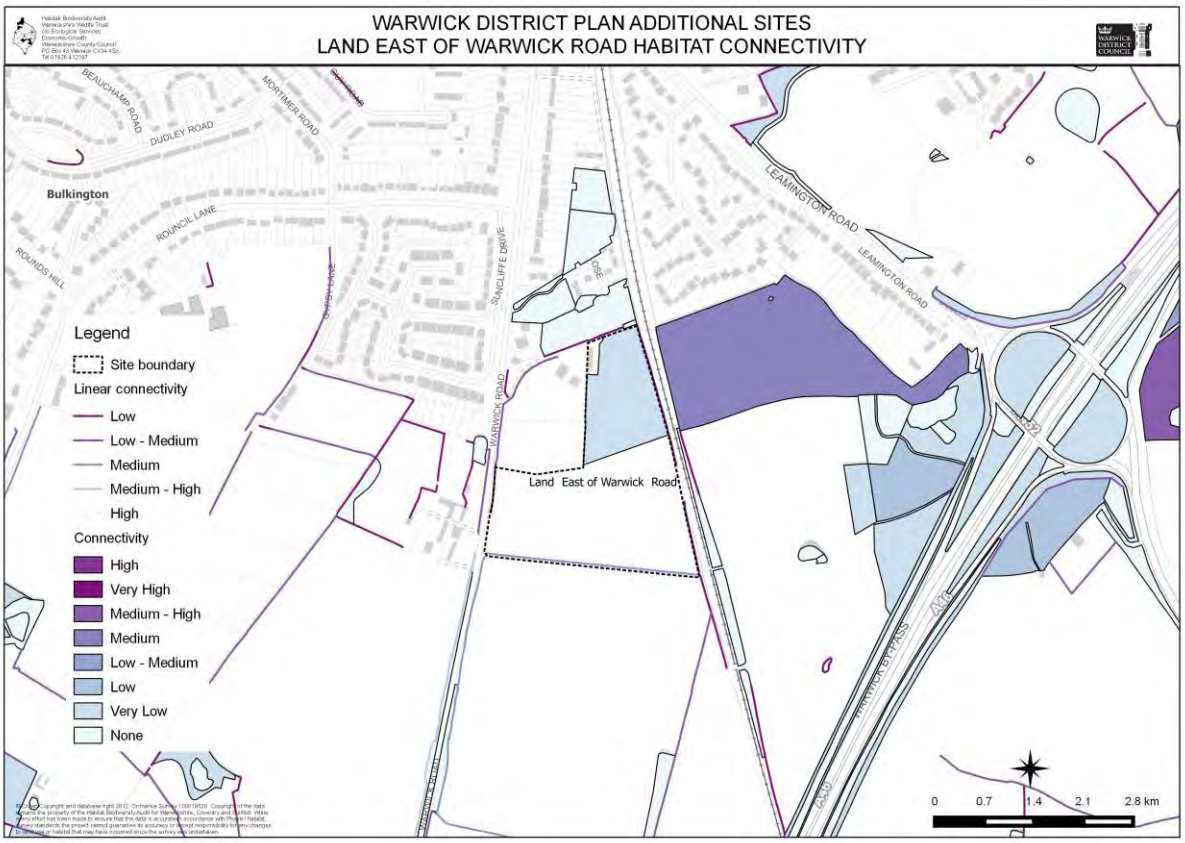
Target Notes

Number	Grid Reference	Survey Date
SP27V1	**SP2962170450**	**08/01/1997**

Bullimore Wood is designated as LWS ancient woodland. The north-west part of the wood comprises of semi-natural broad-leaved woodland with oak (Quercus robur), silver birch (Betula pendula) and sycamore (Acer pseudoplatanus) with an understorey of hazel (Corylus avellana) and elder (Sambucus nigra). The ground flora includes bluebell (Hyacinthoides non-scripta), wood anemone (Anemone nemorosa), bramble (Rubus fruticosus agg.), bracken (Pteridium aquilinum) and various ferns. The south-east part of the wood is coniferous plantation containing mainly stands of pine (Pinus spp.) in north and larch (Larix spp.) in the south with fringing silver birch (Betula pendula). There is a very small area of damp grassland to the north which contains species of purple loosestrife (Lythrum salicaria), soft rush (Juncus effuses), water mint (Mentha aquatica), great (Epilobium hirsutum) and rosebay willowherb (Chamerion angustifolium), spear thistle (Cirsium vulgare), creeping thistle (Cirsium arvense) and willows (Salix spp.). The larger elevated grassland contains common ragwort (Senecio jacobaea), common nettle (Urtica dioica), spear thistle (Cirsium vulgare) great willowherb (Epilobium hirsutum), greater bird's-foot-trefoil (Lotus pedunculatus), medick sp., tufted vetch (Vicca cracca), selfheal (Prunella vulgaris), dock, various grasses and occasional bramble (Rubus fruticosus agg.) and gorse (Ulex europaeus). The pool here is in a deep hollow and

has marginal vegetation including bulrush (Typha latifolia), great willowherb (Epilobium hirsutum), gypsywort (Lycopus europaeus) and woody nightshade (Solanum dulcamara). Moorhen (Gallinula chloropus) sighted within the pool with sparrowhawk (Accipter niscus), chiffchaff (Phylloscopus collybita) willow warbler (Phylloscopus trochilus) and bullfinch (Pyrrhula pyrrhula) sighted in the main body of the wood.

Habitat Connectivity

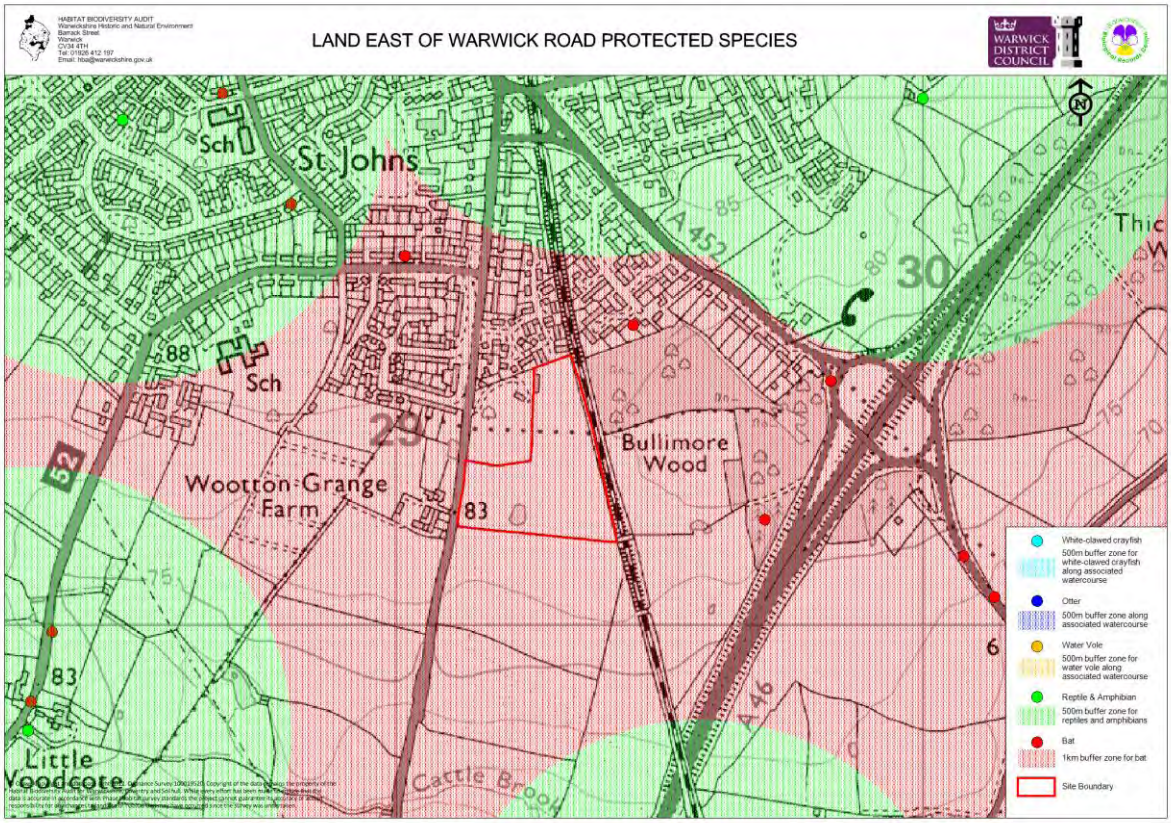


Protected Species

No protected species occur directly within the Site boundary although both foraging and roost records occur for common pipistrelle (Pipistrellus pipistrellus) within 1km of the Site.

Within the wider landscape further records exist for common pipistrelle and lesser noctule (Nyctalus leisleri).

Wider records of reptiles and amphibians are present within the town of Kenilworth and the small village of Little Woodcote for common frog (Rana temporaria), common toad (Bufo bufo) and smooth newt (Lissotriton vulgaris).



KINGS HILL LANE, FINHAM

Area: 269 hectares

Overview

The development parcel is bordered on all sides by transport infrastructure, the A46 marks the eastern periphery intersected through its centre by King's Hill Lane. Stoneleigh Road marks the southern margin with Green Lane delineating the northern limit. The Coventry to Leamington Railway Line fringes the western edge bisecting two blocks of ancient semi-natural woodland of Wainbody Wood. Green Lane separates those residential properties of Finham from the wider landscape fronted by Alvis Sports & Social Club, Finham Primary School and Finham Park School. The wider open landscape holds several agricultural farms/nurseries, playing fields and isolated residential properties. The Finham Brook runs a loop through the south-eastern section of the parcel.

Features identified as having the most significant nature conservation value is the broad-leaved semi-natural woodland of Wainbody Wood, the network of 21 ponds, the watercourse of the Finham Brook, species-rich hedgerows, veteran trees and species-rich grassland.

Key Features

- Amenity grassland
- Ancient & Semi-natural woodland
- Arable farmland
- Finham Brook
- Pond network
- Semi-improved neutral grassland
- Species-rich hedgerows
- Veteran trees
- Wet woodland

Recommendations

Wainbody Wood forms one of the largest and finest remnants of ancient and semi-natural woodlands in Coventry. Given the high biodiversity value and rarity of ancient semi-natural woodland represented, Wainbody Wood should be protected from development. Even so, development close to Wainbody Wood may result in five effects that are not mutually exclusive; chemical effects, disturbance, fragmentation, invasion by non-native species and all those cumulative effects.

The potential impacts on Wainbody Wood are not always clear but are insidious and cumulative. It is essential that Wainbody Wood is protected and enhanced as part of mitigation and management solutions resulting from potential development.

The retention of individual scattered trees within the wider landscape of the development parcel will provide important habitat for woodland birds (Stagoll et al. 2010) and improve the connectivity and function of the surrounding fragmented plots of woodland. The retention and/or creation of trees within hedgerows and small copses will increase connectivity between habitat and landscape types. In disturbed areas alongside the retention of mature tree standards within existing hedgerows and small sections of woodland, tree regeneration should be actively encouraged, greatly improving the resource available for other animals and plants.

The implementation of a 50m wooded buffer zone and the use of passive management techniques such as fencing to prevent impacts of development on Wainbody Wood should be considered to protect against edge effects, encroachment activities and clearly delineate private from public land uses.

Encroachment activities range from waste disposal, woodland recreation, garden extension and garden plant invasion. A buffer of 100m-200m will protect plant species from the effects of vehicle emission from neighbouring roads (Keely et al 2008)

Selective thinning of the over-mature scrub layer and coppicing of selected sycamores will increase the number of sites available for nesting birds and allow additional light to reach the ground flora.

Trees within the development parcel that are subject to a Tree Preservation Order (TPO; Town and Country Planning Act 1990), require consent from the local planning authority before such protected trees are cut down, topped or lopped.

Veteran and mature trees particularly within hedgerows or small copses adjacent to larger blocks of woodland should be retained and incorporated with the development in areas of open space. The inclusion of green bridges, hedgerows, tunnels or

avenues will connect woodland and veteran trees that would otherwise be separated by development. An appropriate buffer zone of semi-natural habitat between the development and the veteran tree should be determined by an appropriate arboriculturist but a minimum buffer should be at least 15 metres. During construction, screening barriers will protect veteran trees from dust and pollution. Veteran trees are irreplaceable and therefore compensation measures can only partially compensate for damage, the management of aged trees and replacing lost veteran trees is a last resort. Planting young trees of similar species can help compensate for removed veteran trees and should be near those trees that they are replacing. Likewise the management of nearby veteran trees including dead trees can help compensate for lost veteran trees. The intact hulk of the veteran tree should be left intact to benefit invertebrates and fungi. Otherwise dead wood should be moved adjacent to other veteran trees within the development parcel.

Any potentially species-rich hedgerows should be subject to a full hedgerow survey detailed in the Hedgerow Survey Handbook (2nd edition) under The Hedgerows Regulations (made under Section 97 of the Environment Act 1995). The regulations were introduced in England and Wales in 1997 to protect this characteristic element of the countryside. The Regulations prohibit the removal of most countryside hedgerows without first submitting a hedgerow removal notice to the local planning authority. Local planning authorities are able to order the retention of 'important' hedgerows but not others. The Regulations set out criteria (simplified below) to be used by the local planning authority in determining which hedgerows are important;

1. Marks a pre-1850 parish or township boundary.
2. Incorporates an archaeological feature.
3. Is part of, or associated with, an archaeological site.
4. Marks the boundary of, or is associated with, a pre-1600 estate or manor.
5. Forms an integral part of a pre-parliamentary enclosure field system.
6. Contains certain categories of species of birds, animals or plants listed in the Wildlife and Countryside Act.
7. Includes:

a) at least seven woody species, on average, in a 30 metre length;
b) at least six woody species, on average, in a 30 metre length and has at least three associated features;
c) at least six woody species, on average, in a 30 metre length, including a black poplar tree, or large-leaved lime, or small-leaved lime, or wild service tree; or
d) at least five woody species, on average, in a 30 metre length and has at least four associated features. The list of 56 woody species comprises mainly shrubs and trees. It generally excludes climbers (such as clematis, honeysuckle and bramble) but includes wild roses.

8. Runs alongside a bridleway, footpath, road used as a public path, or a byway

open to all traffic and includes at least four woody species, on average, in a 30 metre length and has at least two of the associated features listed below. The associated features are:

i) a bank or wall supporting the hedgerow;
ii) less than 10% gaps;
iii) on average, at least one tree per 50 metres;
iv) at least three species from a list of 57 woodland plants;
v) a ditch;
vi) a number of connections with other hedgerows, ponds or woodland; and
vii) a parallel hedge within 15 metres.

There should be a strong commitment to a long term management regime of the species-rich grassland present with the development parcel. A site-specific long-term management plan is required to prevent domination of the sward by scrub and aggressive species. Long term-management should include a monitoring and evaluation programme that will enable the management regime to be adapted as necessary with the aim to determine the extent of the grassland establishment (% ground cover, bald patches and presence of leaf litter) and sward composition (grass to herb ratio, positive indicator species, negative indicator species, species with local distinctiveness).

A regime of cutting and light grazing is essential for maintaining species richness.

All ponds within the development should be subject to an LWS survey as part of a pond network in co-ordination with protected species surveys particularly to determine the presence or absence of great crested newts.

Designated Sites

Local Wildlife Sites:

Wainbody Wood and Kenilworth Road Woods LWS Designated: 05/05/2005 Area 49.9 hectares

The LWS contains the two halves of Wainbody Wood (the northern piece in Coventry and the southern in the parish of Stoneleigh, Warwick DC, but both managed by Coventry CC), and the woodland belt running along both sides of the A429 Kenilworth Road for 2.5km from the A45 Kenpas Highway (2km from the city centre) south-west to the Coventry boundary, less than 2km from Kenilworth. Wainbody Wood itself is situated on the edge of suburbia about 3km west-south-west of the city centre.

Both Wainbody Wood and the Kenilworth Road woodland are good examples of the W10 Oak-Bracken-Bramble woodland community, as defined by the National

Vegetation Classification (NVC), the type characteristic of the more neutral-acid soils found in much of northern, central and western Warwickshire. Wainbody Wood comprises naturally damp ancient woodland.

Wainbody Wood is of ancient origin but was probably a remnant of a much larger block of woodland as there are no medieval wood banks present. The wood was formerly on the Stoneleigh Estate and the name is probably fairly late and suggests that timber from here was used for the construction of estate wagons and carts. The wood was also coppiced. There has been little change in the size or shape of the wood for at least 200 years, the only change coming in 1844 when the construction of the railway from Coventry to Leamington Spa divided the wood into two parts. In contrast the Kenilworth Road woodland is of late 18th century origin, when the ancient highway was straightened and widened by Lord Leigh and planted with a grand avenue of oaks to beautify the approaches to Coventry. This avenue formerly continued to the junction with the Warwick Road but this latter section has mainly disappeared. Before planting, the road had climbed the hill from Kenilworth over a wide stretch of open common land and the hill top was a favourite spot for hanging felons. The current name of Gibbet Hill commemorates the famous execution of three murderers in 1765 at the crossroads, and it was this gibbet which was left in situ until 1810, that partly inspired Lord Leigh to start planting trees after initially planting a screen around it.

The whole of this area remained part of the Stoneleigh Estate and thus rural until 1926 when Coventry CC purchased the woodlands from Lord Leigh to preserve them from the anticipated future spread of development. This was initiated in 1932 by the opening of the Kenpas Highway and by 1939 housing had spread south to enclose the Kenilworth Road woodlands as far as the Roman Catholic School and Cannon Hill Road. This continued after the war and by the 1980's had continued south-west as far as the city boundary. For most of this period development was limited to large properties within extensive grounds, with driveways cut through the woodland. Much of Wainbody Wood South was clear felled during the Second World War as was the eastern strip of the northern wood, alongside the railway.

Much of the Kenilworth Road Wood to the north of Wainbody Wood has in recent decades become increasingly fenced off by individual properties, and this has also happened to the south of the Gibbet Hill crossroads. More recent development has seen small estates of smaller gardened properties being built, particularly to the west of Wainbody Wood North, while two small estates have also been built on the south side of this wood. Otherwise sports fields border the northern section, while the southern section is still entirely rural and bordered by medium to large arable fields, but with some small paddocks and a large pool situated at the south-eastern end at Wainbody Wood Farm.

Wainbody Wood became a Local Nature Reserve in the 1980's and the northern wood now has a network of well-used public paths, including one designed for disabled visitors. Management has been concentrated in this woodland and includes some intermittent coppicing undertaken since
1995. There is no official public access to the southern wood which is largely left undisturbed for wildlife, although a few local residents do access the wood unofficially via the few remaining rides. There is open access to parts of the Kenilworth Road Wood, but mainly to the southern half.

The Kenilworth Road ascends sharply from about 80m ASL at the southern end of the LWS up to a maximum of 101m ASL at Gibbet Hill, before descending to around 85-95m ASL for the stretch to the Kenpas Highway. Wainbody Wood is lower and descends gently from around 85m ASL by the Kenilworth Road down to less than 70m ASL in the south-east corner.

The underlying geology consists of Permian sandstones and conglomerates associated with the Barren Coal Measures under Wainbody Wood and the Kenilworth Road south of here, and moderately acidic Upper Carboniferous Clay to the north. The Kenilworth Road part of the LWS is now poorly drained with some former streams having their courses interrupted by post-war development, although where still unimpeded they feed north-westwards into the nearby Canley Brook. Wainbody Wood has generally impeded drainage with small often seasonal rills draining south-east into the nearby Finham Brook.

This large woodland LWS can be separated for description into three well-defined areas: 1) Kenilworth Road Wood, 2) Wainbody Wood North and 3) Wainbody Wood South.

Kenilworth Road Wood

Until the mid 20th century judging by old photographs this woodland was open canopy, with virtually no shrub layer, at least north of Wainbody Wood, and was open to the road. The ground flora comprised mainly of grasses, Bracken and Bluebell and was probably subject to casual grazing until the First World War. This woodland is now much more overgrown with a closed canopy, dense shrub layer largely of unsuitable species and intermittent ground flora.

The woodland is dominated throughout its 2.5km length by mature Pedunculate Oak, but it also contains frequent Ash, Beech and Turkey Oak, with occasional Sycamore, Hornbeam, Sweet Chestnut and more rarely other trees including a few conifers such as Douglas Fir. There are some standing dead trees in places. From Wainbody Wood southwards, the shrub layer is dense and dominated by Hazel and Holly, but with locally frequent Rhododendron around Gibbet Hill which is known to have been introduced in 1949. Other shrubs present include rare-occasional Field Maple,

Hawthorn, Elder and Guelder-rose, regenerating trees such as Sycamore, Ash (locally abundant) and Rowan, and garden escapes such as Cherry Laurel and Yew. North of the wood the shrub layer is composed almost entirely of dense Holly that dominates the woodland over large areas and thus acidifying the soil and depriving much of the ground flora of light.

The ground flora is most varied from Wainbody Wood southwards where a woodland flora has probably been longer established and this is further enhanced by several small wet flushes along the courses of seasonal drains. Bramble tends to be dominant, except in the darker areas where it is replaced by Ivy, but in the denser areas of Holly much of the ground is bare. Also frequent to abundant in the more open areas are Bluebell and Bracken, together with frequent Cleavers, Herb Bennet, Ground-ivy and more locally, Wood Anemone. Enchanter's Nightshade is frequent in the damper areas, and the small flushes contain frequent Common Water-starwort, Wavy Bittercress, Remote Sedge, Creeping Buttercup and Brooklime. Other species noted in this section at low density include Cuckoo Pint, Pendulous Sedge, Common Male-fern, Broad and Narrow Buckler-ferns, Herb Robert, Honeysuckle, Wood Millet, Yellow Pimpernel, Lesser Celandine, Redcurrant, Wood Dock, Common Figwort, Ivy-leaved Speedwell and Common Dog-violet.

To the north of the wood there is far less light getting through the dense canopy and large areas under the Holly thickets are bare with deep leaf litter. The original field layer of Bluebell and Bracken is now confined to scattered small glades, while the rest of the vegetated areas are dominated by Bramble and locally Ivy. Enchanters Nightshade is locally frequent in the damper areas, while other components include very locally frequent Herb Robert, Herb Bennet, Honeysuckle, Wood Millet, Field Rose and occasional Broad Buckler-fern.

On both sides of the Kenilworth Road the woodlands are now enclosed on the sides facing the road by well-trimmed low hedges of Hawthorn, of post-war age. Also present along these hedges are occasional Field Maple, Hazel, Garden Privet and Elder, with a few other odd specimens of other species recorded, including Wayfaring-tree.

Wainbody Wood North

Although there are a few scattered glades, this section of the wood has a largely closed canopy of dominant Pedunculate Oak, together with frequent Downy Birch, and more locally frequent Sycamore, Silver Birch, Beech and Scots Pine. Occasional species include Silver Fir, Sweet Chestnut, Ash, European and hybrid Larch, Norway Spruce, Douglas Fir, American Red Oak and Rowan, with most of the conifers limited to groups near the northern and western boundaries. In places there is a well established sub-canopy of young trees, particularly Sycamore, but also of young Beech, Ash, Wild Cherry, Pedunculate Oak and Rowan. The shrub layer is very

variable, being locally dense in the north and east of the wood, but becoming sparser elsewhere. Hazel and Holly are the main constituents, being frequent throughout, while Field Maple, Hawthorn, Blackthorn, Field and Dog Roses, Elder, Grey and Goat Sallow, Yew, Wych Elm and Guelder-rose are all occasional. There is dense regeneration of both Sycamore and Ash in places. Both Rhododendron and Cherry Laurel are locally frequent alongside the Kenilworth Road. Other potentially invasive garden escapes occur infrequently along the boundary with the small housing estate on the south side, including Garden Privet and Snowberry.

The field layer is everywhere dominated by Bramble, but with locally abundant Wood Anemone, Cleavers, Bluebell, Creeping Soft-grass, Bracken and Rough Meadow-grass, with Ivy dominating light restricted areas. The damper parts have abundant Enchanter's Nightshade, Lesser Celandine and more locally Creeping Buttercup, Wood Dock and Common Nettle. Also at least locally frequent in the wood are Common Water-starwort, Wavy Bittercress, Remote Sedge, Rosebay Willowherb, Broad Buckler and Common Male-ferns, Herb Bennet, Herb Robert, Honeysuckle, Yellow Pimpernel, Wood Millet, Wood-sorrel, Redcurrant, Raspberry, Red Campion, Greater Stitchwort, Ivy-leaved Speedwell, Wood Speedwell and Bush Vetch. A wet ride in the north of the wood also contains abundant Bog Stitchwort, with occasional Wild Angelica and Bugle, while the wood possesses a fine fern flora which includes localised patches of Lady Fern, Narrow Buckler-fern, Scaly Male-fern and Soft Shield-fern, with both Hard Shield-fern and Hartstongue on the railway embankment.

Other species recorded in the wood at a low frequency level include Wood Sedge, Pendulous Sedge, Tufted Hair-grass, Foxglove, Wild Strawberry, Common Hemp-nettle, Compact Rush, Hairy Wood-rush, Wood Meadow-grass, Primrose, Common Figwort and Common Dog-violet. The railway embankment, formerly more open and grassy, is now heavily shaded by tall Hazel, birch and Ash. This formally held a fine flora including Broad-leaved Helleborine, Twayblade, Woodruff and Bitter Vetchling. The ground flora is now either absent or swamped with Bramble, although a few Broad-leaved Helleborines are still present.

Wainbody Wood South

The canopy of this part of the wood is more open than the public section and contains abundant Pedunculate Oak, but usually in conjunction with either Downy Birch or Ash. There is also locally frequent Silver Birch, with rare to occasional Sweet Chestnut, Beech, European Larch, Scots Pine, Aspen, Rowan and Douglas Fir. The shrub layer is rather dense, tall and neglected, and largely composed of abundant Hazel. Other species present include locally frequent Blackthorn and occasional Hawthorn, Holly, Elder, Grey Sallow and Wych Elm. Rare Wild Plum is present on the boundary. Everywhere the field layer is dominated by Bluebell, Bracken and Bramble, while Wood Anemone, Remote Sedge, Broad Buckler and Common Male-fern, Cleavers, Herb Bennet, Ground-ivy, Creeping Soft-grass,

Honeysuckle and Rough Meadow-grass are abundant, with locally abundant Enchanter's Nightshade, Wood Dock and Wood Speedwell in the damper areas. A rich variety of other plants include frequent Lady Fern, Common Water-starwort, Wavy Bittercress, Common Hemp-nettle, Floating Sweet-grass, Herb Robert, Yellow Pimpernel, Wood Millet, Three-nerved Sandwort, Wood-sorrel, Common Water-pepper, Lesser Celandine, Raspberry, Red Campion and Greater Stitchwort. Of more occasional occurrence are Bugle, False Brome, Wood Sedge, Pignut, Tufted Hair-grass, Narrow Buckler-fern, Giant Fescue, Wood Melick, Wood Meadow-grass, Primrose, Redcurrant, Common Figwort, Thyme-leaved Speedwell and Common Dog-violet. Many of these are confined to the several very wet grassy rides which cross the wood. A small former field pond near the railway on the south-facing side has now become part of the wood. This appears to have its origin as a marl pit as there are similar hollows nearby within the wood. This pond is bordered by some Pendulous and Remote Sedges, and Soft Rush, while the water is covered by the alien Least Duckweed.

Wainbody Wood supports a remarkably rich avifauna for a wood on the verge of a major city, and species recorded here during the survey (with breeding pair counts in brackets where made) include Common Buzzard, Pheasant, Green Woodpecker, Great Spotted Woodpecker (eight), Jay (six), Song Thrush (ten), Dunnock, Marsh Tit (two), Coal Tit (seven), Nuthatch (four), Treecreeper (five), Spotted Flycatcher (three), Blackcap (ten), Chiffchaff (seven), Goldcrest and Chaffinch.

In addition Sparrowhawk and Tawny Owl are reported to breed. Both Marsh Tit and Spotted Flycatcher now breed at only one or two other sites in Coventry. The Kenilworth Road woodlands have a similar avifauna including Jays, Jackdaws, woodpeckers and a good population of Nuthatches. A small rookery still exists at the southern end of the LWS beyond Gibbet Hill. Reflecting its former open canopy and lack of shrub layer, the Kenilworth Road Spinney was formerly an important breeding site for the now county extinct Wood Warbler, with up to five pairs annually during the 1940's and up to at least 1953. It also probably bred annually in Wainbody Wood at that time and a passage male still occurs rarely there in spring.

Grass Snakes and Smooth Newts have been recorded from the wood (WBRC).
A bat survey along the Kenilworth Road woodlands in 2005 found both Common and Soprano

Pipistrelles, Noctule and the county scarce Serotine Bat (WBRC). Amongst the commoner butterflies, Purple Hairstreak is recorded here in most years, while White Admiral was recorded in 2010 (WBRC).

Finham Park Ponds SP37H2 Designated: Pre 2005 Area 0.31 hectares

This designated LWS lies 254 yds outside the Sites north-western boundary and comprises of three small partly interconnected ponds surrounded by a narrow belt of fenced-in scrub and trees. The LWS is situated within the grounds of Finham Park Secondary School on the fringe of the Coventry suburbs, about 2.5km south-south-west of the city centre.

The site is bordered by open playing fields to the east and south, while to the north and west are private back gardens of houses fronting Gretna Road, with the Coventry-Leamington Spa railway beyond. Open farmland still exists beyond the school grounds to the south, while the nearest Local Wildlife Sites are Wainbody Wood 1km to the south-west, the Kenilworth Road woodlands 0.7km west, Stivichall Common 0.8km north and Leaf Lane grassland 1.75km east-north-east.
The ponds, which appear to have originated from quarrying activities, are steep-sided and very small, covering an area of just 0.086ha. They have not been managed for many years, possibly since the school was built, and so consequently they are heavily silted with decaying leaf fall and also partly shaded by derelict Crack willows, some of which have collapsed into the open water. A key is required to enter this site so there is little present disturbance, although the school do manage bee hives here. The underlying geology comprises Upper Carboniferous Sandstone which produces moderately acid soils. The altitude is around 85m ASL.

The site was originally designated as a Coventry SINC in the early 1980's for the population of breeding Great Crested Newts, the most recent record from here dating to 1996. This is the first assessment of the site's habitat. The school is hoping to manage the site in future as a nature reserve and educational resource.

Habitats

The three ponds are badly silted and now fairly shallow and partly covered with wind-blown derelict Crack Willows. The northern and western ponds are partly connected but this gap is crossed by a make-shift bridge. The water surface is dominated by extensive floating carpets of both Common Duckweed and the invasive alien, Least Duckweed. Small stands of Yellow Iris swamp occur in the northern and western ponds, while the eastern pond contain small stands of Greater Pond-sedge and Reed Sweet-grass. Other species associated with the shoreline of the three ponds include frequent Remote Sedge, American Willowherb and Gipsywort, with more occasional Wavy Bittercress, Broad-leaved and Hoary Willowherbs, and Bittersweet.

The ponds are surrounded by a belt of scrub woodland, mainly comprising of frequent Crack Willow and young Pedunculate Oak and Ash, with several mature specimens of the latter two species along the north-west and north facing boundaries marking the position of former hedgerows. A single large oak also stands by the south-western pond, which has had its top broken off, although it now looks a good site for Tawny Owls to breed. The trees mainly disappear on the east side of the site

where dense Crack Willow and Blackthorn scrub forms a canopy but this site is rather impenetrable and so not easily surveyed. Where a tree canopy is present (on the northern and western perimeter) there is a fairly diverse shrub layer containing frequent Holly, Blackthorn, Field Rose and Elder, with occasional Field Maple, Hazel, Hawthorn and Yew. Other species recorded include rare Alder, Downy Birch, Rowan, Goat Sallow and Wild Cherry. Some alien and potentially invasive species occur along the boundary fences, having arrived with green waste from adjoining gardens; and these include occasional Cherry Laurel, and rare Wall Cotoneaster, Garden Privet and Portugal Laurel. There is a large mound on the northern perimeter edge resulting from tipped garden waste. For such a small site the woodland field layer is fairly diverse, although much of the dry banks are dominated by Ivy due to light restriction, while Common Nettle dominates the damper areas. Species of frequent occurrence include Common Bent, Red Fescue, Broad Buckler and Common Male-ferns, Cleavers, Herb Bennet, Ground-ivy and Bramble, with rare-occasional Cuckoo Pint, White Bryony, Enchanter's Nightshade, Narrow Buckler-fern, Herb Robert, Honeysuckle, Hartstongue, Hard shield-fern, Redcurrant, Wood Dock and Hedge Woundwort also recorded. The diversity of ferns was particularly notable.

Near the southern entrance gate is an open area of dense Bramble and Large Bindweed, while where the three ponds meet there is an open grassy area dominated by Yorkshire Fog, together with Common Bent, Red Fescue and Cocksfoot. In this area White Clover is frequent, while a few meadow herbs occur at low density including Meadow Vetchling, Ribwort Plantain, Meadow Buttercup and Lesser Stitchwort.

Fauna

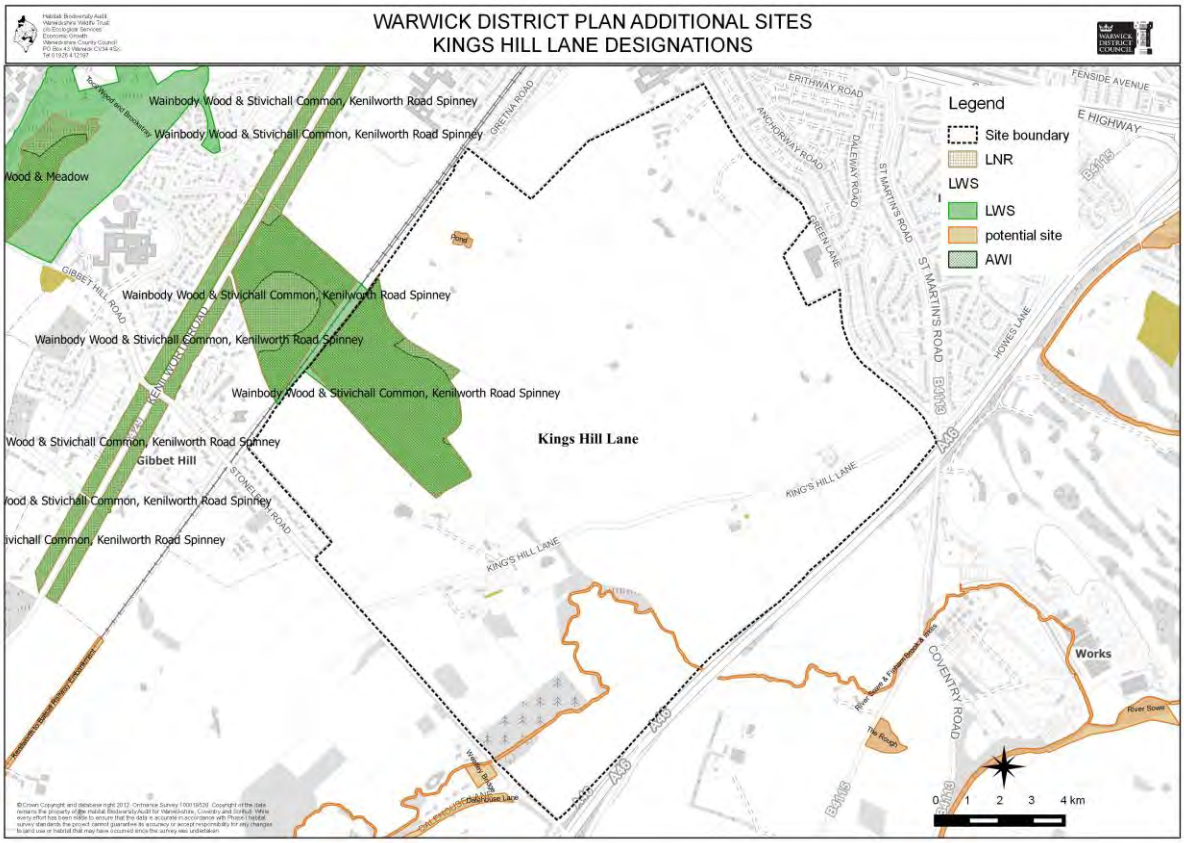
Badgers are present. Moorhens are known to breed. Other birds noted during the survey included Grey Wagtail, Blackcap, Goldcrest, Bullfinch and Goldfinch, while insects included Southern and Migrant Hawker dragonflies, and Speckled Wood butterfly.

There are recent (2010) records of breeding Common Frogs and Smooth Newts from the ponds, while there is still potential for Great Crested Newts to occur, although there have been no confirmed records since 1996.

Potential Local Wildlife Sites:

Pond (SP37C3) 0.1 hectare

A small field pond designated as part of the pond network exists within the development parcel. All ponds alongside this designated pLWS pond should be subject to the same LWS survey in co-ordination with protected species surveys particularly to determine the presence or absence of great crested newts.



Habitat Description

Much of the proposed development parcel is consigned as agricultural farmland, managed as part of a ley farming system, the parcel comprises largely of arable farmland (J11) of approximately 139.5 ha and currently 60.9 hectares of improved grassland (B4). Roughly, 74% of the total area of the proposed development.

A relatively high proportion of 2.11 hectares of semi-improved grassland emerges on set-a-side or marginal areas where the grassland has been less intensively managed. A 1.3 ha neutral semi-improved grassland field (B22) contrasts markedly within horse-grazed paddocks at SP31797456, bordered on the east by a tributary of the Finham Brook with associated wet woodland (A6). This mosaic of habitats warrants a specific well-timed survey to determine the exact value of biodiversity within this immediate area. This grassland component totals 61% of semi-improved grassland found and should be subject to an LWS survey.

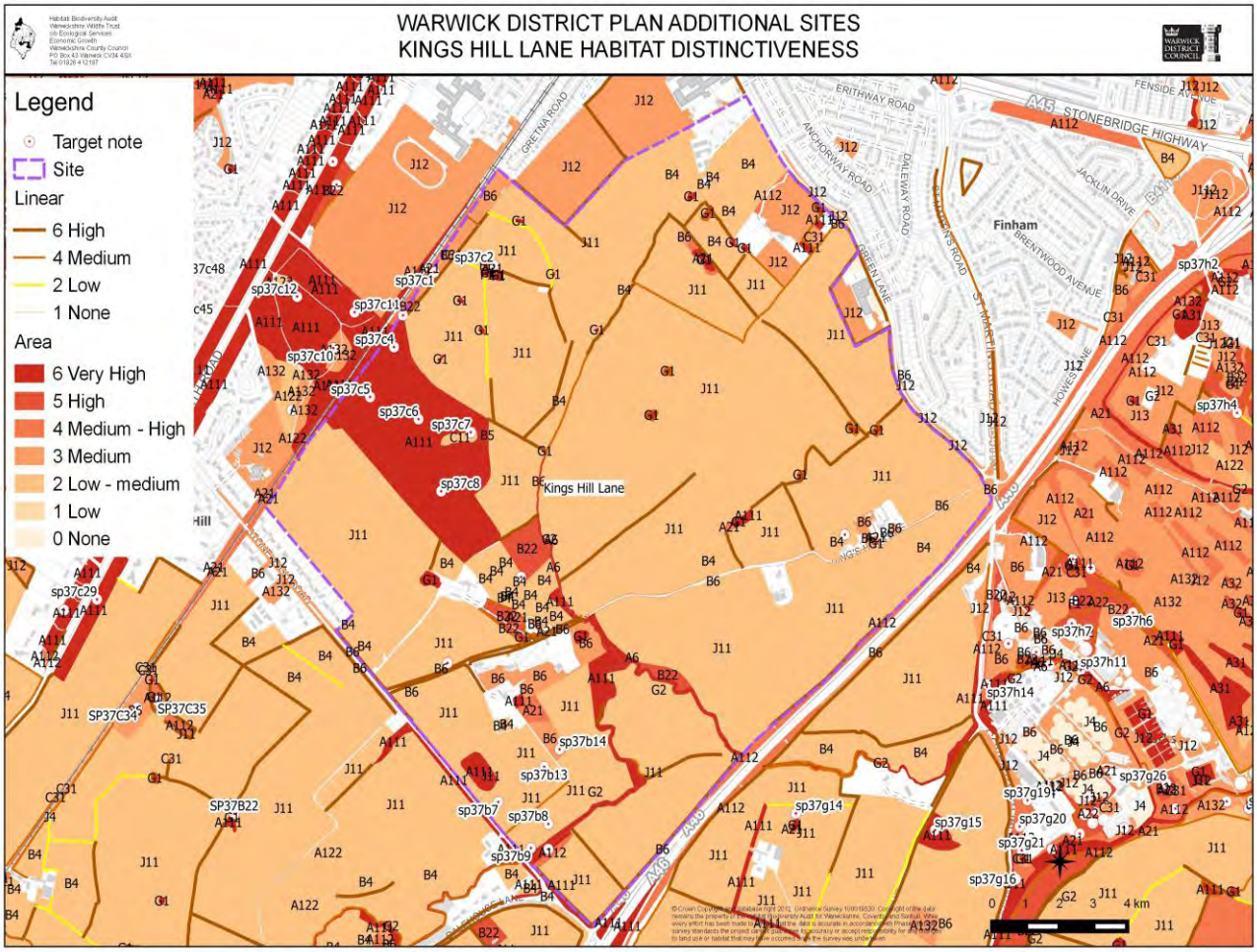
1.3 ha of marginal wet woodland occurs on poorly drained or seasonally wet soils along the fringes of the Finham Brook which intersects predominately arable fields in the south east corner of the development parcel. The wet woodland contrasts gradually with dryland woodland through succession, most notably within woodland

surrounding King's Hill Nurseries, King's Hill Lane, CV3 6PS. The wet woodland combines elements of many other ecosystems and as such is important for many taxa.

Fragmented plots of semi-natural broad leaved woodland (A111) equates to a total of 4.74 hectares. Wainbody Wood totals 16.5 hectares, 77% of the woodland found within the site, an ancient semi-natural woodland characteristic of the W10 Oak-Bracken-Bramble community (NVC), is typical of woodland occurring on the more acidic soils within the county. It contains a good variety (137 species during the survey) of typical woodland plants including at least ten ancient woodland indicator species. The LWS further supports a number of county notable plants and several breeding birds (Song Thrush, Marsh Tit and Spotted Flycatcher). The Kenilworth Road woodlands and Wainbody Wood provides a very substantial corridor of woodland on the south side of Coventry.

A strong network of 21 field ponds (G1) exist across the development parcel including one ear marked as a pLWS at SP3169675325 . This network of ponds used predominately to trap flood water off adjoining farmland provides locally important habitats for breeding amphibians and invertebrates. The high connectivity of the pond network is maintained by close proximity between the mosaic of hedgerows and ponds and as such should be considered to have potential for great crested newts. Finham Park Ponds designated as an LWS occurs within the grounds of Finham Park School and contributes to the distinct pond network which occurs withi the development parcel. A thorough assessment of the ponds should coincide with great crested new surveys.

The mature species-rich hedgerows present support a variety of woody species and are accompanied in part by ditches and a diverse woodland ground flora. In an open intensively farmed landscape, the hedgerow network provides features of high biological and landscape value, providing a network of wildlife corridors connecting ponds, woodlands and grasslands. The hedgerows themselves provide important nesting and foraging habitat for breeding birds, mammals and invertebrates.



Target Notes

Number	Grid Reference	Survey Date
SP37B10	**SP3186273717**	**30/06/1998**

Mosaic of broad-leaved semi-natural and wet woodland besides the Finham Brook with willow (Salix spp.), some mature ash (Fraxinus excelsior) and young alder (Alnus glutinosa). The dense ground flora is dominated by common nettle (Urtica dioica) with frequent rosebay willowherb (Chamerion angustifolium), meadowsweet (Filipendula ulmaria), cleavers (Galium aparine), bramble (Rubus fruticosus agg.) and creeping thistle (Cirsium arvensis).

SP37B13	**SP3185073945**	**30/06/1998**

Poor semi-improved grassland hay meadow with frequent false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata), Yorkshire-fog (Holcus lanatus) and timothy (Phleum pratense). The grass sward contains to a lesser extent forbs of cow parsley (Anthriscus sylvestris), creeping thistle (Cirsium arvensis) and creeping buttercup (Ranunculus repens).

SP37B14 **SP3189673993** **30/06/1998**

Poor semi-improved grassland hay meadow with frequent false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata), Yorkshire-fog (Holcus lanatus) and timothy (Phleum pratense). The grass sward contains to a lesser extent forbs of cow parsley (Anthriscus sylvestris), creeping thistle (Cirsium arvensis) and creeping buttercup (Ranunculus repens).

SP37B7 **SP3171473847** **30/06/1998**

Poor semi-improved grassland hay meadow with frequent false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata), Yorkshire-fog (Holcus lanatus) and timothy (Phleum pratense). The grass sward contains to a lesser extent forbs of cow parsley (Anthriscus sylvestris), creeping thistle (Cirsium arvensis) and creeping buttercup (Ranunculus repens).

SP37B8 **SP3186273787** **30/06/1998**

A young conifer plantation of Norway spruce (Picea abies) trees.

Updated: GP 09/10/2015: The young conifer plantation has been removed and has been restored to arable farmland.

SP37B9 **SP3181173720** **30/06/1998**

The Finham Brook with well vegetated banks is dominated by common nettle (Urtica dioica) with frequent Himalayan balsam (Impatiens glanduifera), reed sweet-grass (Glyceria maxima), wild teasel (Dipsacus fullonum) and hogweed (Heracleum sphondylium).

SP37C1 **SP3152475314** **12/08/2014**

Cattle grazed species-poor rough pasture containing a variety of grasses including Yorkshire Fog (Holcus lanatus), false oat-grass (Arrhenatherum elatius), creeping bent (Agrostis stolonifera) and tufted hair-grass (Deschampsia caespitosa) with meadow buttercup (Ranunculus acris), common sorrel (Rumex acetosa), hogweed (Heracleum sphondylium) and trailing tormentil (Potentilla anglica) especially to the south of the site.

SP37C2 **SP3170075334** **12/08/2014**

A large partially-dry pond excavated to form two distinct pools with bulrush (Typha latifolia), branched bur-reed (Sparganium erectum), soft rush (Juncus effusus), compact rush (Juncus conglomeratus), gypsywort (Lycopus europaeus) with commmon woody nightshade (Solanum dulcamara) and a small patch of water lily occurring in the eastern pool. Mature oak (Quercus robur) and young willow (Salix

spp.) surround the pond with the latter invading into the drier parts. Signs of water vole (Arvicola amphibius) present.

SP37C25 SP3178274470 12/08/2014

Cattle grazed semi-improved grassland previously managed as a hay meadow is dominated by common bent (Agrostis tenuis) with crested dog's-tail (Cynosurus cristatus) and lesser knapweed (Centaurea nigra) with some cock's-foot (Dactylis glomerata) and common sorrel (Rumex acetosa). Bounded by a small brook lined with willow (Salix spp.) and alder (Alnus glutinosa).

SP37C26 SP3156374232 12/08/2014

King's Hill Lane roadside hedge containing a wide diversity of woody species which include hazel (Corylus avellana), oak (Quercus robur), holly (Ilex aquifolius), elder (Sambucus nigra), hawthorn (Crataegus monogyna) with some blackthorn (Prunus spinosa) and elm (Ulmus spp.).

SP37C3 SP3143175195 12/08/2014

Small area of scrub forming a dense tangle of hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa) and hazel (Corylus avellana). Mature ash (Fraxinus excelsior) also present. Ground flora includes abundant common nettle (Urtica dioica) with common male-fern (Dryopteris filix-mas), herb-Robert (Geranium robertianum) and wood avens (Geum urbanum). The more enclosed banks are partially vegetated by mosses which include swan's neck thyme-moss (Mnium hornum), hart's-tongue thyme-moss (Plagiomnium undulatum) and common feather-moss (Eurhynchium praelongum). Evidence of muntjac (Muntiacus reevesi).

SP37C4 SP3140575107 12/08/2014

Ash (Fraxinus excelsior) woodland with occasional oak (Quercus robur) and a high canopy with an understorey of hazel (Corylus avellana), hawthorn (Crataegus monogyna) and self-sown ash of varying density. The ground flora is dominated by common nettle (Urtica dioica) where the canopy is open and contains broad buckler-fern (Dryopteris dilatata), false brome (Brachypodium sylvaticum), hairy brome (Bromus ramosa), great willowherb (Epilobium hirsutum), enchanter's nightshade (Circaea lutetiana) and some tutsan (Hypericum androsaemum). Under a sparse canopy, the ground flora becomes more developed with honeysuckle (Lonicera periclymenum), herb-Robert (Geranium robertianum), greater stitchwort (Stellaria holostea), bugle (Ajuga reptans), male fern (Dryopteris filix-mas), scaly male fern (Dryopteris affinis), broad buckler-fern (Dryopteris dilatata) and Hart's-tongue

Thyme-moss (Plagiomnium undulatum) with patches of abundant Bluebell (Hyacinthoides non-scripta).

UPDATE CFT 12/07/2014

Tocil Wood and Brookstray LWS remains as described with a dense scrub understorey with a broad-leaved plantation. There are areas of wet woodland - alder carr (Alnus glutinosa) and planted ash (Fraxinus excelsior). The ground flora is a mix of bramble (Rubus fruticosus agg.), pendulous Sedge (Carex pendula) and male fern.

SP37C5 SP3133474969 12/08/2014

Old hazel (Corylus avellana) coppice with abundant young silver birch (Betula pendula) and oak standards (Quercus robur) becoming more dominant in the west and south. Ground flora generally patchy with bugle (Ajuga reptans), bramble (Rubus fruticosus agg.) and male fern (Dryopteris filix-mas) occurring along rides and in small clearings.

SP37C6 SP3147774907 12/08/2014

Oak woodland (Quercus robur) with abundant young silver birch (Betula pendula) with an understorey of abundant hazel (Corylus avellana) and holly (Ilex aquifolius). Sparse ground flora which includes male fern (Dryopteris filix-mas), bramble (Rubus fruticosus agg.), creeping soft-grass (Holcus mollis) and Eurinchium praelongum. Clearings are generally dominated by bracken (Pteridium aquilinum).

SP37C7 SP3163274871 12/08/2014

Woodland clearing of Wainbody Wood invaded by bracken (Pteridium aquilinum) with recent oak planting (Quercus robur). Also contains tufted hair-grass (Deschampsia caespitosa), wood-sedge (Carex sylvatica) and foxglove (Digitalis purpurea).

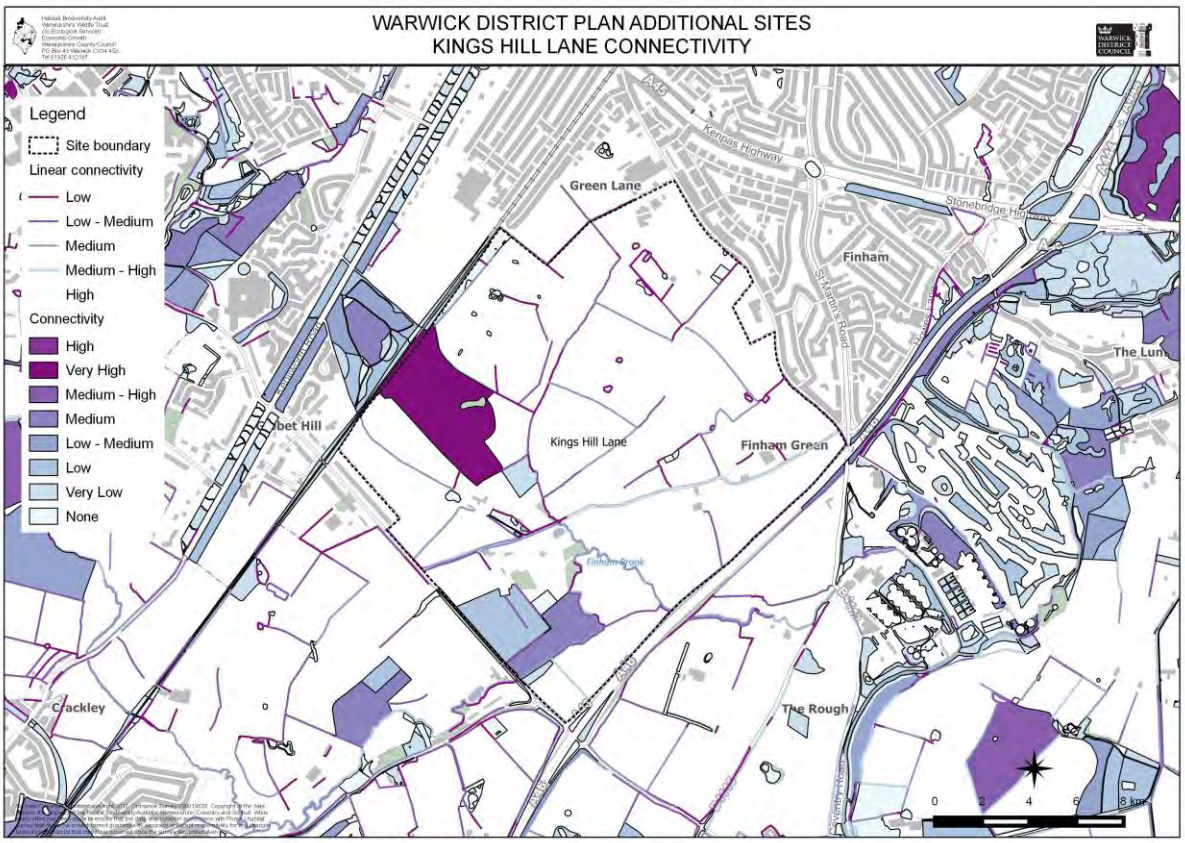
SP37C8 SP3154474708 12/08/2014

Semi-natural ash (Fraxinus excelsior) woodland with some oak (Quercus robur) and occasional grand fir (Abies grandis). Fairly open canopy with a dense hazel (Corylus avellana) and holly (Ilex aquifolium) under-storey. Ground flora includes bramble (Rubus fruticosus agg.), broad-buckler fern (Dryopteris dilatata), male fern (Dryopteris filix-mas), lady fern (Athyrium felix-femina), enchanter's nightshade (Circaea lutetiana), figwort, bugle (Ajuga reptans) and yellow pimpernel (Lysimachia nemorum) with bank haircap-moss (Polytrichum formosum), Swan's-neck thyme-moss (Mnium hornum), common tamarisk-moss (Thuidium tamariscinum) and possibly common smooth-cap moss (Atrichum undulatum).

SP37H5 **SP3274274587** **06/10/1996**

Roughly grazed rank semi-improved grassland consisting of coarse grasses.

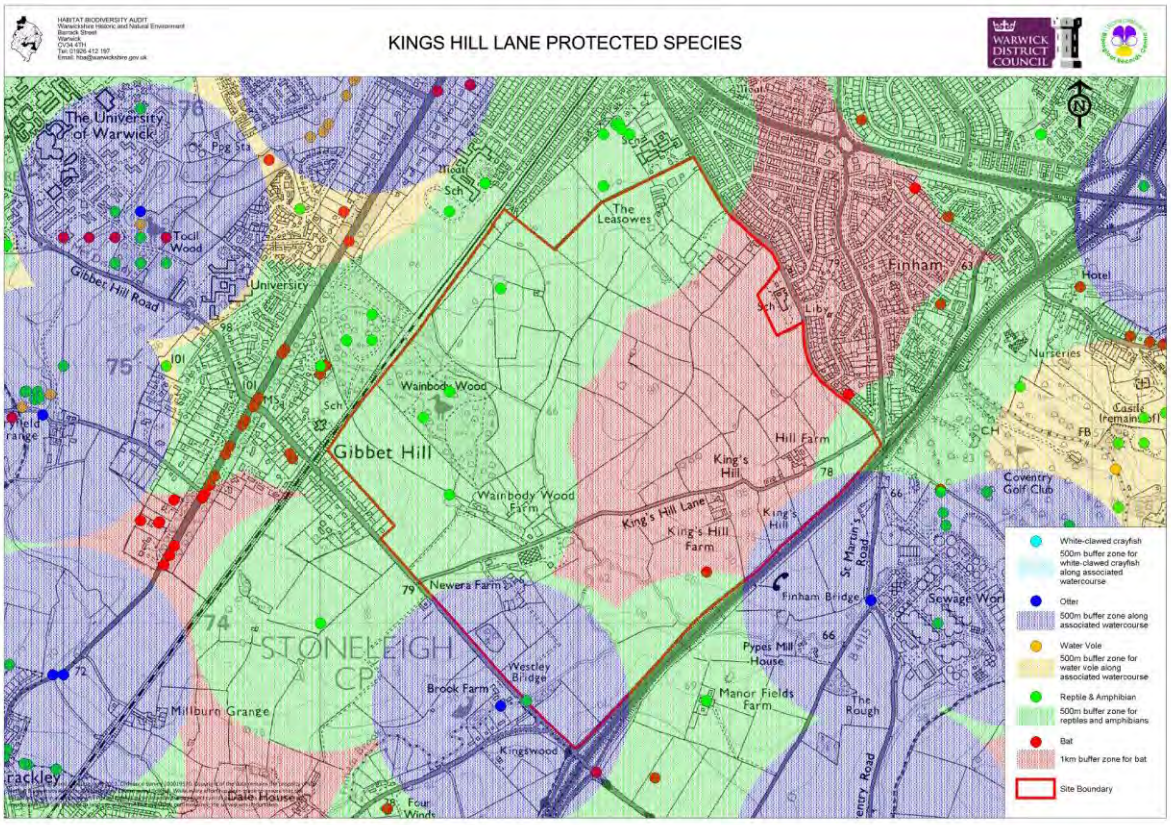
Habitat Connectivity



Protected Species

There are a high number of protected and notable species recorded within the Site boundary. These include numerous records for great crested newt (Triturus cristatus), smooth newt (Lissotriton vulgaris), common frog (Rana temporaria), common toad (Bufo bufo), grass snake (Natrix natrix), bats of noctule (Nyctalus noctula), common pipistrelle (Pipistrellus pipistrellus) and pipistrelle sp. (Pipistrellus sp.), badger (Meles Meles), tormentil (Potentilla erecta), hedgehog (Erinaceus europaeus) and a range of invertebrate species.

In addition, otter (Lutra Lutra), water vole (Arvicola amphibius), kingfisher (Alcedo atthis) and a range of other species of bats including serotine (Eptesicus serotinus), Brandt's (Myotis brandtii), Daubenton's (Myotis daubentonii), Natterer's (Myotis nattereri), Leisler's (Nyctalus leisleri), brown long-eared (Plecotus auritus), soprano pipistrelle (Pipistrellus pygmaeus), an unidentified myotis (Myotis spp.) and unidentified bat (Chiroptera spp.) have also been recorded in the area surrounding the Site.



LAND AT WESTWOOD HEATH

Area: 50 hectares

Overview

The Westwood Heath site consists of five arable and three grassland fields. The site is bordered by Westwood Heath Road to the north which marks the boundary with Coventry City. The eastern boundary runs along the continuous housing extent along Cromwell Road from Burton Green to the Coventry City boundary. The southern and western edge consists of open farmland and woodland. The site is divided into two sections, east and west by the Brockendon Road. The eastern section is centred on Old Lodge Farm. A footpath passes through this section which connects Westwood Heath Road with the Green Way and continues on to Kenilworth.

Further south is the Greenway Dismantled Railway along which will run the proposed HS2 Railway Line.

Key Features

- Ancient and semi-natural woodlands
- Intact hedgerows
- Ponds and associated wetland habitats
- Semi-improved grassland

Recommendations

Consideration should be given to maintaining and incorporating additional tree cover and well established hedgerows to maintain the important semi-natural woodlands facilitating improved connectivity between them.

Similarly, the pond complex and associated wetland habitats identified at Brockenham Grange Farm should be incorporated into a single Local Wildlife Site (LWS) and should be surveyed accordingly.

Considering the potential impact of the HS2 Railway Line route in regard to the proposed development and the possible mitigation and landscaping thus required, protecting existing habitats, particular focus should be on LWS woodlands between the route and the development Site.

The proposed development scheme should consider connecting ponds and metapopulations of amphibians.

Designated Sites

Local Wildlife Sites:

Within the Site itself there are no designated sites. Two local wildlife sites form part of the southern boundary these are Black Waste Wood and The Pools Wood. Black Waste Wood is a 10 hectare semi-natural woodland, part of which is an area of ancient woodland consisting mainly of oak, ash and birch woodland with hazel coppice. The wood has been much reduced in size since Victorian times including the area to the south of the old railway which was gone by 1958 and the western section along the Burton Green Road lost to development in the 1970s. Along the southern boundary of the woodland is the dismantled Kenilworth to Balsall Railway line and embankment, which is a potential local wildlife site. The HS2 rail link splits off from the disused railway line here at the southern edge of the wood and passes on through another ancient woodland and local wildlife site at Broadwells Wood.

The second local wildlife site along the southern edge of the site is Pools Wood a three hectare mature unmanaged semi-natural deciduous woodland consisting of oak and ash with occasional turkey oak, sycamore and hybrid black popular. The woodland has grown up around two old fish ponds which have created areas of wet woodland dominated by alder and willow. Two dams remain where the former fish ponds were located.

Black Waste Wood LWS Designation Year: 2009 Area 9.59 hectares

The site consists of a triangular shaped, mainly deciduous oak, ash and birch woodland with hazel coppice situated in a mixed arable/pastoral landscape about 3 km north of Kenilworth.

A disused railway with a public footpath runs north-west to south-east along the southern boundary of the woodland. A small area in the north of woodland has been replanted with coniferous plantation. The northern boundary of the woodland is interrupted by amenity gardens and fenced pig enclosures. The southern portion of the woodland has been reduced by clear felling and partially used by horse riders.

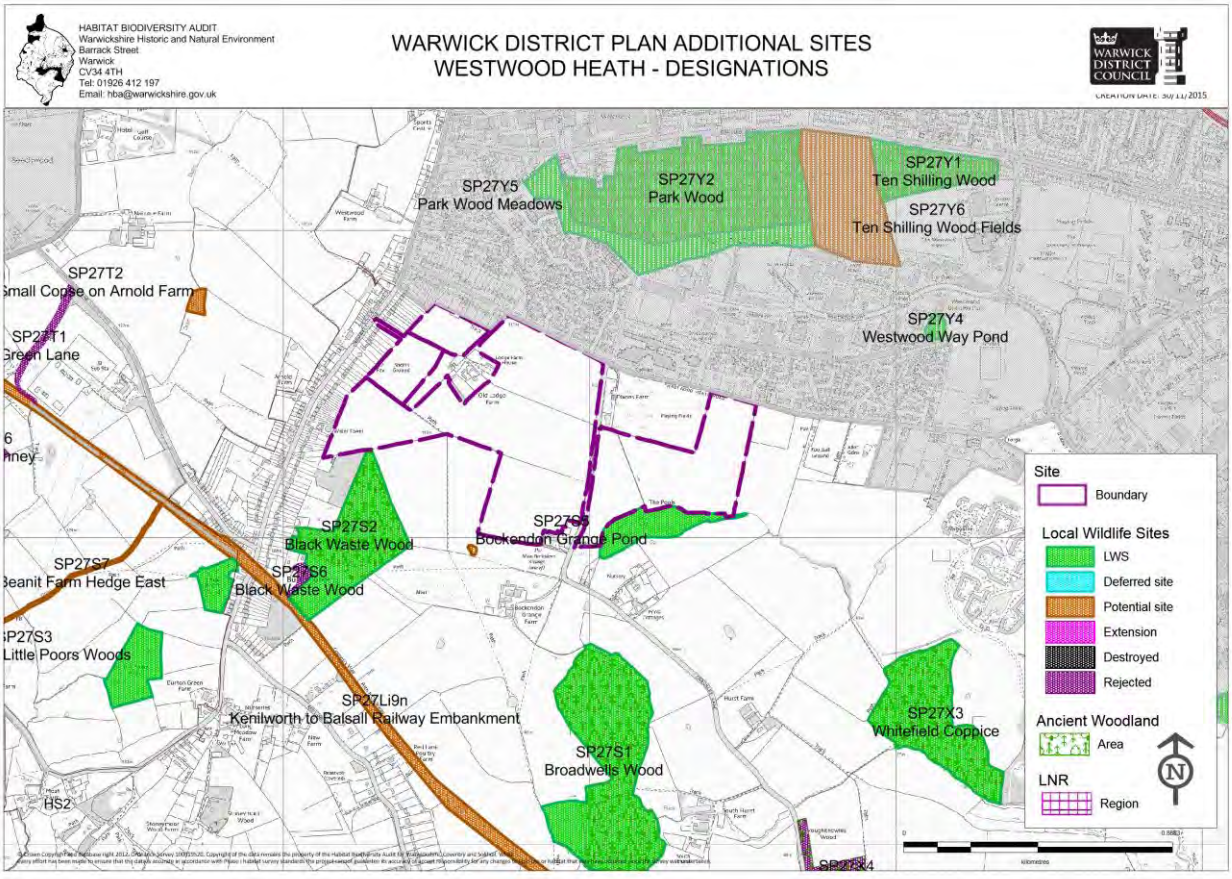
Small areas within the woodland have been clear felled and are now dominated by tall stands of bracken.

Pools Wood LWS Designation Year: 2009 Area 3.17 hectares

The Site consists of mature un-managed semi natural deciduous woodland of oak/ash with occasional turkey oak (Quercus cerris), sycamore (Acer

pseudoplatanus) and hybrid black poplars (Populus canadensis) situated in a mixed arable/pastoral landscape about 3 km north of Kenilworth. The Site is marked as three fish ponds covering an area slightly greater than the present wood in the first edition of the OS Map (surveyed c1830) and no woodland was present at this time.

The wood is transacted by tributaries of Finham Brook and remnant banks (two dams remain) of the old 'fish ponds' that existed on the Site. These aspects create adjacent wet areas that are dominated by alders and willows. The understorey is dominated by hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra) and holly (Iiex aquifolium) with a diverse ground flora dominated in parts by bracken (Pteridium aquilinum) and bramble (Rubus fruticosus agg.). There is a marked difference in vegetation found in the dry, shaded areas, open dry areas and damp open areas. The site contains very mature hybrid black poplars and turkey oaks.

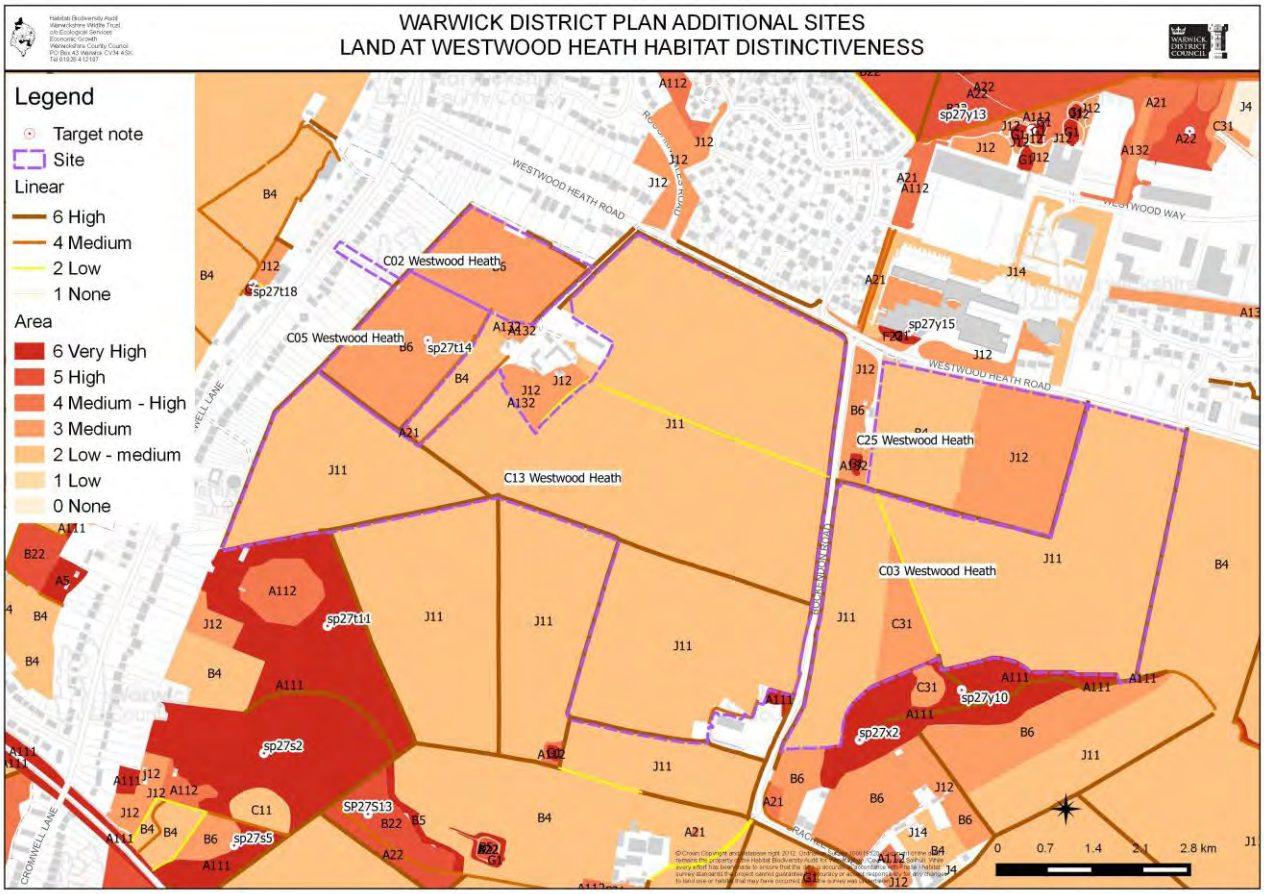


Habitat Description

The combined sites of Westwood Heath consist mainly of arable land (J11) with some semi-improved grassland within parcels; CO2 and CO5 and a sports field at C25 (J12). The two parcels of land CO2 and CO5 are summarised in Target Note SP27T14.

The southern edges of CO3 and C13 are bounded by important semi-natural woodland (A112) LWS's of Black Wood and Pools Wood described above and noted within Target Notes: SP27T1, SP27S2 and SP27S5 for Black Waste Wood and SP27Y10 and SP27X2 for Pools Wood. Both woods are connected by intact hedgerows (J21).

South of Westwood Heath, several ponds (G1) persist including the potential local wildlife site of Bockenden Grange Pond. A cluster of four ponds form a pond complex close to Brockendon Grange Farm. Through this group of ponds runs the Finham Brook (G2) which incorporates an area of marshy grassland (B5) and semi-improved neutral grassland (B22). Together these habitats are rated as high distinctiveness and are noted at Target Note: SP27S13.



Target Notes

Number	Grid Reference	Survey Date
SP27S1	**SP2795675485**	**04/06/2011**

Broadwells Wood LWS is semi-natural broad-leaved woodland with planted conifers. The canopy comprises pedunculate oak (Quercus robur) with silver birch (Betula pendula) and occasional sweet chestnut (Castanea sativa).The open canopy suppirts a understorey of hazel (Corylus avellana) and dominan young silver birch (Betula pendula) with a species-poor ground flora. Bracken (Pteridium aquilinum) and bramble (Rubus fruticosus agg.) are abundant throughout.

UPDATE 27/05/2011 MF

As described with occasional Scots pine (Pinus sylvestris), ash (Fraxinus excelsior), sycamore (Acer pseudoplatanus), pedunculate oak (Quercus robur), silver birch (Betula pendula) with dominant oak (Quercus robur) and an understorey of bramble (Rubus fruticosus), hawthorn (Crataegus monogyna), hazel (Corylus avellana) and occasional lady fern (Athyrium filix-femina) with patches of bare ground.

SP27S2	**SP2719175949**	**04/06/2011**

Black Waste Wood LWS is semi-natural broad-leaved woodland dominated by ash (Fraxinus excelsior) standards with coppiced hazel (Corylus avellana), holly (Ilex aquifolium) and elder (Sambucus nigra) with locally frequent raspberry (Rubus idaeus) resulting in a locally dense understorey. The ground flora comprises a variety of typical woodland plants with occasional pendulous sedge (Carex pendula) and wood sedge (Carex sylvatica).

UPDATE 27/05/2011 MF

Unable to access woodland but viewed from a neighbouring field. Additional tree species include pedunculate oak (Quercus robur) and silver birch (Betula pendula). The understorey is dense, with bramble (Rubus fruticosus), dog-rose (Rosa canina), fern species and bluebell (Hyacinthoides non-scripta).

SP27S5	**SP2714775814**	**04/06/2011**

Black Waste Wood LWS is semi-natural broad-leaved woodland with its canopy dominated by ash (Fraxinus excelsior), pedunculate oak (Quercus robur) and silver birch (Betula pendula). The understorey comprises dense hawthorn (Crataegus monogyna) and bramble (Rubus fruticosus agg.).

UPDATE 27/05/2011 MF

As described, but is more diverse than previously recorded. Trees recorded include oak (Quercus robur), silver birch (Betula pendula) and ash (Fraxinus excelsior). The understorey includes abundant hazel (Corylus avellana), holly (Ilex aquifolium) (especially in ditch to the south-east) and rowan (Sorbus aucuparia). Ground flora includes wood anemone (Anemone nemorosa), bluebell (Hyacinthoides non-scripta), common dog-violet (Viola riviniana), wood-sorrel (Oxalis acetosella), yellow pimpernel (Lysimachia nemorum), honeysuckle (Lonicera periclymenum), occasional bracken (Pteridium aquilinum), common male-fern (Dryopteris filix-mas) and yellow archangel (Lamiastrum galeobdolon).

SP27S6 SP2676375847 04/06/2011

Big Poors and Little Poors Woods LWS is mixed plantation of predominantly pedunculate oak (Quercus robur) with European larch (Larix decidua) and hazel (Corylus avellana) and holly (Ilex aquifolium) frequent in the understorey. The field and ground layers are dominated by bramble (Rubus fruticosus) and locally abundant bracken (Pteridium aquilinum).

UPDATE 04/06/2011 MF

The wood is as described and bounded by a hawthorn hedge (Crataegus mongoyna). The understorey is fully developed with English elm (Ulmus procera), hazel (Crataegus monogyna), hawthorn (Crataegus monogyna), elder (Sambucus nigra), ash (Fraxinus excelsior) and rowan (Sorbus aucuparia). The ground flora includes bluebell (Hyacinthoides non-scripta), ivy (Hedera helix), black bryony (Tamus communis), bracken and honeysuckle (Lonicera periclymenum).

SP27S12 SP2701975733 04/06/2011

Semi-natural broad-leaved woodland dominated by ash (Fraxinus excelsior) with an hawthorn (Crataegus monogyna) and occasional elder (Sambucus nigra) understorey. There is very little ground flora except ivy (Hedera helix) and wood speedwell (Veronica montana). This section of the woodland is part of the proposed HS2 link.

SP27S13 SP2734475860 04/06/2011

Wet ditch with scrub which includes dog-rose (Rosa canina), gorse (Ulex europaeus), hawthorn (Crataegus monogyna), bramble (Rubus fruticosus). Herb species include bittersweet (Solanum dulcamara), sheep's sorrel (Rumex acetosella), soft rush (Juncus effusus), common bird’s-foot-trefoil (Lotus corniculatus), broom (Cytisus scoparius), common mouse-ear (Cerastium fontanum), great willowherb (Epilobium hirsutum), lesser stitchwort (Stellaria graminea), herb Robert (Geranium robertianum), water forget-me-not (Myosotis scorpioides), foxglove (Digitalis purpurea) and square-stalked St John's-wort (Hypericum

tetrapterum). There is a marshy area to the south where the ditch ends; this area is heavily poached by cattle with abundant celery-leaved Buttercup (Ranunculus sceleratus).

UPDATE 29/09/2015 CFT

The Finham Brook continues to flow from Black Waste Wood, close to an area shown on OS mapping as a moat, it includes a pond with marginal vegeation surrounded by wet marshy grassland. This should be considered a plws with nearby Brockendon Grange Pond plws.

SP27T1 SP2667076142 29/09/2015

Young ash (Fraxinus excelsior) and horse chestnut (Aesculus hippocastanum) with medium-aged pedunculate oak (Quercus robur) in the south and English Elm (Ulmus procera) with oak seedlings to the west.There is no understorey and the field layer consists of sparse bramble (Rubus fruticosus agg.). The sparse ground flora contains periennal rye-grass (Lolium perenne) and cow parsley (Anthriscus sylvestris) with marginal wood avens (Geum urbanum), common chickweed (Stellaria media) and cleavers (Galium aparine).

UPDATE 22/11/07 MF

Currently improved grassland grazed by a mixture of livestock of horses, hens, geese and turkeys. No evidence of plantation to the south-west with only a single oak tree.

UPDATE 29/09/2015 CFT

Currently a horse grazed paddock.

SP27T11 SP2728476136 29/09/2015

Black Waste Wood LWS is semi-natural broad-leaved woodland with a fairly open canopy. Ash (Fraxinus excelsior) standards and ancient coppice predominates, many of which are ivy-clad (Hedera helix). Hazel (Corylus avelllana), holly (Ilex aquifolium) and elder (Sambucus nigra) are occassional. The field layer contains raspberry (Rubus ideaus), bramble (Rubus fruticosus agg.) and patches of common nettle (Urtica dioica). Ground flora includes ground-ivy (Glechoma hederacea), herb-Robert (Geranium robertianum), wood speedwell (Veronica montana), common chickweed (Stellaria media), hedge woundwort (Stachys sylvatica), bluebells (Hyacinthoides non-scripta), pendulous sedge (Carex pendula) and wood Sedge (Carex sylvatica). There is much dead wood and briar (Rosa spp.).

UPDATE 19/11/07 MF

Area of marshy grassland in corner of field, permanently wet hollow surrounded by oak (Quercus robur), silver birch (Betula pendula), willow (Salix spp.), hazel (Corylus avellana) and elder (Sambucus nigra) alongside dead wood. Long-tailed tit, wren, dunnock and grey squirrel also noted here.

UPDATE 29/9/2015 CFT

Black Waste Wood LWS as described in citation.

SP27T14 SP2743176554 29/09/2015

Neglected former playing fields developed as species poor semi-improved grassland dominated by tall grasses of false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata) and creeping bent (Agrostis stolonifera), hogweed (Heracleum sphondylium), creeping thistle (Cirsium arvense), broad-leaved dock (Rumex obtusifolius), rosebay willowherb (Chamerion angustifolium), creeping buttercup (Ranunculus repens) and common ragwort (Senecio jacobaea) with occasional hawthorn (Crataegus monogyna) and young ash (Fraxinus excelsior). Dense scrub borders footpath.

SP27T19 SP2689576411 29/09/2015

Remnant species-rich hedgerow with mature trees of pedunculate oak (Quercus robur) and ash (Fraxinus excelsior) with a shrub layer of hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), elder (Sambucus nigra), holly (Ilex aquifolium) and English elm (Ulmus procera). The hedge separates a ploughed arable field from improved grassland.

SP27X2 SP2806475969 21/10/1996

The Pools Wood is semi-natural broad-leaved woodland dominated by oak (Quercus robur) except where locally dominant crack willow (Salix fragilis) encloses former dried out fish ponds. The understorey comprises hawthorn (Crataegus monogyna) and locally abundant holly (Ilex aquifolium). The ground flora is species-poor with abundant bramble (Rubus fruticosus agg.) and frequent bracken (Pteridium aquilinum) with occasional bluebell (Hyacinthoides non-scripta). The leaf litter is deep throughout and there is plentiful fallen rotting dead wood.

SP27Y10 SP2821376042 28/08/2014

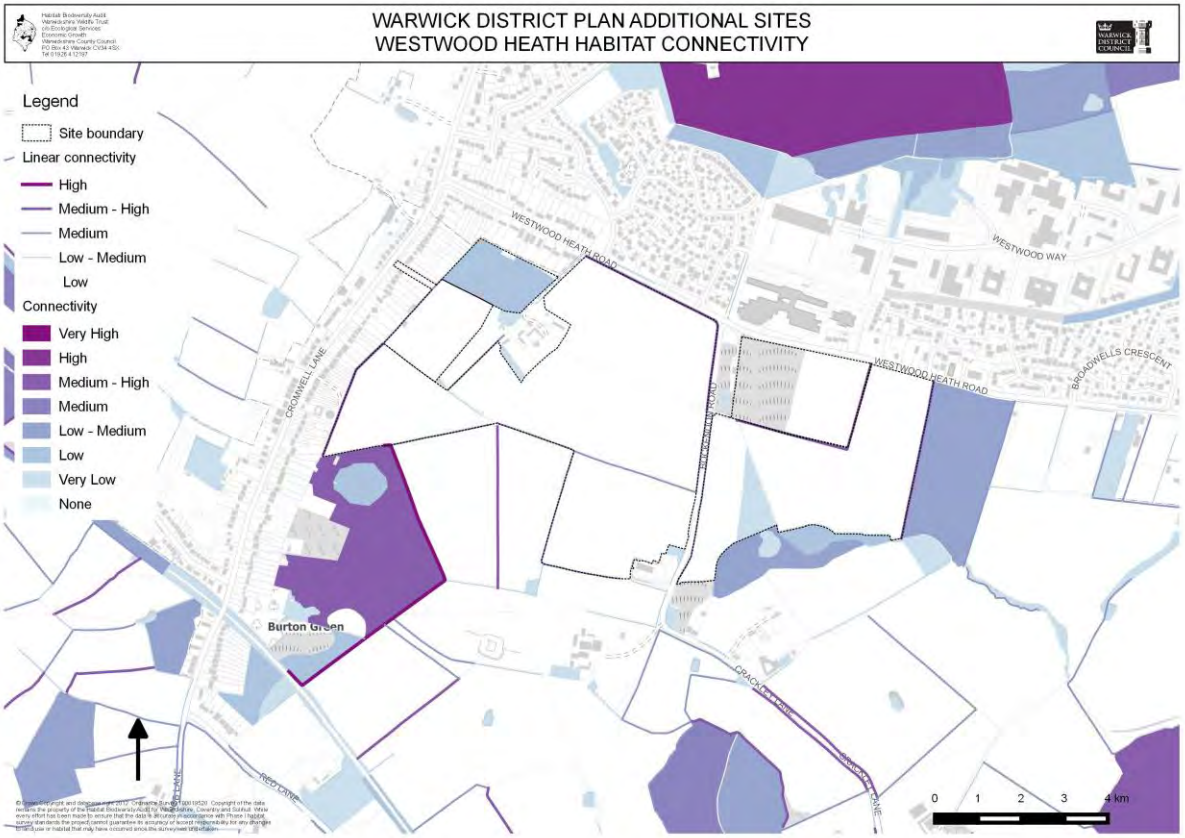
The Pools Wood is semi-natural broad-leaved woodland dominated by oak (Quercus robur) except where locally dominant crack willow (Salix fragilis) encloses former dried out fish ponds. The understorey comprises hawthorn (Crataegus monogyna) and locally abundant holly (Ilex aquifolium). The ground flora is species-poor with abundant bramble (Rubus fruticosus agg.) and frequent bracken (Pteridium

aquilinum) with occasional bluebell (Hyacinthoides non-scripta). The leaf litter is deep throughout and there is plentiful fallen rotting dead wood.

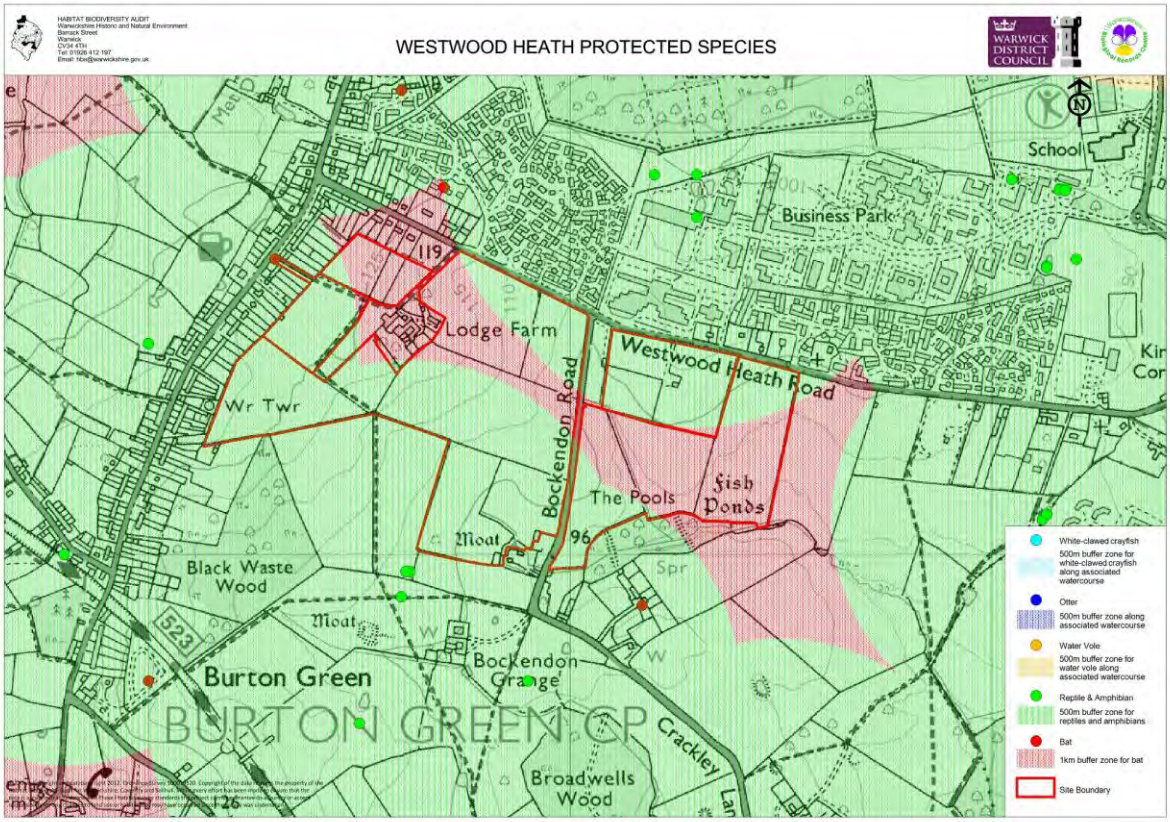
UPDATE 30/10/2014 CFT

The Pools Wood LWS (SP27X2) was surveyed on the 03/02/2009. The Site was unaccessible at the time of survey although the site appears to be as described.

Habitat Connectivity



Protected Species



Both foraging and roost records for common pipistrelle (Pipistrellus pipistrellus) and brown long-eared (Plecotus auritus) bats respectively arise within or very close to the curtilage of the Site.

Current breeding records for great crested newts (Triturus cristatus) occur within 50m of the proposed development boundary.

In the wider context, records for both great crested newts and smooth newt materialise within the grounds of Business Park WMG Academy for Young Engineers (Coventry) and the University of Warwick. Given the position of the proposed development in relation to metapopulations of great crested newts, the development scheme should be designed to incorporate additional aquatic features and green corridors to improve linkage between sites in addition to the retention of suitable terrestrial habitat. Sustainable urban drainage schemes should be used to achieve conservation gains for great crested newts.

Mitigation measures must demonstrate that the assessed great crested newt population has suffered no net loss on its conservation status.

LAND SOUTH OF DALEHOUSE LANE AND NORTH OF FRYTHE CLOSE

Area: 3.64 hectares

Overview

The land parcel south of Dalehouse Lane and North of Frythe Close is on the edge of the continuous built up area of Kenilworth where houses border the Kenilworth Golf Club. The field itself is a grass meadow surrounded by dense hedgerows.

Key Features

- Hedgerows
- River corridor
- Roadside verges

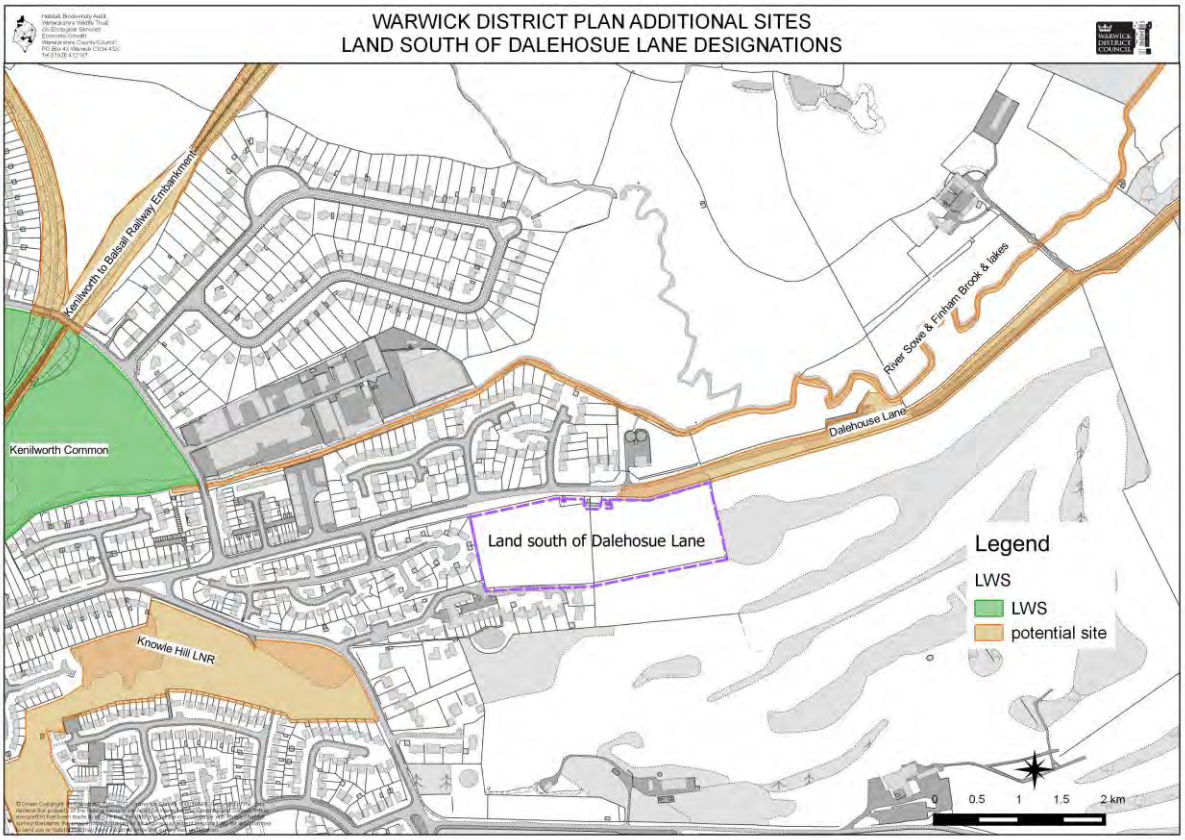
Recommendations

Dalehouse Lane was recommended for survey in 2008 as a Local Wildlife Site and has not been done in the intervening period. The Lane incorporates the semi-improved grass verge and bank, associated hedgerows and linear woodland sections. These should all be incorporated into the LWS. In addition to the survey itself a verge management plan should also be considered to prevent the further deterioration of the grassland verge.

Consideration should also be given to maintaining and improving the habitat connectivity along Dalehouse Lane to the proposed site following the established hedgerows that surround the site and the semi-natural woodland corridor link to Knowle Hill LNR.

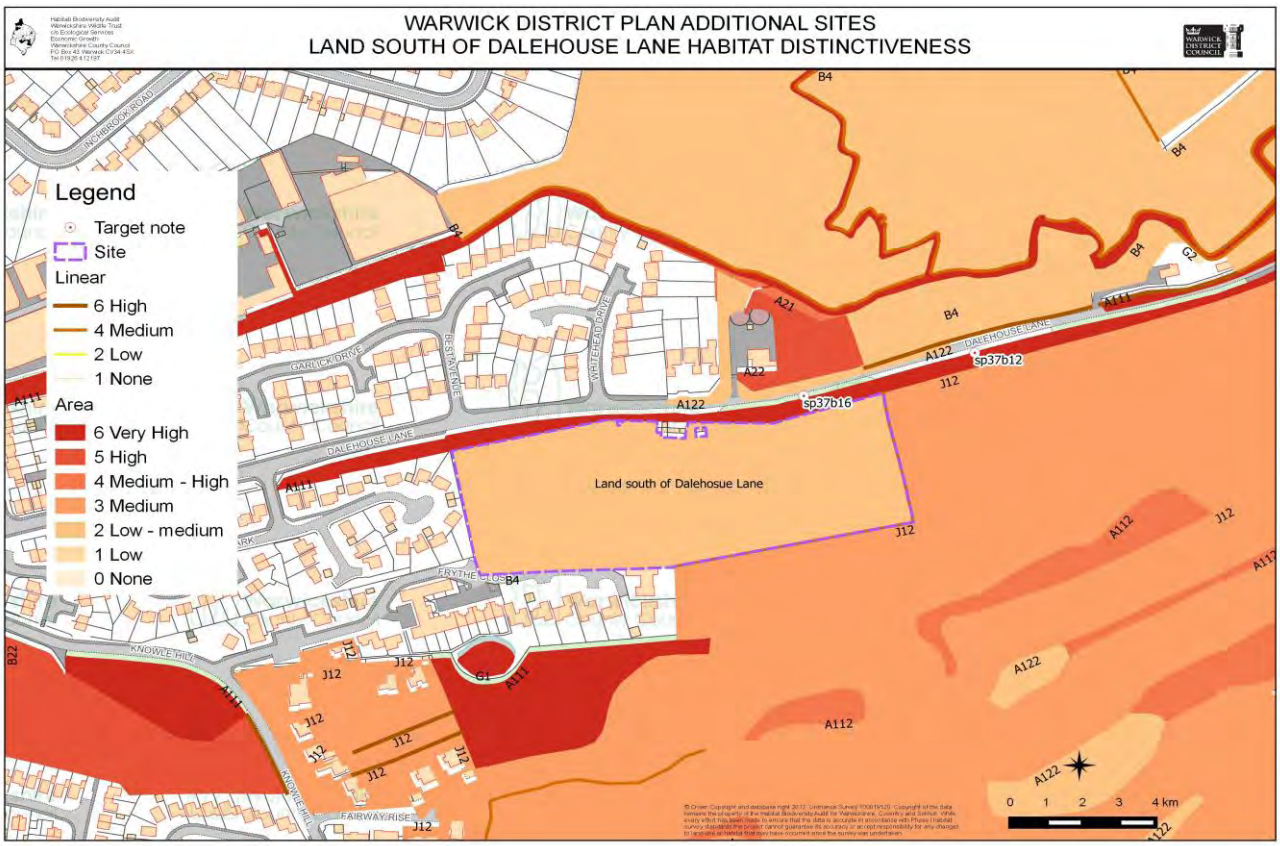
Designated Sites

There are no designated sites within the immediate vicinity of the field. The nearest designated local wildlife site is Kenilworth Common. The site does border a section of the linear Dalehouse Lane potential local wildlife site (plws) and the River Sowe and Finham Brooks plws. Knowle Hill LNR, a Warwickshire Wildlife Trust Reserve and potential local wildlife site (pLWS) is also close by.



Habitat Description

The development parcel consists of a single field recorded as improved grassland (B4) of low habitat distinctiveness, surrounded by intact hedgerows with trees (J23). The verge along Dalehouse Lane has been noted as semi-improved grassland (B22) detailed in Target Notes: SP37B12 and SP37B16. The verge detiorates to species-poor grassland (B6) dominated by coarse grasses, hogweed (Heracleum sphondylium) and bracken (Pteridium aquilinum) e.t.c. with sections of tall ruderal (C31) vegetation noted in Target Note: SP37B15, as it continues westward towards Dale House Farm. Along Dalehouse Lane, linear strips of semi-natural woodland and trees, specified in Target Note: SP37B25 merge with the hedgerow to create a continuous corridor linking Knowle Hill LNR with the open countryside and woodland plantations of Kenilworth Golf Course.



Target Notes

Number	Grid Reference	Survey Date
SP37B12	**SP3069672987**	**14/05/2011**

Dale House Lane Road Verge holds species of dog's mercury (Mercurialis perennis), cleavers (Galium aparine), garlic mustard (Alliaria petiolata), hazel (Corylus avellana), pedunculate oak (Quercus robur), bluebell (Hyacinthoides non-scripta), green alkanet (Pentaglottis sempervirens), bracken (Pteridium aquilinum), wood avens (Geum urbanum), great willowherb (Epilobium hirsutum), creeping buttercup (Ranunculus repens) and blackthorn (Prunus spinosa).

SP37B15	**SP3102473185**	**14/05/2011**

Dale House Lane Road Verge is a wide road verge with and un-mown strip a distance away from the carriageway. There is frequent cock's-foot (Dactylis glomerata), false oat-grass (Arrhenatherum elatius), sweet vernal-grass (Anthoxanthum odoratum), great willowherb (Epilobium hirsutum), hogweed (Heracleum sphondylium), common nettle (Urtica dioica), bramble (Rubus fruticosus), creeping thistle (Cirsium arvense), common mouse-ear (Cerastium fontanum), lesser trefoil (Trifolium dubium) and ribwort plantain (Plantago

lanceolata), with less frequent bluebell (Hyacinthoides non-scripta), greater stitchwort (Stellaria holostea) and lesser celandine (Ranunculus ficaria).

UPDATED 14/05/2011 MF

Dale House Lane Road Verge is now dominated by rosebay willowherb (Chamerion angustifolium), bramble (Rubus fruticosus), hogweed (Heracleum sphondylium), broad-leaved dock (Rumex obtusifolius), cow parsley (Anthriscus sylvestris), creeping buttercup (Ranunculus repens), bracken (Pteridium aquilinum), ground elder (Aegopodium podagraria), ground-ivy (Glechoma hederacea) and occasional red campion (Silene dioica). Abundant dog's mercury (Mercurialis perennis) is present across the carriage on the verge opposite.

SP37B16 SP3058372957 14/05/2011

Dale House Lane Road Verge is a steeply sloping grass bank with frequent haln; Common Bent (Agrostis capillaris), sweet vernal-grass (Anthoxanthum odoratum), Red Fescue (Festuca rubra), false oat-grass (Arrhenatherum elatius), cleavers (Galium aparine), bramble (Rubus fruticosus), hawthorn (Crataegus monogyna), colts-foot (Tussilago farfara), vetch (Vicia spp.), smooth tare (Vicia tetrasperma), meadow buttercup (Ranunculus acris), creeping thistle (Cirsium arvense), meadow vetchling (Lathyrus pratensis) and occasional white campion (Silene latifolia) and foxglove (Digitalis purpurea). A hawthorn hedge marks the top of the bank.

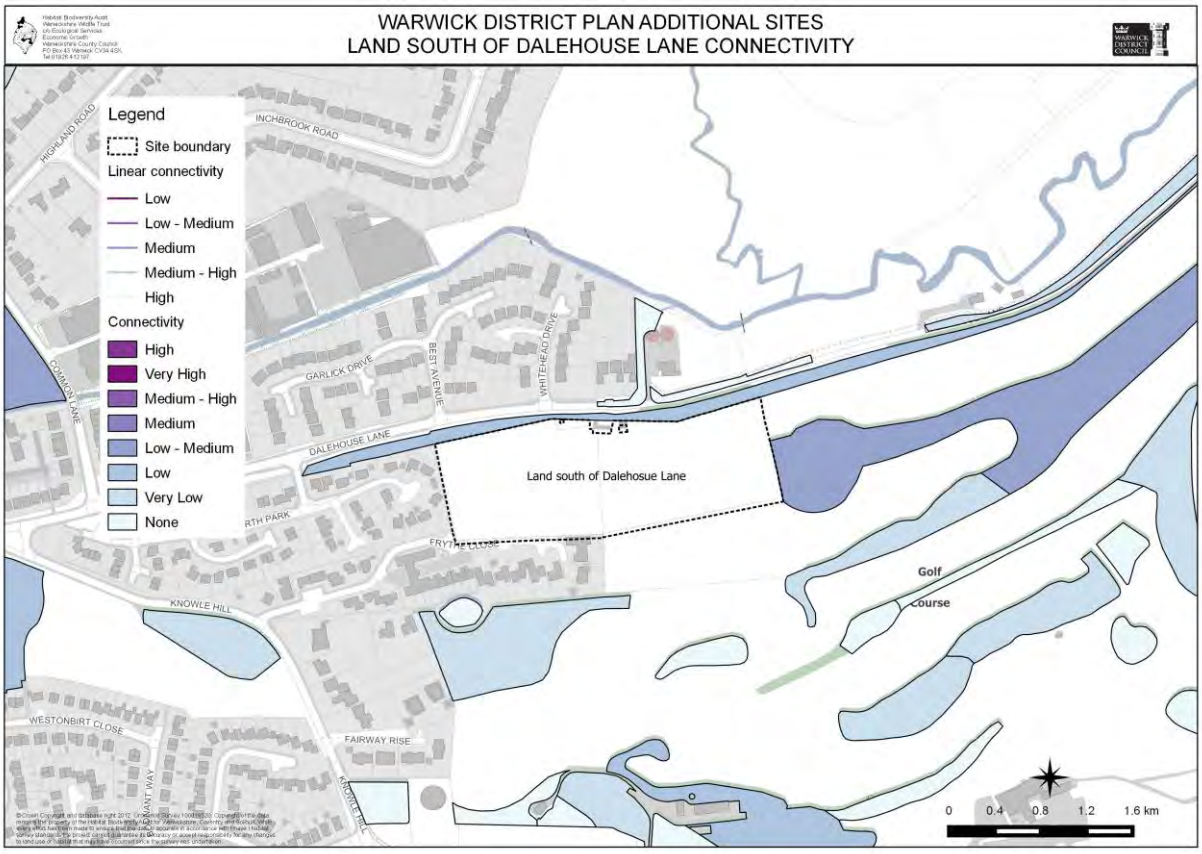
UPDATE 14/05/2011 MF

Species found at time of visit to both locations include dog's mercury (Mercurialis perennis), cleavers (Galium aparine), garlic mustard (Alliaria petiolata), hazel (Corylus avellana), pedunculate oak (Quercus robur), bluebell (Hyacinthoides non-scripta), green alkanet (Pentaglottis sempervirens), bracken (Pteridium aquilinum), wood avens (Geum urbanum), great willowherb (Epilobium hirsutum), creeping buttercup (Ranunculus repens) and blackthorn (Prunus spinosa).

SP37B24 SP3098173141 14/05/2011

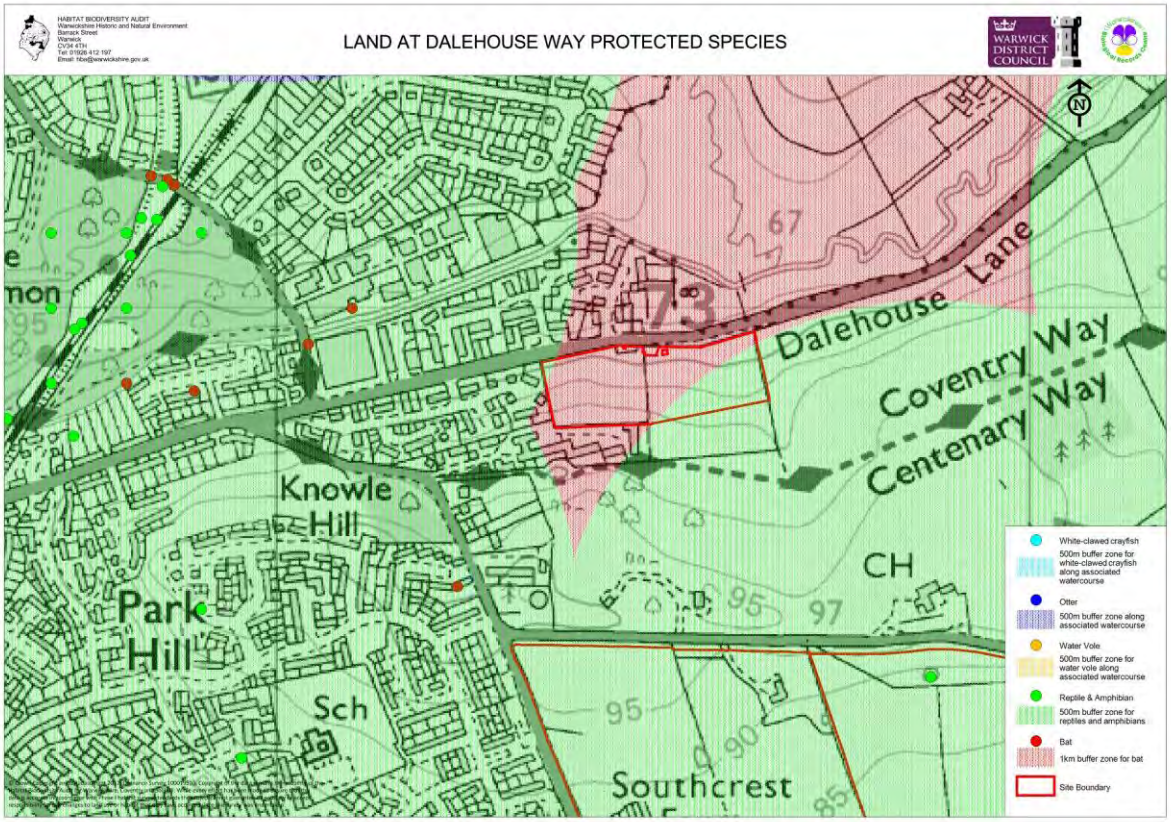
Strip of semi-natural broadleaved woodland on the north side of the road dominated by pedunculate oak (Quercus robur) with sycamore (Acer pseudoplatanus) and an understorey of holly (Ilex aquifolium), hawthorn (Crataegus monogyna), elder (Sambucus nigra), hazel (Corylus avellana) and blackthorn (Prunus spinosa). Ground flora includes bluebell (Hyacinthoides non-scripta) and red campion (Silene dioica), Indian/Himalayan Balsam (Impatiens glandulifera) has also become established.

Habitat Connectivity



Protected Species

Less than a 1km away from the development parcel sits a current great crested newt (Triturus cristatus) breeding pond and a confirmed roost record for common pipistrelle (Pipistrellus pipistrellus). Foraging bat records for common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (Pipistrellus pygmaeus) and noctule (Nyctalus noctula) are present 250m from the Sites boundary.



LAND NORTH OF MILVERTON

Area: 83.3 hectares

Overview

Intensive farmland dominates the development parcel consisting primarily of arable crops bordered on the southern boundary by the Milverton New and Binswood Allotments and those residential properties off Northumberland Road. The western perimeter is marked by the Old Milverton Road with the northern fringe edged by Sandy Lane. The parcel boundary snakes around Sandy Lane Farm transversing along Old Milverton Lane and encompassing arable farmland up to broad-leaved plantation woodland on the periphery of the Warwickshire Hospital sandwiched in the north-eastern corner of the parcel between the eastern margins of Kenilworth Road.

Key Features

- Arable farmland
- Open running water
- Intact hedgerows
- Hedgerows with trees
- Veteran trees

Recommendations

The loss of a large expanse of arable farmland should be mitigated by the creation, maintenance and enhancement of set-a-side arable fields, wild bird covers and fallows/stubbles to provide safe nesting sites and shelter alonsige both a summer and winter food source for farmland birds.

Grass margins at a width of 1.5-6 m adjacent to hedgerows and watercourses will deliver significant wildlife benefits. The enhancement and retention of such high value habitats such as hedgerows, ponds and brooks should be incorporated within development proposals.

Broad buffer zones of rank grassland and scrub should be delivered in addition to the gapping up of existing hedegrows to be retained using native woody species of

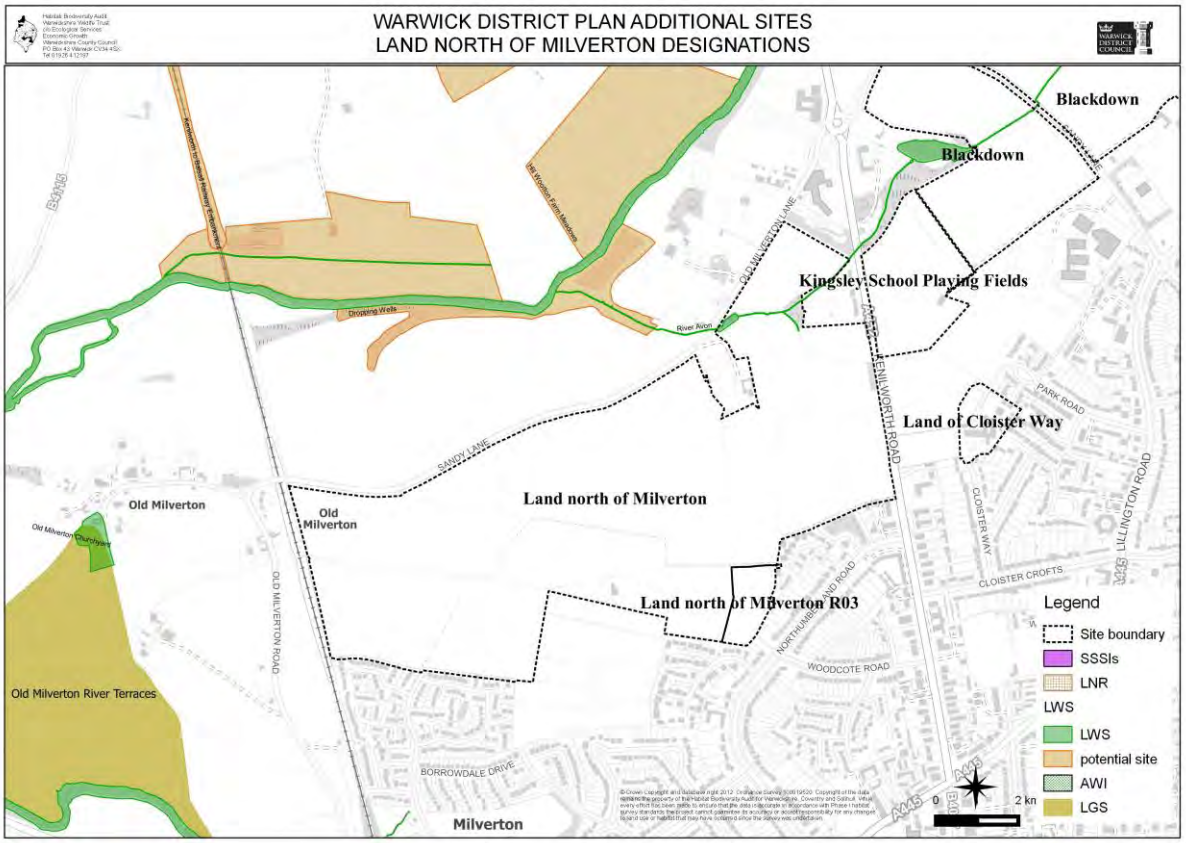
local provenance of crab apple and rowan. This will produce winter fruit for a wide range of bird species.

The margins should be managed appropriately with seed mixes sown in the spring or autumn with grass margins left undisturbed in the summer and managed with existing hedgerows should be cut around one-third on a three year rotatation.

Veteran and mature trees particularly within hedgerows should be retained and incorporated within the development in areas of open space and retained semi-natural areas. All those hedgerows and trees that form the development boundary should be retained and enhanced. Each hedgerow and tree should be identified and protected to BS5837:2012.

An adequate buffer zone should be place between any proposed development and the brook as an LWS tributary of the River Avon as not to adversely affect the character and value of the watercourse. Any proposed development at a minimum should not be within 8 metres of the brook, the vegetated buffer zone of native plant species will allow the retention of any trees and shrubs along this boundary.

Designated Sites



Local Wildlife Sites:

A tributary of the River Avon LWS tranverses the northern section of the development parcels and continues to mark a section of the north-eastern boundary.

River Avon SP15Li8F Designated: 2011 Area: 102 km / Tributeries – 205km

River Avon enters the Warwickshire upstream of Rugby, from Leicestershire and Northamptonshire to the east. The river flows in a general south-westerly direction through the county until it reaches Worcestershire downstream of Bidford on Avon. The river then briefly re-enters Warwickshire near Abbotts Salford before finally flowing on through Worcestershire towards its confluence with the River Severn. The Local Wildlife Site (LWS) consists of the entire length of the River Avon which flows through Warwickshire. The River Avon is the largest river flowing through the county and as a consequence conveys the majority of water within Warwickshire (with the exception to the northern part of Warwickshire, which drains into the River Tame). The River Avon and its tributaries form and essential role as important habitats in their own right and equally importantly as an arterial network of waterways and wildlife corridors throughout the county. Given the importance of the tributaries of the River Avon, as outlined below, the minor tributaries also form part of the LWS as

they are an intrinsic feature of the Avon itself. Larger and more significant rivers and streams are worthy of designation in their own right and as such do not form a part of the River Avon LWS.

The river forms an artery through the Warwickshire countryside linking wetland and other wildlife habitats such as the wildlife and fishing lakes around Abbots Salford and the Cleve Bank Woodland in the south west of the reach all the way up to Brandon Marsh SSSI and beyond. It is used by birds to navigate from site to site and is a corridor for many species to expand their range or migrate and will be a vital resource in the coming years as Climate Change takes effect.

The river flows through a number of towns, including Rugby, Leamington, Warwick, Stratford and the village of Bidford, and whilst the ecological and geomorphological value of the river is reduced through hard engineering, flood alleviation work and other impacts of urbanisation, the river remains as one of the key environmental assets within each town and forms a focal point of the towns. The wildlife corridor, though reduced in value, is still an integral function through the towns.

Throughout the LWS abstraction of water and discharges to the river have impacts upon flows and the water quality. However through modern regulation water quality in the river has greatly improved in recent years, though periodic pollution events continue to have significant impacts upon fauna within the river system.

The river banks are tree lined, generally growing at regular spacings, with intermittent patches of open banks side and woodland. The dominant species are Alder (Alnus glutinosa) and Willow (Salix spp.) although Ash (Fraxinus excelsior), Oak (Quercus robur), Hawthorn (Crataegus monogyna), Blackthorn (Prunus spinosa) and Elder (Sambucus nigra) are also common throughout this length. Of particular interest are the numerous willow pollards and mature oak and ash which contain large amounts of standing dead wood and support large numbers of invertebrates, nesting birds and bats. Trees and their associated invertebrate fauna also form an important part of the food resource within the river and its tributaries.

The River Avon contains abundant bankside, emergent, floating and submerged vegetation, including stands of : Common Reed (Phragmites Australis), Water Mint (Mentha aquatic), Great Yellowcress (Rorippa amphibea), Branched Bur-reed (Sparganium erectum), Reed Canary-grass (Phalaris arundinacea), Marsh Marigold (Caltha palustris), Pendulous Sedge (Carex pendula), Hoary Willowherb (Epilobium parviflorum), Yellow Iris (Iris pseudacorus), Soft Rush (Juncus effuses), Water Forget-me-not (Myosotis scorpioides), Yellow Water Lilly (Nuphar lutea) and Arrowhead (Sagittaria sagittifolia).

Water is a vital resource for riparian mammals and as such the river indirectly supports the majority of riparian mammal species present in the county. Otters Lutra

lutra continue to make a recovery through the county and recent otters signs have been found within a few hundred meters of the county boundary in the south west and on through the entire Avon all the way up to Rugby and beyond where otter spraints are abundant. Otters are now considered firmly established in the Avon Catchment, though at considerably lower densities than many other parts of the country.

Notable breeding birds along this section of the Avon include Reed (Acrocephalus luscinius) and Sedge Warbler (A. schoenobaenus), Reed Bunting (Emberiza schoeniclus) and Kingfisher (Alcedo atthis).

Grass snakes (Natrix natrix) which are associated with water and feed largely upon amphibians and fish are found throughout the Avon catchment.

The river supports a healthy self-sustaining coarse fishery and also supports eels, which are continuing to decline throughout Europe at an alarming rate.

The river supports many species of invertebrates including a number of Nationally and Regionally scarce riparian beetles, including the rove beetle species (Carpelimus gracilis), (Carpelimus lindrothi), (Carpelimus obesus) and (Carpelimus similis). All of these beetles are characteristic of exposed muddy sediments on river margins. Other species include: (Cercyon granaries), a crawling water beetle (Cercyon bifenestratus), the whirligig beetle (Gyrinus urinator), the rove beetle (Stenus opticus), the latridiid beetle (Corticaria punctulata), the rove beetle (Stenus opticu), crawling water beetles (Haliplus laminatus) and (Cercyon bifenestratus), the crawling water beetle (Helophorus arvernicus) and the rove beetle (Carpelimus manchuricus).

Two other significant records from the Avon are of the Nationaly scarce riparian rove beetle (Achenium humile) and the Red Data Book histerid (Saprinus virescens), the first record in the UK for over 25 years, sieved out of flood refuse on pasture at Welford Pastures.

The River Avon displays different characteristics as it flows through the County. The river has therefore been separated into three distinct reaches for assessment (lower navigable reach, middle reach and upper reach) and the tributaries of the Avon form the final section of the assessment.

River Avon - Head of Navigation upstream of Stratford SP233571 to the Confluence of the River Sowe, Stoneleigh SP324723
WFD Classification: Moderate (to confluence with R. Leam) Poor (above Leam confluence) Ecological Status

This reach of the LWS consists of the length of River Avon from the head of navigation at Alveston, upstream of Stratford on Avon to the confluence with the River Leam in Warwick. This reach of the River Avon shows some of the best examples of natural geomorphology along the entire river. This includes the Barford Loop, a length of River from upstream of Hampton Lucy to upstream of Barford, which contains no impoundments and which retains its natural features, including extensive riffles, glides and pools and abundant in channel and bankside vegetation, as well as eroding banks. This stretch of river is particularly important for its associated habitats, including, woodland, marsh and floodplain wet grassland as well as open water, reed beds and wet woodland.

This section of the River Avon retains a high value for Biodiversity. There are a number of islands along this length and the associated bankside and marginal vegetation provide excellent habitat, particularly for invertebrates. This length of the River Avon has been assessed as Grade B on the General Quality Assessment criteria for invertebrates, and has been graded as Class Two in the Habitat Quality Assessment for River Habitat Survey, indicating that the river is of good quality. However the Water Framework Classification for this reach grades the river as Moderate in the lower half and Poor above Leamington.

The reach of river between Barford and Warwick contains some excellent associated habitats including an extensive sedge bed downstream of the M40 river crossing and a large area of floodplain meadows upstream of the M40. The New Waters Lake, in Warwick Castle Park, is also present in this reach, a landscape feature created by Capability Brown. The lake contains abundant reed beds and otters are known to utilise the site as well as recent records of water vole. There are some weirs associated with mills and other historic structures including Warwick Castle.

The flows from the River Sowe enter the Avon near Stoneleigh. The Sowe is a major tributary of the Avon and conveys flows from several other watercourses, including draining a large part of the city of Coventry. The Finham Sewage Treatment Works discharge into the Sowe just upstream of the confluence of the River Avon. This discharge constitutes a significant proportion of the flows in the River Avon, particularly during drier months and as such the quality of the discharge from Finham STW, combined with runoff from Coventry and that of the surrounding intensive agriculture has an impact upon the water quality in the brook. Whilst there have been significant improvements in the quality of water entering the river, severe storm events continue to cause problems and pollution of the river is not uncommon.

An otter has recently been run over on the Barford Road and a juvenile otter has been found, also run over, next to the New Waters Lake which adjoins the Avon within the Warwick Castle Landscape Park.

Nearby potential Local Wildlife Sites (pLWS) include:

- Dropping Wells pLWS (SP36D1) 4.2 hectares
- Hill Wootton Farm Meadows (SP36E2) 31.2 hectares

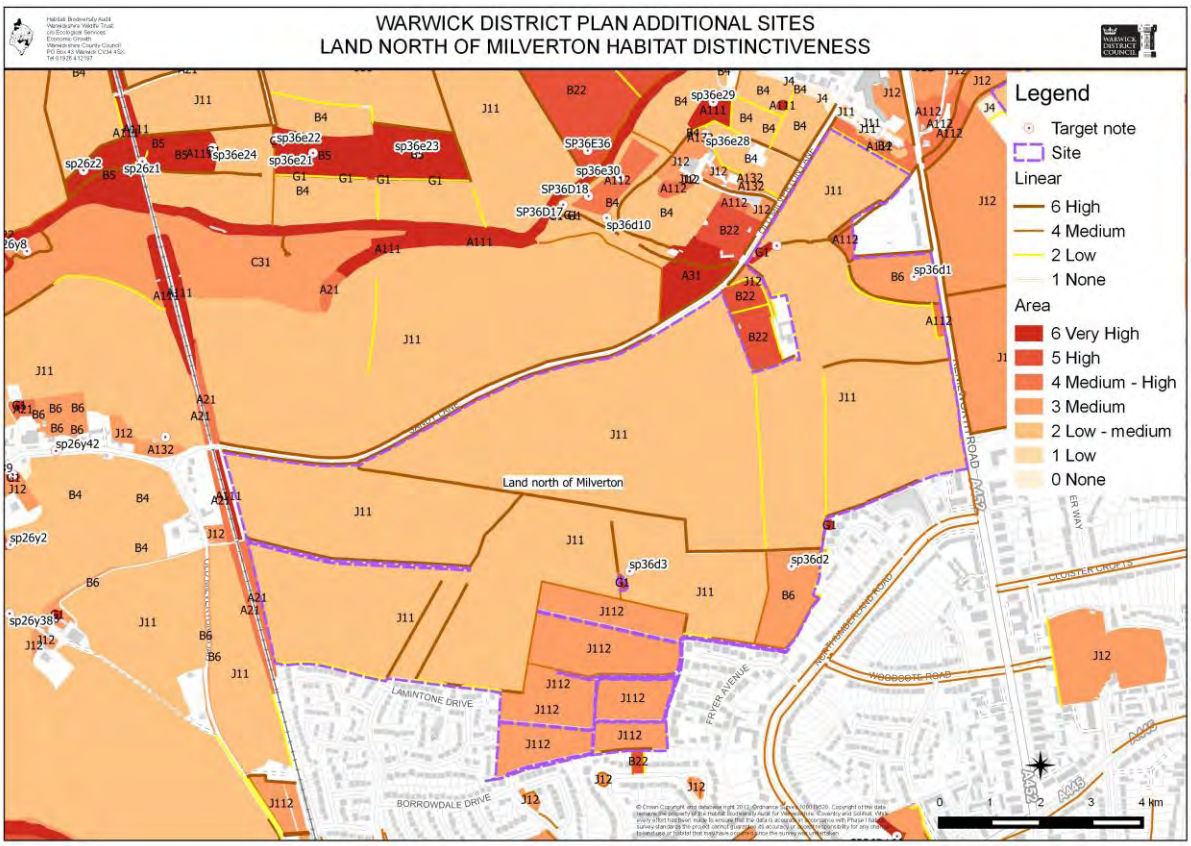
Habitat Description

The development parcel is almost entirely dominated by intensive farming with 71 hectares designated as arable farmland. A further 0.14 hectares was designated as poor semi-improved grassland immediately adjacent to residential properties fronting Kenilworth Road. As recently as 2013, this grassland has been converted to arable farmland. Two fields equate to 1.2 hectares of neutral semi-improved grassland of Sandy Lane Farm, which directly borders the development parcel separated by shrub and scattered trees.

A pond surrounded by scrub currently subject to eutrophication from farmland run-off lies adjacent to the Milverton New & Binswood Allotments.

A shallow pond holding emergent and marginal vegetation is connected by a small brook to the River Avon and is consequently designated as such within the River Avon LWS. The 102 km river holds 205 km of designated tributaries. The brook runs from the Drooping Wells plws located 112 metres from the development parcel boundary, bisecting arable fields and travels beyond residential boundaries that abound Kenilworth Road, eventually connecting to a larger pool within Lakeside Lawns & Cranford House.

The hedgerow network across the development parcel predominately comprises of intact hedgerows with trees to a lesser extent comprising of intact hedgerows and linear scrub.



Target Notes

Number	Grid Reference	Survey Date
SP36D5	**SP3124967876**	**05/04/2011**

Shallow pond with much emergent vegetation of yellow iris (Iris pseudacorus), meadow buttercup (Ranunculus repens), common nettle (urtica dioica) and a rush (Juncus spp.)

UPDATE 22/04/2011 JB

Remains as described.

SP36D1	**SP3152067815**	**04/05/2011**

Poor semi-improved grassland with fine annual grasses and frequent groundsel (Senecio vulgare) and common nettle (Urtica dioica) with occasional spear thistle (Cirsium vulgare) and dock (Rumex spp.).

UPDATE 22/04/2011 JB

Poor semi-improved rough grassland, now mostly overgrown with common nettle (Urtica dioica), a sow-thistle (Sonchus spp.), frequent spear thistle (Cirsium vulgare), fumitory, ragwort (Senecio spp.) and willowherbs (Epilobium sp.). Burdock, red

campion, herb bennet, mayweed present and occasional meadow buttercup (Ranunculus acris), speedwell (Veronica spp.), field poppy (Papaver rhoeas), groundsel (Senecio vulgare), common chickweed (Stellaria media), cleavers (Galium aparine), forget-me-not (Myosotis spp.), white dead-nettle (Lamium album) and borage (Borago officinalis). Dry stream along hedge line with wood sedge (Carex sylvestris), great willowherb (Epilobium hirsutum) and rosebay willowherb (Chamerion angustifolium). Bordered by a few young oak (Quercus robur) & marginal bramble (Rubus fruticosus agg.). Grasshoppers present alongside ringlet (Aphantopus hyperantus), small white (Pieris rapae), large white (Pieris brassicae) and small tortoiseshell (Aglais urticae).

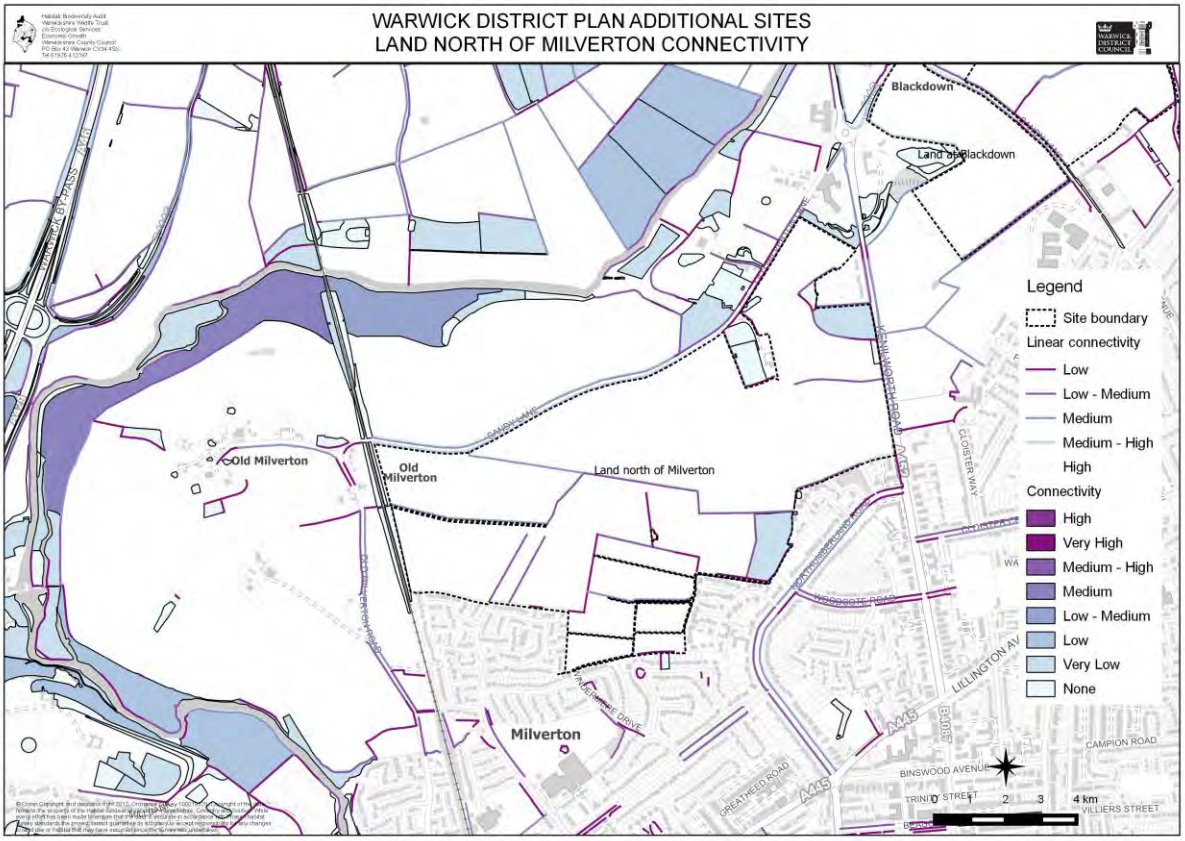
SP36D3 SP3095767232 04/05/2011

Eutrophicated pond surrounded by hawthorn (Crataegus monogyna), elder (Sambucus nigra) and bramble scrub (Rubus fruticosus agg.).

UPDATE 22/04/2011 JB

Remains as described.

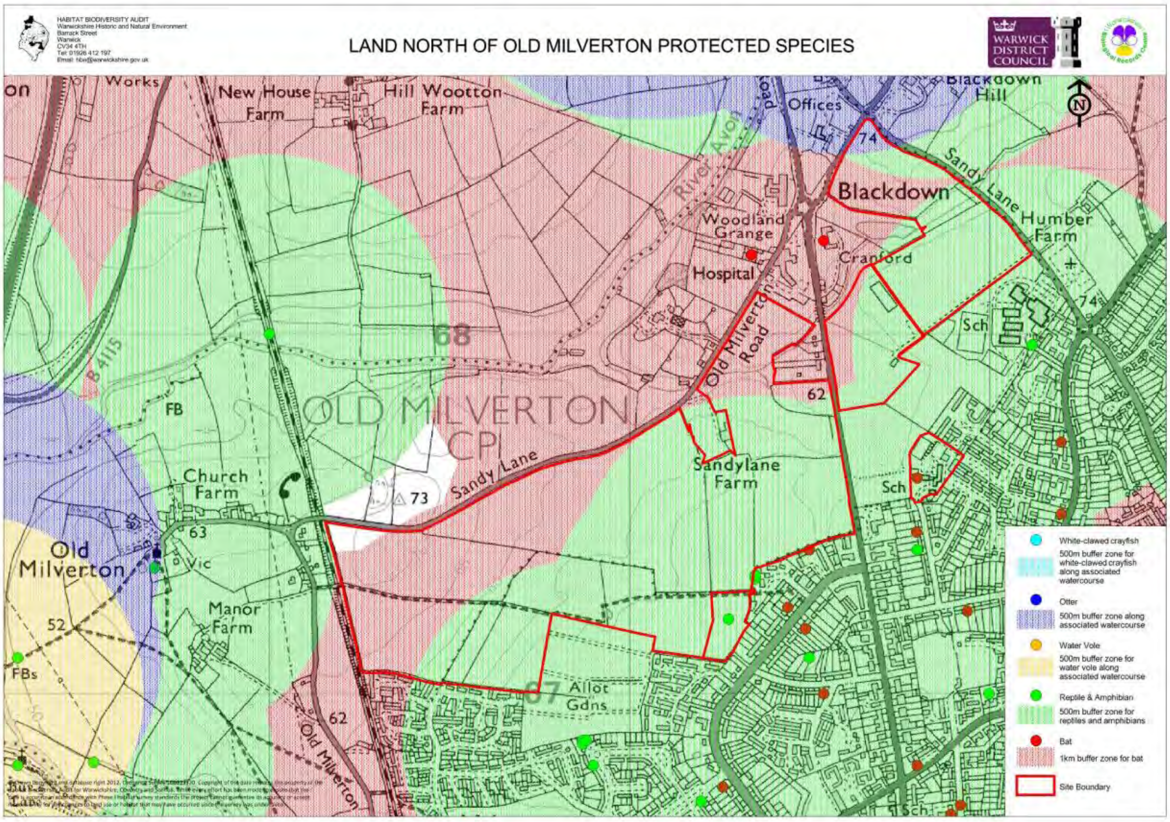
Habitat Connectivity



Protected Species

The development parcel holds records for breeding great crested newts dating back to the year 2000 superseded by modern records in 2014. A newt breeding pond lies within the eastern boundary of the Site bounded by residential properties.

Potential bat foraging and roost occurences do occur close to the boundary of the Site particularly to the north and the south east corners.


HABITAT BIODIVERSITY AUDIT
LAND NORTH OF OLD MILVERTON PROTECTED SPECIES
WARWICK DISTRICT COUNCIL
Old Milverton
Church Farm
Manor Farm
Sandy Lane
Sandylane Farm
Blackdown
Hospital
Old Milverton Road
White-clawed crayfish
500m buffer zone for white-clawed crayfish along associated watercourse
Otter
500m buffer zone along associated watercourse
Water Vole
500m buffer zone for water vole along associated watercourse
Reptile & Amphibian
500m buffer zone for reptiles and amphibians
Bat
1km buffer zone for bat
Site Boundary

LAND NORTH OF MILVERTON L03

Area: 1.7 hectares

Overview

A 1.7 hectare parcel of land comprising an un-managed poor semi-improved grassland interspersed by planted broad-leaved trees becoming rank and adjoining a mix of marginal bramble scrub and garden ornamentals to the back of residential properties off Northumberland Road and Fryer Avenue.

Key Features

- Poor semi-improved grassland
- Linear and Dense scrub

Recommendations

Hedgerow, scrub and grass corridors can be maintained and enhanced to provide networks of habitats through the poor semi improved grassland, linear scrub and the garden habitats off Northumberland Road and Fryer Avenue.

The poor semi-improved grassland in close proximity to a great crested newt breeding pond offers suitable terrestrial habitat for this species and other widespread reptiles and amphibians. As such habitat connectivity must be maintined and enhanced to allow the migration of species to other pockets of important habitat. The creation of viable habitat pockets will go someway in mitigating the impact of the proposed development on metapopulations of these species.

Building and development work can harm great crested newts and their habitats, for example if it:

- removes habitat or makes it unsuitable
- disconnects or isolates habitats, eg by splitting it up
- changes habitats of other species, reducing the newts' food sources
- increases shade and silt in ponds or other water bodies used by the newts
- changes the water table
- introduces fish, which will eat newt eggs or young
- increases the numbers of people, traffic and pollutants in the area or the amount of chemicals that run off into ponds

You should be able to avoid harming the newts, damaging or blocking access to their habitats by adjusting proposed development plans.

The creation of a greenspace network of linked ponds and small patches of undeveloped land across both this Site and Land North of Milverton has a greater capacity to support wildlife than any single pond or small area of semi-natural habitat could separately. The creation of an extensive greenspace based on a mosaic of ponds across both Sites will offer a useful refuge for native fauna and flora.

The sensitive and appropriate management of ponds and associated areas of terrestrial habitat will provide good habitat not only for great crested newts through their lifecycle but will also be of benefit to other species of wildlife.

To compensate for any loss of grassland, enhancement of any remaining grassland areas to species rich grassland within the development footprint would be recommended.

The planted and scattered trees of and planted scrub should be retained and protected from damage during construction activities using tree protection fencing in accordance with BS5837:2012

Designated Sites

Within the Site itself there are no designated sites. Less than a kilometre from the eastern boundary of the Site lie's the Midland Oak Open Space LWS (SP36I1). A small suburban park situated just to the east of the A452 Kenilworth Road and alongside the A445 Lillington Avenue, about 0.9 km north east of Leamington Spa town centre. The park is formed of mixed grassland types, a central reedbed, planted trees, scattered scrub and amenity grassland with a play area.

Habitat Description

The grassland parcel is bordered on the west by arable farmland separated by linear shrub and sections of un-managed hedgerow of hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa) and developing ash trees (Fraxius excelsior). Ivy (Hedera helix), nipplewort (Lapsana communis), cleavers (Galium aparine) and cow parsley (Anthriscus sylvestris) form the hedgerow's ground flora encroaching into the grassland margin.

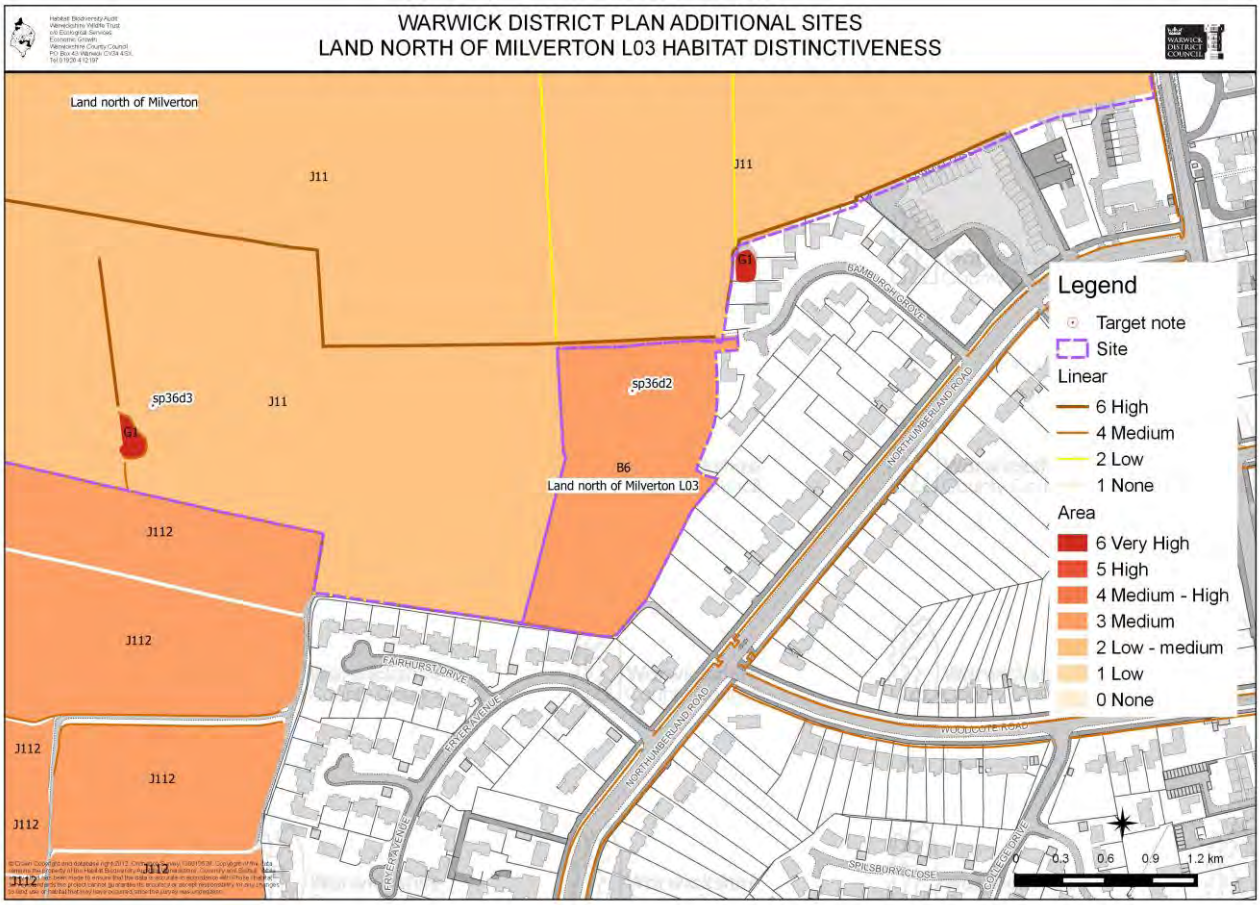
The tussocky grassland is dominated by widespread and coarse grasses of smooth meadow-grass (Poa pratensis), creeping bent (Agrostis stonifera), cock's-foot (Dactylis glomerata), false oat-grass (Arrhenatherum elatius) and red fescue (Festuca rubra). Rank and widespread forbs occasional within the sward include broad-leaved dock (Rumex obtusifolius), common sorrel (Rumex acetosa), creeping buttercup (Ranunculus repens), hogweed (Heracleum sphondylium) and creeping

thistle (Cirsium arvense). Sections of grassland have succeeded to scrub of bramble (Rubus fruticosus agg.), nettle (Urtica dioica) and raspberry (Rubus idaeus)

A species of particular note and indicative of better quality habitat was sheep's sorrel present on localized anthills (Rumex acetosella) within a small section of grassland and was recorded as rare within the development parcel occurring as a result of microhabitat, with sheep's sorrel being more abundant on anthills than in the pasture.

The poor semi-improved grassland holds the potential to support widespread reptiles and amphibians.

Scattered trees of oak (Quercus robur), silver birch (Betula pendula) and ash (Fraxinus excelsior) prevail with trees of leyland cypress (Cuprocyparis leylandii) and bird cherry (Prunus padus) mark the boundary with residential properties.



Target Notes

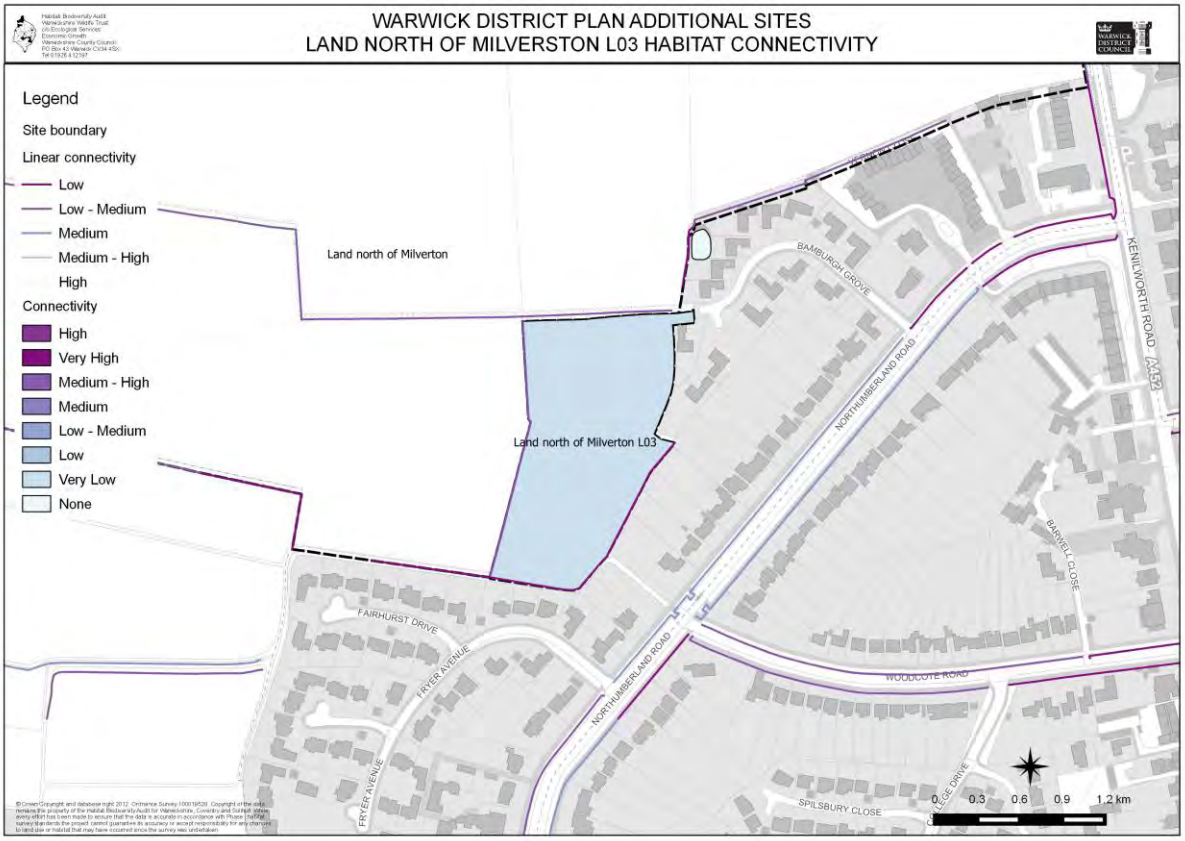
Number	Grid Reference	Survey Date
SP36d2	SP3127867242	5/4/2011

Poor semi-improved meadow with abundant cock's-foot (Dactylis glomerata) and timothy (Phleum pratense), frequent meadow buttercup (Ranunculus acris), dandelion (Taraxacum officinale agg.), hogweed (Heracleum spondylium), occasional pignut (Conopodium majus), sweet-vernal grass (Anthoxanthum odoratum), field wood-rush (Luzula campestris), vetch spp. (Vicia spp.), common sorrel (Rumex acetosa), creeping buttercup (Ranunculus repens), clover (Trifolium spp.) and cleavers (Galium aparine). Hedge to north contains abundant hawthorn (Crataegus monogyna) with bramble (Rubus fruticosus agg.), oak (Quercus robur) and dog rose (Rosa canina). Small area of meadow flooded at time of visit.

UPDATE 22/04/2011 JB

Poor semi-improved meadow, not grazed or mown, with rapidly encroaching scrub and trees. At the north end, thicket of blackthorn (Prunus spinosa) behind copse of oak up to 8m. Bare woodland floor developing under trees with fine grasses. At the south end, thicket of sloe and group of ash saplings (Fraxinus excelsior) 1m high. Scattered ash (Fraxinus excelsior), oak (Quercus robur) and hawthorn (Crataegus monogyna) up to 4-5m high. Brome grass dominant, some rye grass, foxtail. Along boundaries, belt of bramble 4-5m deep. Flora includes abundant creeping thistle (Cirsium arvense) and dock (Rumex spp.), frequent meadow vetchling (Lathyrus pratensis), hogweed (Heracleum sphondylium), some meadow (Ranunculus acris) and creeping buttercup (R. repens), scentless mayweed (Tripleurospernum inodoratum), common nettle (Urtica dioica), common sorrel (Rumex acetosa), white clover (Trifolium repens), dog rose (Rosa canina) and plantain (Planatago spp.). Grasshoppers present; gatekeeper (Pyronia tithonus), small white (Pieris rapae) & comma seen (Polygonia c-album). Chiffchaff (Phylloscopus collybita) and blackcap (Sylvia atricapilla) heard. South end floods in winter.

Habitat Connectivity



Protected Species

The development proposal holds records for breeding great crested newts (Triturus cristatus) dating back to the year 2000 superseded by modern records in 2014. A newt breeding pond lies 35 m from the northern boundary of the development parcel which in addition provides suitable terrestrial habitat for great crested newts.

LAND OFF CLOISTER WAY, LEAMINGTON SPA

Area: 0.18 hectares

Overview

The now disused buildings and school grounds of North Leamington Community School & Arts College comprise a range of buildings dating back to the 1950's. The school was formed in 1977 by the merging of three schools Blackdown High School accessed off Park Road, the Leamington College for Girls accessed from Cloister Way and Leamington College for Boys at Binswood Hall.

This development parcel is accessed predominately from Cloister Way and before 2009 consisted of the Lower School previously named Croft Hall and was the former Leamington College for Girls.

The Site lies within a residential area and is bordered on three sides by residential developments, gardens and hard standing.

Key Features

- Amenity grassland
- Buildings and hardstanding
- Introduced shrub
- Poor semi-improved grassland
- Scattered trees

Recommendations

The development parcel comprises the former North Leamington Community School and Arts College and grounds. The site is dominated by amenity grassland, hard standing and buildings with areas planted with scattered trees and introduced shrubs.

The scattered trees and poor semi-improved grassland represent the highest value of habitats on Site and thus should be duely considered. The semi-mature planted scattered trees close to the entrance of the Site from Cloister Way should be retained.

The development proposal should demonstrate retention or adequate replacement with appropriate species of scattered trees including particularly the maintenance and enhancement of bird nesting and foraging habitat in conjunction with the continued maintenance and enhancement of habitat connectivity. All trees being retained in or adjacent to the application area will be adequately protected during construction, in accordance with existing guidelines BS5837: 2005. Any landscaping and habitat recreation or enhancement should comprise a high proportion of native species. Introduced shrubs should be replaced with locally appropriate native species. The small section of poor semi-improved grassland does not require any particular conservation measures above and beyond good working practice to minimise the overall impacts of any development works and an appropriate assessment of fauna which the grassland could support particularly for amphibians and reptiles and mammals of particularly hedgehog and foraging habitat for badger. To compensate for any loss of grassland, enhancement of any remaining grassland areas to species rich grassland within the development footprint would be recommended.

Introduced shrub comprises of box-leaved honeysuckle (Lonicera pileata) and laurel (Prunus spp.) with scattered trees of beech (Fagus sp.) cherry (Prunus spp.) and maple (Acer sp.).

Designated Sites

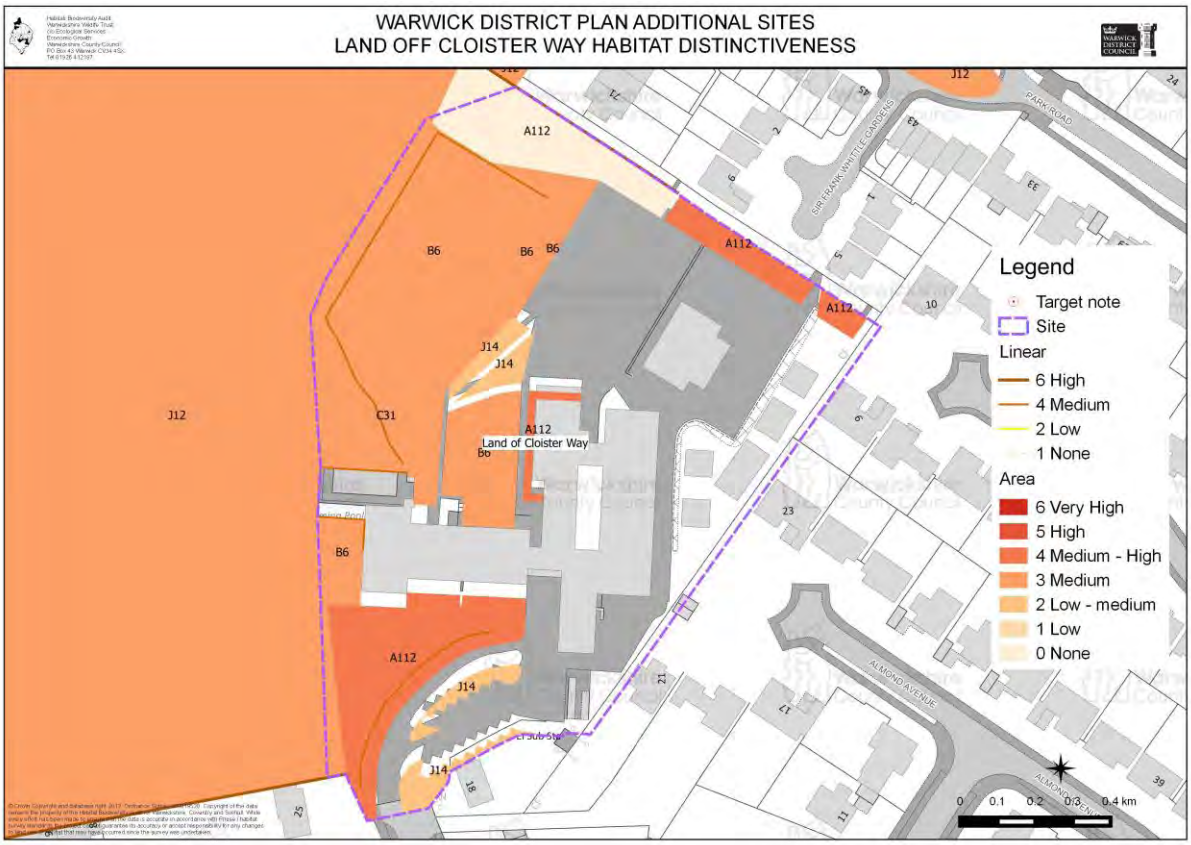
There are no designated sites close to this site.

Habitat Description

The Site comprises amenity grassland (J12), buildings and hand standing with scattered trees (A112) and poor semi-improved grassland (B6) which has overlain an amenity playing surface. The site is flat and surrounded on all sides by roads, hard standing and residential properties.

A row of semi-mature broad-leaved trees (A112) mark the entrance of the former school grounds. Small borders of introduced shrubs are present along the southern edge of the school building immediately adjacent to the entrance. There are continued small areas of introduced scrub across the former school ground.

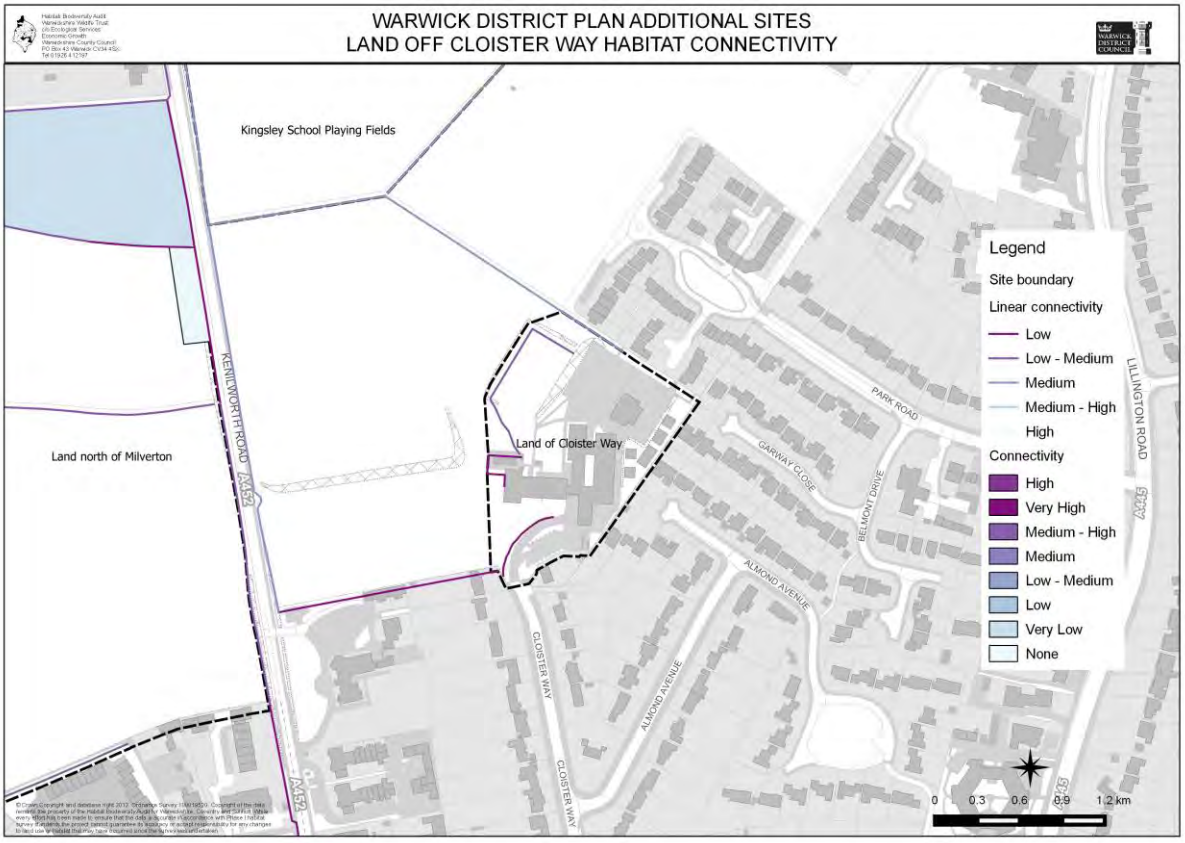
Beyond the planted broad leaved scattered trees and patches of abandoned amenity grassland (J12) lie's two playing fields of amenity grassland of the western parcel boundary.



Target Notes

Within the Site itself there are no existing Target Notes.

Habitat Connectivity



Protected Species

Occurences of bat foraging were recorded around the former school grounds. A confirmed brown long-eared bat (Plectotus auritus) roost lies within 100m of the Site boundary as does an obsolete record for grass snake (Natrix natrix).

LILLINGTON FREE CHURCH, CUBBINGTON ROAD, LEAMINGTON SPA

Area: 0.4 hectares

Overview

The site of the former Lillington Free Church comprises the former church building and a youth centre with an attached flat-roofed outbuilding. The area currently proposed for development comprises patches of introduced scrub, poor semi-improved grassland, planted trees and dense scrub. Immediately east of the shrubby un-managed border lies Holt Recreation Ground supporting amenity grassland and a small margin of poor semi-improved grassland butting up to the un-managed border of the Site. Planted trees front the verge of the entrance off Cubbington Road, Lillington. The surrounding landscape is characterised by residential properties associated with the town of Lillington.

Key Features

- Dense & Linear scrub
- Introduced scrub
- Linear trees
- Poor semi-improved grassland

Recommendations

The scattered trees and planted scrub within the curitage of the Site particularly those along the north and eastern boundary should be retained and protected from damage during construction activities using tree protection fencing in accordance with BS5837:2012. This will prevent accidental damage during construction. Such measures will ensure that the most important habitat and landscape features on this relatively small site, remain.

Areas of soft landscaping should be incorporated with the existing boundary to maintain the sites current landscape aesthetic alongside sensitive garden and native amenity planting.

The small parcel of scrub and associated linear trees provides some habitat to support breeding and overwintering birds typical of urban fringe and garden habitats. The dumped plant material provides suitable habitat for hibernating reptiles and sheltering hedgehogs. The building itself should be subject to a full (internal and external) bat survey.

The removal of Japanese knotweed (Fallopia japonica) is covered under the Wildlife & Countryside Act 1981 as Listed under Schedule 9, Section 14 of the Act and the Environmental Protection Act 1990.

It is an offence to plant or otherwise cause this species in the wild and is classed as "controlled waste" and as such must be disposed of safely at a licensed landfill site according to the Environmental Protection Act (Duty of Care) Regulations 1991. Otherwise treating Japanese Knotweed on-site can follow practices of cutting, burning, excavation and burial as per the Knotweed Code of Practice (Environment Agency 2013).

Designated Sites

Within the Site itself there are no designated sites.

Habitat Description

Introduced scrub on the eastern boundary encroaching into the Holt Recreation Ground comprises of predominately firethorn "orange glow" (Oyracantha saphyr orange) and snowberry (Symphoricarpos albus) with a single specimen of natural gorse (Ulex europaeus), planted specimens of bird cherry (Prunus padus), leyland cypress (Cuprocyparis leylandii) and mature Japanese cultivars of weeping cherry (Prunus spp.).

Ornamental species planted in garden borders edge the periphery of buildings with larger specimens encroaching into the scrub and the un-managed eastern boundary with scattered scrub bushes and encroaching bramble and nettle. A small section of poor semi-improved grassland goes beyond the un-managed boundary later merging into mown amenity grassland.

The scrub within the Site consists of dense stands of introduced snowberry, bramble (Rubus fruticosus agg.), elder (Sambucus nigra), specimens of butterfly-bush (Buddleja davidii) and a single yew (Taxus baccata). An isolated patch of Japanese Knotweed (Fallopia japonica) arises close to stands of planted trees to the east of the main church building.

The poor semi-improved grassland towards the rear of the Site is dominated by tussocky grasses of false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis

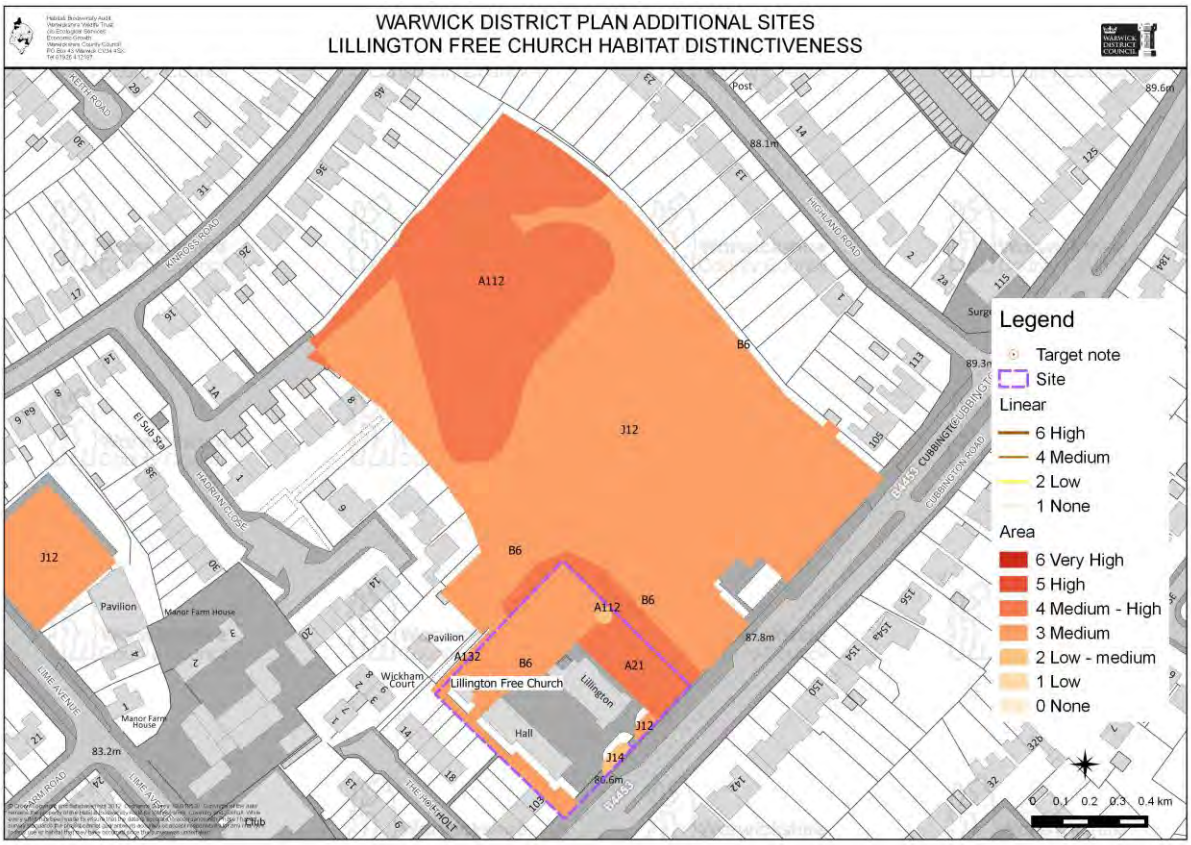
glomerata) and Yorkshire-fog (Holcus lanatus) with locally frequent red fescue (Festuca rubra) and creeping bent (Agrostis stolonifera). Forbs within the sward include cow parsley (Anthriscus sylvestris), common nettle (Urtica dioica), wood avens (Geum urbanum), cleavers (Galium aparine), creeping buttercup (Ranunculus repens) and broad-leaved dock (Rumex acetosa).

The abandoned hardstanding holds groundsel (Senecio vulgaris), dove's-foot crane's-bill (Geranium molle), a willowherb (Epilobium spp.) and creeping thistle (Cirsium arvense)

Planted on the pavement verge are planted specimens of sycamore (Acer pseudoplatanus), purple sycamore (Acer pseudoplatanus purpureum), rowan (Sorbus aucuparia) and tree cotoneaster (Cotoneaster frigidus spp.) with a mature beech tree (Fagus sylvatica) immediately west of the main entrance.

A dense band of Leyland cypress (Cuprocyparis leylandii) acting as a wind break marks the western section of the northern boundary.

Fly-tipping has occurred resulting in an established stand of Japanese knotweed (Fallopia japonica) and introduced green alkanet (Pentaglottis sempervirens).



Target Notes

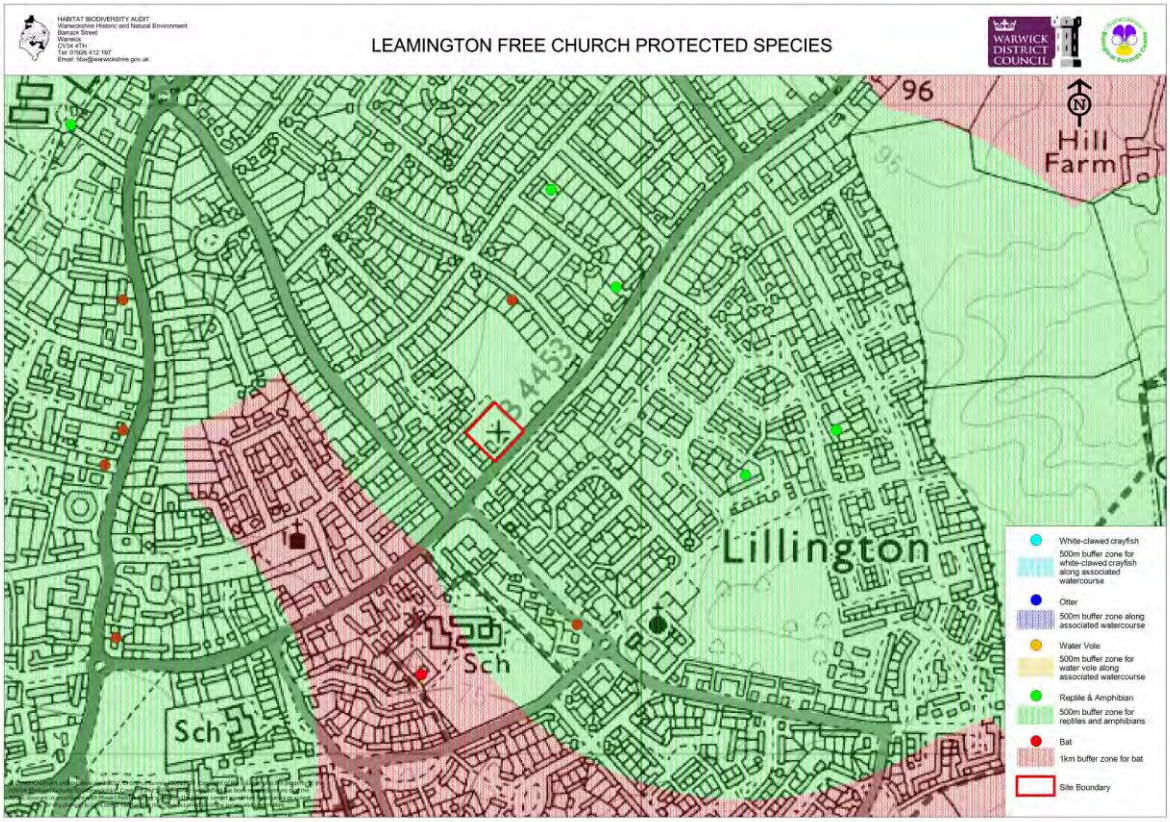
Within the Site itself there are no existing Target Notes.

Habitat Connectivity

There is no connectivity mapping recorded for this Site.

Protected Species

General and dated records of foraging bats and common widespread amphibians of common frog (Rana temporaria) and smooth newt (Lissotriton vulgaris) are present within residental Lillington. An external and internal bat survey will be required to determine the presence and absence of roosting bats and potential levels of bat activity across the Site.



LOWER HEATHCOTE FARM (ADDITIONAL)

Area: 9.6 hectares

Overview

This additional development parcel originally forms open space as part of an existing development permission of 85 ha of open farm land encompassing Lower Heathcote Farm buildings, a caravan park and two fishing ponds alongside semi-improved neutral grassland within the former Severn Trent sewage works. The additional development parcel comprises a 9.6 ha arable farmland immediately bordered to the east by the former sewage works. Directly to the north sits an arable field bordered beyond by Harbury Lane and further west by the two fishing ponds surrounded by mown grassland and a broad-leaved plantation which edges Europa Way. South of the additional development parcel, a large arable field itself is enclosed by the Tach Brook.

Key Features

- Arable farmland
- Hedgerow with trees
- Linear scrub

Recommendations

Lower Heathcote Farm forms a small part of a much larger development parcel which includes proposals for the design and incorporation of a country park. The retention of existing hedgerows with trees in addition to the integration of buffer strips and areas of set-a-side arable farmland managed for winter stubble will provide some compensatory habitat for farmland birds given the substantial loss of arable farmland.

Designated Sites

Asps farm Pools lies 355 m from the development parcel whereas the Tach Brook; a designated Local Wildlife Site as part of the tributery of the River Avon lies 186 m from the development boundary.

Local Wildlife Sites

Asps Farm Pools Designated: 2016 Area: 1.5 hectares

The site comprises two small pools situated on the south side of the Tach Brook in the north-western corner of Bishops Tachbrook parish, and between the A425 Banbury Road to the west and the A452 Europa Way to the east. The site also lies about 0.5km east of Warwick Castle Park, and Asps Farm on which the pools are situated was formerly part of the Warwick Castle estate.

Immediately adjoining the site to the north-west is a former tip (now grassed over) which occupies the site of the silted up extension to New Waters, the great "Capability" Brown designed lake, which was formed by damming the Tach Brook. This tip is bordered on the north side by the remains of a nineteenth century plantation woodland known as Turnbull's Garden, which formerly also covered the former lake bed. Otherwise the site is surrounded by a number of medium sized rolling grass and arable fields, though the expanding outskirts of Leamington Spa are now less than 0.5km to the north beyond Gallows Hill.

The two roughly rectangular pools appear to have been constructed around 40 years ago for angling purposes and are over 2m in depth and have fairly steep sides. Regular angling has now ceased and they now lie undisturbed within a narrow corridor of unmanaged semi-improved grassland, which is rapidly becoming overgrown with tall herb, scattered scrub and Bramble. This is unfenced along the south side bordering an arable field and a pylon is also situated here.
The nearest Local Wildlife Sites are New Waters and Nursery Wood 0.5km to the north-west and west respectively, both part of the rich variety of habitats present within Warwick Castle Park. The adjoining Turnbull's Garden is a pLWS.
The pools are situated within a narrow valley at just below 55m ASL, containing the north-west draining canalised Tach Brook, a tributary of and within the River Avon LWS, which it eventually joins 1.25km to the west in Warwick Castle Park. The underlying geology comprises fairly neutral clays belonging to the Mercia Mudstone series.

<u>Pools</u>

Despite having rather steep sides the two pools contain a diverse aquatic flora, probably due to their proximity to New Waters and the River Avon. There are no

islands present, although the western pool contains shallows in the middle which may originally have been one as there are two mature White Willows protruding from them. This pool is generally shallower than the longer eastern one and includes frequent submerged Spiked Water-milfoil and mats of floating White Water-lily and Broad-leaved Pondweed. The eastern pool also contains frequent Broad-leaved Pondweed, while Amphibious Bistort is locally frequent in the eastern corner. The shorelines of both pools contain narrow belts of marginal swamp, which are generally dominated by Greater Pond-sedge, but with also locally frequent Lesser Pond-sedge, Great Willowherb, Water Horsetail, Reed Sweet-grass and Reed Canary-grass, with more occasional Yellow Iris, Soft Rush and Common Reedmace. Both Water Mint and Marsh Woundwort are locally frequent along the southern shore of the eastern pool.

Surrounding Habitats

The two pools are surrounded by a narrow corridor of variable damp and dry semi-improved grassland-tall herb-scattered scrub mosaic, which is sandwiched between an arable field to the south and the canalised Tach Brook to the north. The latter brook is heavily choked with Fool's Watercress and other aquatic plants but provides an important connective corridor.

The grassland is mainly rather rank and dominated by False Oat-grass, Cocksfoot and Yorkshire Fog, but along the southern edge and particularly in the south-east corner are areas of shorter fine-leaved grassland kept open by grazing rabbits, and here there is abundant Common Bent, with locally abundant Creeping Bent in the damper areas and one area of locally frequent Crested Dogstail. Tufted Hair-grass is occasional. Forbs in these areas include locally abundant Hairy Sedge and frequent Wild Carrot, Dovesfoot Cranesbill, Hard Rush, Meadow Vetchling, Autumn Hawkbit, Common Birdsfoot-trefoil, Ribwort Plantain, Creeping Cinquefoil, Selfheal, Meadow and Creeping Buttercups, Common Ragwort, White Clover, and both Hairy and Smooth Tares. Of more occasional frequency are Yarrow, Common Mouse-ear, Ground-ivy, Perforate St. John's-wort, Black Medick, Hoary Ragwort, Red Clover, Coltsfoot and Common Vetch. Tall herb is dominant along the north side of the site as well as at the north-west end, and here there is abundant Cow Parsley, Creeping and Spear Thistles, Common Nettle and locally dominant Bramble. Also frequent in this habitat are False Oat-grass, Hedge Bindweed, Cocksfoot, Wild Teasel, Great Willowherb, Cleavers, Hogweed and Common Ragwort, while pockets of this habitat is also scattered elsewhere within the grassland including one area of abundant Rosebay Willowherb on the south side. At the eastern end of the site near the brook there is a large expanding thicket of invasive Japanese Knotweed. Along the northern border adjoining the brook is a belt of dense Blackthorn scrub, and near the western pool within this area is an expanding colony of Hop. Some scrub invasion also occurs throughout the site, chiefly of scattered Hawthorn, Blackthorn and Dog Rose but with also occasional Field Maple, Sycamore, Broom, Ash, Apple, Wild

Plum and Elder. There are scattered willows, White and Crack, around the pool margins.

The eastern boundary of the site borders on a plantation of young trees situated on the bank of the adjoining Europa Way and this consists mostly of Sycamore and Cherry, but with some Silver Birch, Osier and Goat Sallow.

Fauna

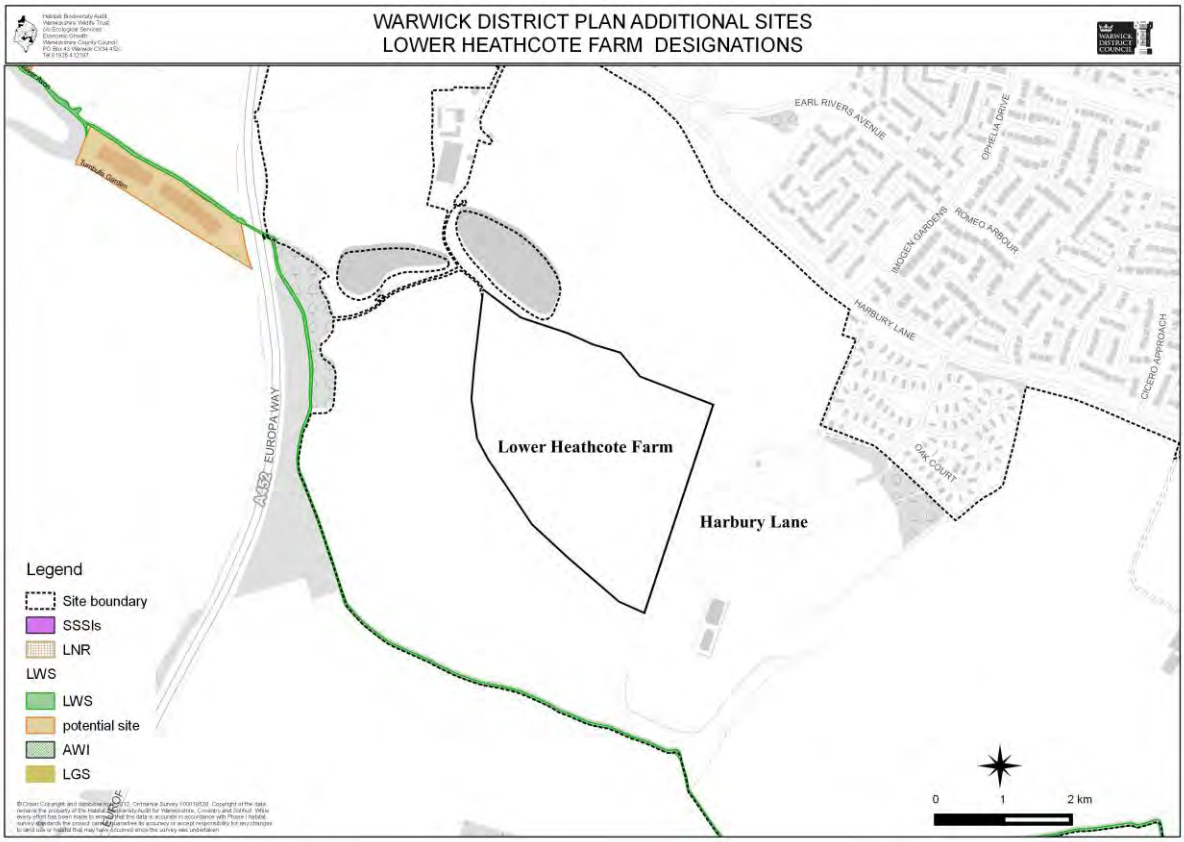
The pools provide habitat for a number of water birds, including Mute Swan, Greylag and Canada Geese, Mallard, Coot and Moorhen, some of which regularly breed. Kingfishers and Grey Herons are regular visitors. The surrounding marginal swamp and scrubby grassland support a range of nesting passerine birds including Reed Warbler, Whitethroat, Long-tailed Tit, Linnet, Reed Bunting and Yellowhammer. Two specially protected mammals have been recently recorded at the pools, with Water Vole in 2003 and Otter in 2008 and 2009, the latter probably foraging regularly along the brook corridor. A recent bat survey on Asps Farm recorded seven species, with especially good numbers of Common and Soprano Pipistrelles, and a Myotis bat, probably Daubenton's. Smaller numbers of Noctule, Nathusius's Pipistrelle, Serotine and Leisler's Bats were also recorded, with the last three being uncommon or rare in Warwickshire. The highest concentration of contacts occurred in the corridor containing the two pools illustrating that this is a very valuable feeding area for this group of mammals.

The LWS supports small numbers of Grass Snakes, Common Frogs, Common Toads and Smooth Newts.

The pools have not been adequately surveyed for its invertebrate population, but is probably at least of local importance for dragonflies. Despite the late date of the survey, Migrant and Southern Hawkers, and Common Darters were seen. Other insect species recorded during the survey included Small Copper butterfly and Roesel's Bush-cricket.

River Avon SP15Li8F Designated: 2010 Area: 102 km / Tributeries – 205km

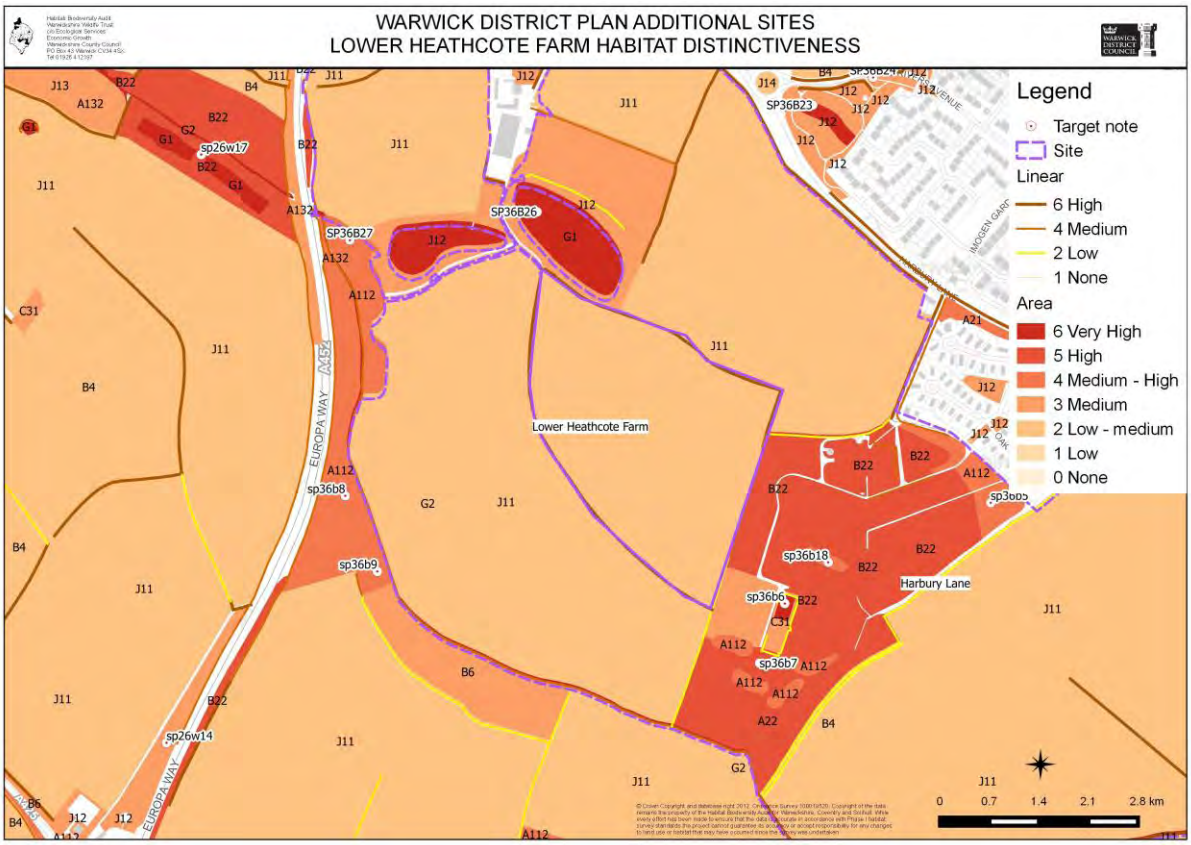
As detailed previously.



Habitat Description

The arable parcel (J11) is fringed on two sides by intact hedgerows with trees (J23) and divided from the former sewage works by linear scrub (A21) and palisade fencing.

The former sewage works contans a mosaic of grasslands developing from semi-improved neutral grassland (B22) to poor semi-imrpoved grassland (B6) given the current lack of management.



Target Notes

Number	Grid Reference	Survey Date
SP36B18	**SP3084462585**	**22/07/1997**

Semi-improved grassland surrounding the now former Severn Trent Sewage Works (south of Harbury Lane). The sward contains grasses of common bent (Agrostis capillaris), cock's-foot (Dactylis glomerata), common couch (Elytrigia repens) and perennial rye-grass (Lolium perenne) with forbs of common mallow (Malva sylvestris), prickly lettuce (Lactuca serriola), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris), common mouse-ear (Cerastium fontanum), spear thistle (Cirsium vulgare), creeping thistle (C. arvense), common cat's-ear (Hypochaeris radicata), scented mayweed (Matricaria recutita), ribwort plantain (Plantago lancelota), burdock, sun spurge (Euphorbia helioscopia), hedge mustard (Sisymbrium officinale), shepherd's-purse (Capsella bursa-pastoris), hedge bindweed (Calystegia sepium), germander speedwell (Veronica chamaedrys), redshank (Persicaria maculosa), black medick (Medicago lupulina) and common poppy (Papaver rhoeas).

SP36B25	**SP3040463359**	**16/07/2010**

30 pitch caravan park adjacent to Heathcote Lakes Trout Fishery. Trout fishery closed as of Sunday 28th June 2015.Lower Heathcote Farm, Harbury Lane, Warwick, Warwickshire, CV34 6SL. Land sold for property development.

SP36B26 SP3043363080 16/07/2010

Two trout fishing ponds with dragonflies, damselflies and mallards, forms part of Heathcote Lakes Trout Fishery.

SP36B27 SP3016863041 16/07/2010

Broad-leaved plantation with white poplar (Populus lba), willow (Salix spp.), nettles (Urtica dioica), rough meadow-grass (Poa trivialis), perennial rye-grass (Lolium perenne), creeping buttercup (Ranunculus repens), great willowherb (Epilobium hirsutum), forget-me-not (Myosotis spp.) and lesser pond-sedge (Carex acutiformis). Buzzard (Buteo buteo) seen.

SP36B5 SP3107462670 22/07/1997

Broad-leaved plantation with a canopy dominated by aspen (Populus tremula) with recently planted white poplar (Populus alba), ash (Fraxinus excelsior), alder (Alnus glutinosa) and field maple (Acer campestre). The ground flora contains cock's-foot (Dactylis glomerata), false oat-grass (Arrhenatherum elatius), perennial rye-grass (Lolium perenne), common nettle (Urtica dioica), common ragwort (Senecio jacobaea), white campion (Silene album), spear thistle (Cirsium vulgare), hogweed (Heracleum sphondylium) and burdock (Arctium sp.).

SP36B6 SP3078362527 22/07/1997

An old water tank within now former Severn Trent Sewage Works (south of Harbury Lane). The banks of the water tank support common nettle (Urtica dioica).

SP36B7 SP3074762443 22/07/1997

Young broad-leaved plantation with a canopy of sycamore (Acer pseudoplatanus), oak (Quercus robur), beech (Fagus sylvestris), ash (Fraxinus excelsior) and white poplar (Populus alba). The understorey has not had time to develop whilst the ground flora is dominated by grasses.

SP36B8 SP3016262679 16/07/2010

Young mixed plantation of oak (Quercus robur), ash (Fraxinus excelsior), larch (Larix spp.) hazel (Corylus avellana), lime (Tilia europaea) and horse chestnut (Aesculus hippocastanum) with a underdeveloped understorey due to the age of the planting. The ground flora contains false oat-grass (Arrhenatherum elatius), Yorkshire-fog (Holcus lanatus), common couch (Elytrigia repens), cock's-foot (Dactylis glomerata),

common bent (Agrostis capillaris formerly recorded as A. tenuis and hard rush (Juncus inflexus) occurring with smooth vetch, great willowherb (Epilobium hirsutum), meadow vetchling (Lathyrus pratensis), creeping thistle (Cirisum arvense), spear thistle (Cirsium vulgare), common ragwort (Senecio jacobaea), yarrow (Achillea millefolium) and hogweed (Heracleum sphondylium). Marble whites were identified.

UPDATE 28/06/2010 HW/SB

Access restricted consequently viewed from edge of wood. Broad-leaved plantation with willow (Salix sp.), hawthorn (Crataegus monogyna), soft rush (Juncus effuses), cut-leaved crane's-bill (Geranium dissectum) and abundant common nettle (Urtica dioica).

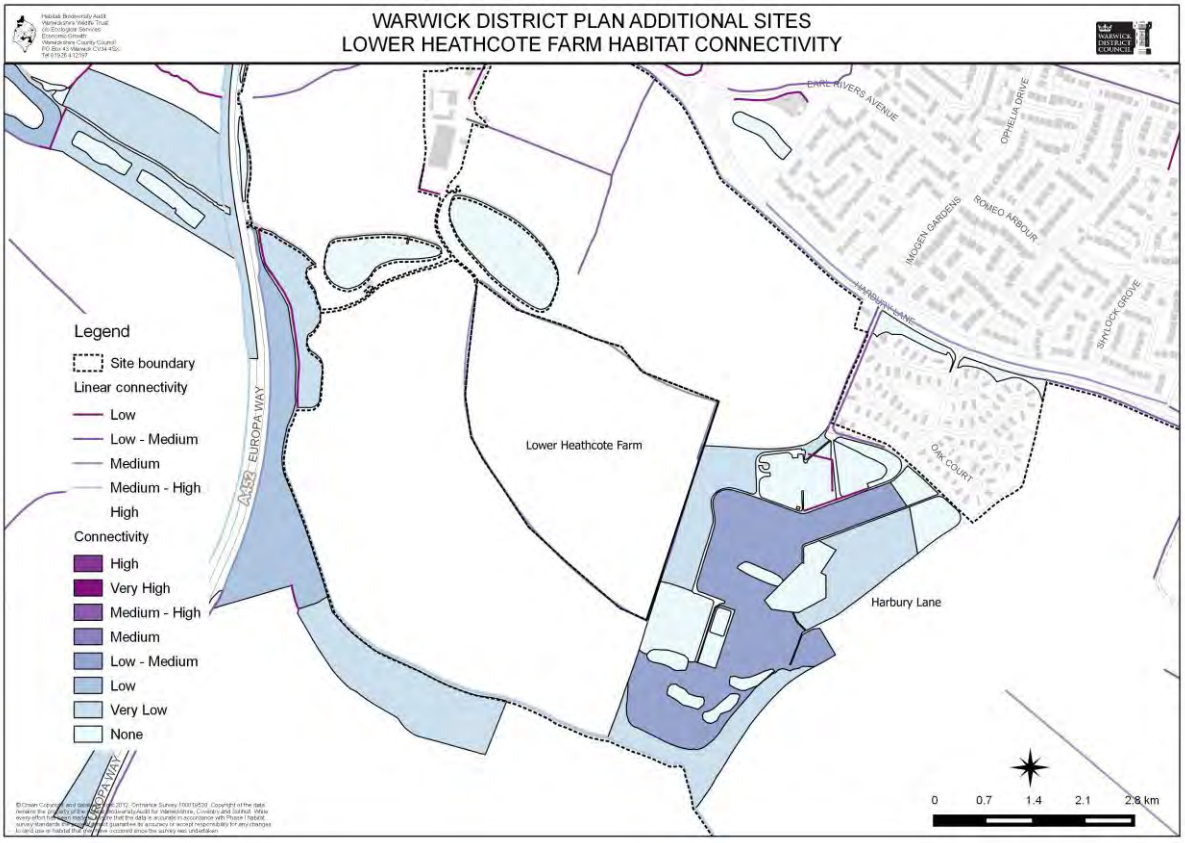
SP36B9 SP3020762572 16/07/2010

Broad-leaved plantation with a closed canopy dominated by ash (Fraxinus excelsior). The ground flora is sparse and dominated by hogweed (Heracleum sphondylium).

UPDATE 28/06/2010 HW/SB

As described, with abundant common nettle (Urtica dioica) in ground flora.

Habitat Connectivity

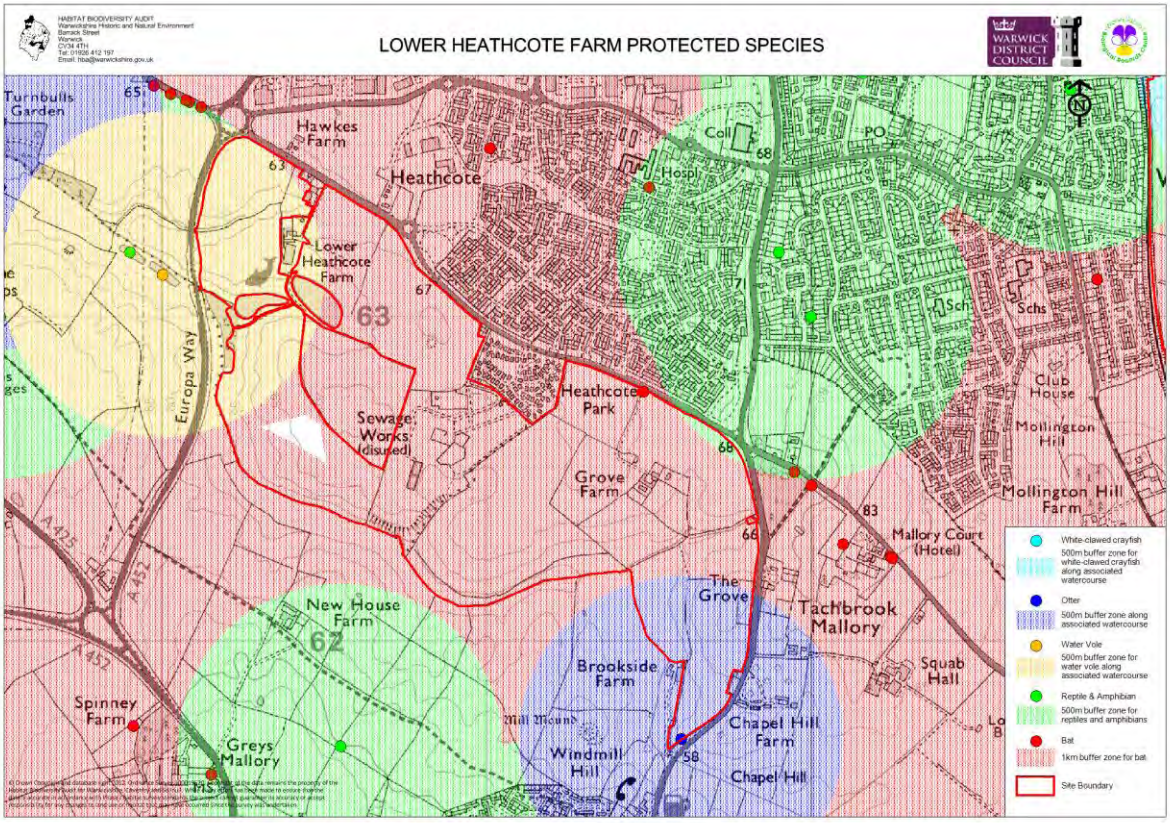


Protected Species

An occurrence of a foraging common pipistrelle (Pipistrellus pipistrellus) marks the southern boundary within the the Site, whilst wider occurences of commuting and foraging lesser noctule (Nyctalus leisleri), noctule (Nyctalus noctula), common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (Pipistrellus pygmaeus) and brown long-eared bats (Plecotus auritus) form a selection of records close to the wider Sites north -eastern boundary close to nearby Tachbrook Mallory. Likewise a concentration of commuting and foraging records for noctule (Nyctalus noctula) and common pipistrelle (Pipistrellus pipistrellus).

A record for water vole (Arvicola amphibius) occurs within 500m from the development Site separated by the carriageway of Europa Way.

A recent record for otter (Lutra lutra) occurs within the development parcel on the Tach Brook.


LOWER HEATHCOTE FARM PROTECTED SPECIES
HABITAT BIODIVERSITY AUDIT
Warwickshire Historic and Natural Environment
Barrack Street
Warwick
CV34 4SH
Tel: (01926 412 197
Email: hba@warwickshire.gov.uk
WARWICK DISTRICT COUNCIL
Turnbulls Garden
Hawkes Farm
Heathcote
Lower Heathcote Farm
Europa Way
Sewage Works (disused)
Heathcote Park
Grove Farm
Hospl
Coll
PO
Schs
Club House
Mollington Hill
Mollington Hill Farm
Mallory Court (Hotel)
The Grove
Tachbrook Mallory
Squab Hall
Brookside Farm
Chapel Hill Farm
Chapel Hill
Windmill Hill
New House Farm
Spinney Farm
Greys Mallory
A425
A452
63
62
65
67
68
71
83
66
58
White-clawed crayfish
500m buffer zone for white-clawed crayfish along associated watercourse
Otter
500m buffer zone along associated watercourse
Water Vole
500m buffer zone for water vole along associated watercourse
Reptile & Amphibian
500m buffer zone for reptiles and amphibians
Bat
1km buffer zone for bat
Site Boundary

SOUTHCREST FARM, CREWE GARDENS AND WOODSIDE TRAINING CENTRE

Area:	**Crewe Gardens**	**19.8 hectares**
	Southcrest Farm	**18.2 hectares**
	Woodside Training Centre	**15 hectares**
	Combined total:	**53 hectares**

Overview

The combined site forms a triangle shaped wedge with the widest section to the north bordered by Kenilworth Golf Course along Crew Lane, the western edge is bordered by the continuous built up area of Kenilworth along Glasshouse Lane and the A46 to the east. To the south is woodland and a sports ground.

Most of the area consists of improved grassland with area of amenity grassland and occasional areas of semi-improved grassland and woodland. The fields are bisected by remnant hedgerows and there is a single square shaped pond in the centre to the site. Each of the three Sites contains existing buildings including; Southcrest Farm, Woodside Training Centre and Crewe Gardens.

Key Features

- Ponds
- Woodland
- Semi-improved grassland
- Hedgerows

Recommendations

Maintain the woodlands and associated hedgerows that connect to Glasshouse Spinney and Glasshouse West. The existing woodlands should be retained and managed accordingly by the instigation of a woodland management plan.

The grassland and woodland mosaic in and around the Woodside Training Centre should be enhanced and protected.

Survey Glasshouse Wood plws and Glasshouse Wood LWS to complete surveys across the mosaic of local woodlands either side of the A46. This will provide baseline data to determine the current status of the woodland network. The

woodlands should be enhanced by the retention of mature hedgerows and veteran trees improving woodland connectivity and providing an important habitat corridor.

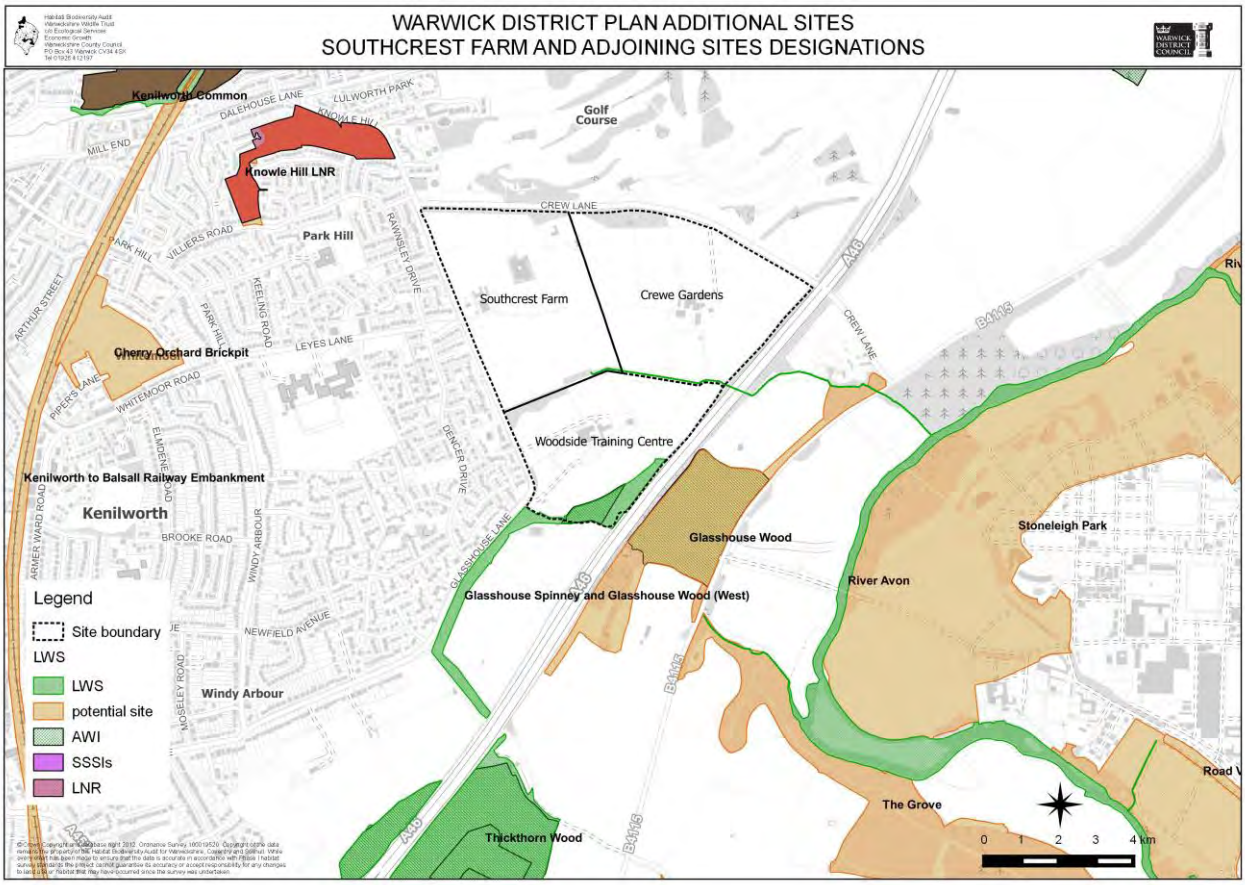
Designated Sites

Local Wildlife Sites:

Glasshouse Spinney and Glasshouse Wood (West) LWS Designated 2011
Area 3.48 hectares

The LWS consists of a small irregularly shaped mainly semi-natural woodland situated on the south-east side of Kenilworth. The wood lies along the perimeter of suburban Kenilworth, to which it is connected by a well-used bridle path that runs along and forms the western boundary. The wood itself is well used by dog walkers all the way along its length. The building of the A46 Warwick bypass has separated Glasshouse Wood into two sections with the larger section situated on the east of the road, which was not assessed during this survey. Thickthorn Wood LWS (east of A46 section) is only 80 metres from the southern tip of Glasshouse Spinney and the section of Thickthorn Wood on the west of the A46 is 220 metres from Glasshouse Spinney.

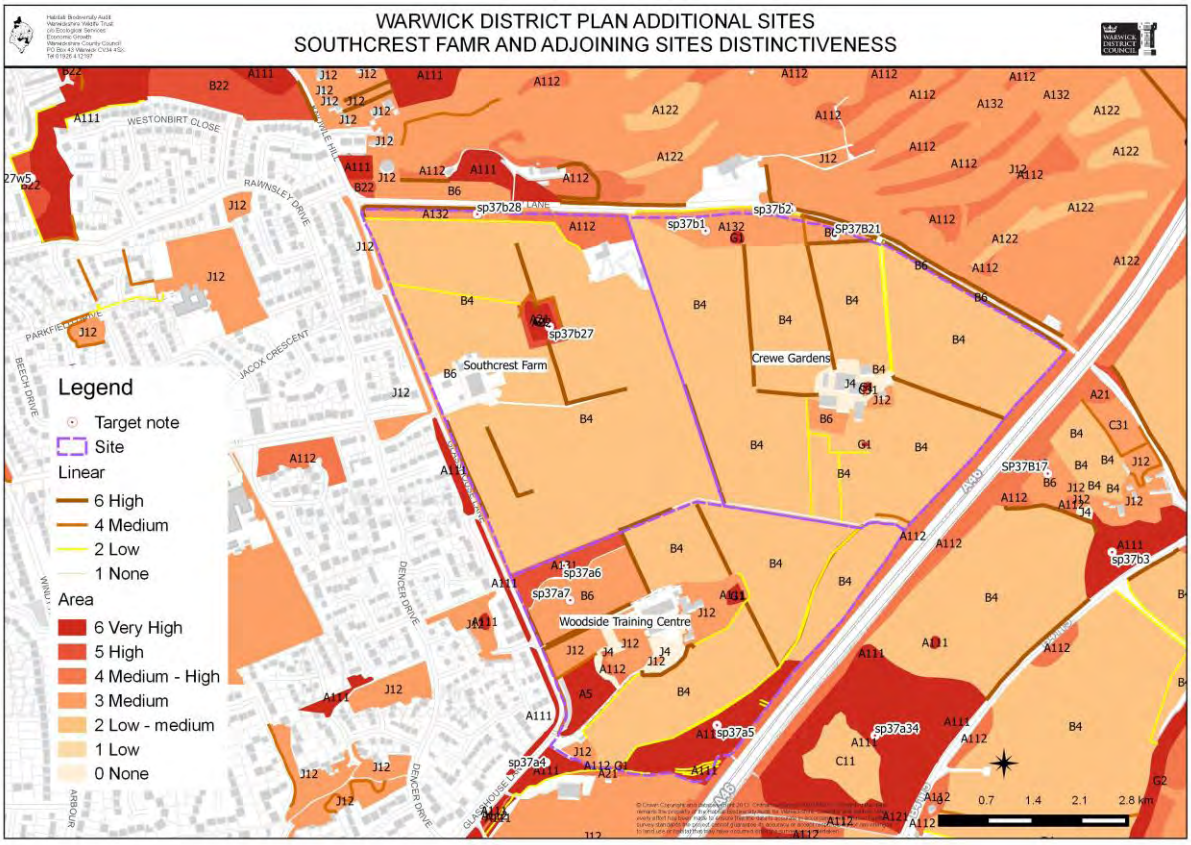
Both Glasshouse Wood and Glasshouse Spinney are ancient semi-natural woodlands, although Glasshouse Wood is the only part that is on the Ancient Woodland Inventory. A range of habitats are present including dry semi-natural and plantation woodlands, wet and dry ditches, thickets of young growth and a pond.


WARWICK DISTRICT PLAN ADDITIONAL SITES
SOUTHCREST FARM AND ADJOINING SITES DESIGNATIONS
Kenilworth Common
Knowle Hill LNR
Golf Course
Park Hill
Southcrest Farm
Crewe Gardens
Cherry Orchard Brickpit
Woodside Training Centre
Kenilworth to Balsall Railway Embankment
Kenilworth
Glasshouse Wood
Glasshouse Spinney and Glasshouse Wood (West)
River Avon
Stoneleigh Park
Windy Arbour
Thickthorn Wood
The Grove
Legend
Site boundary
LWS
LWS
potential site
AWI
SSSIs
LNR
0 1 2 3 4 km

Habitat Description

Most of the proposed development Site is improved grassland (B4) with low habitat distinctiveness. Southcrest Farm contains a large pond (G1) surrounded by moderate grassland and emergent vegetation. A number of smaller ponds are distributed across the three sites.

The mixed woodland (A132) and hedgerows with trees (J23) along Glasshouse Lane provide a natural green north-south corridor, with the plantation woodland at Kenilworth Golf Course in the north down to the semi-natural woodlands (A111) at Glasshouse Spinney and Glasshouse Wood (West). Between these is the smaller mixed woodland plantation as Victoria Spinney. Crewe Gardens has the least distinctiveness of the three sites. The Woodside Training Centre has the best mix of habitats including the Glasshouse Spinney to the south, Victoria Spinney alongside areas of semi-improved grassland (B6), an orchard (A5) within the grounds of the centre, a pool bordered by intact hedgerows with trees. The remaining areas are improved grassland (B4).



Target Notes

Number	Grid Reference	Survey Date
SP37A4	**SP3058871716**	**30/06/1998**

Broad-leaved semi-natural wood with frequent English elm (Ulmus procera), lime (Tilla europaeus), oak (Quercus robur), ash (Fraxinus excelsior) and sycamore (Acer pseudoplatanus). The understorey contains frequent holly (Ilex aquifolium), hawthorn (Crataegus monogyna) and young English Elm (Ulmus procera). The ground flora contains frequent ivy (Hedera helix), bluebell (Hyacinthoides non-scripta), lords-and-ladies (Arum maculatum), bramble (Rubus fruticosus agg.), red campion (Silene dioica), wood millet (Milium effusum), cleavers (Galium aparine) and wood avens (Geum urbanum).

UPDATE CFT 11/12/2015

Forms part of Glasshouse Spinney LWS.

SP37A5	**SP3077671733**	**11/12/2015**

Glasshouse Spinney and Glasshouse Wood (West) Local Wildlife Site and Ancient Woodland in Part. Broad-leaved semi-natural woodland with frequent ash (Fraxinus excelsior), oak (Quercus robur), elm (Ulmus spp.), sycamore (Acer pseudoplatanus), silver birch (Betula pendula) and occasional grey poplar (Populus canescens). The sparse understorey contains frequent hawthorn (Crataegus monogyna) and elm (Ulmus spp.), the open canopy has allowed a dense ground flora to develop with frequent bramble (Rubus fruticosus agg.), bracken (Pteridium aquilinum), false oat-grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata), cleavers (Galium aparine), common nettle (Urtica dioica), frequent rosebay willowherb (Chamerion angustifolium), nipplewort (Lapsana communis) and a large patch of foxglove (Digitalis purpurea). A rabbit (Oryctolagus cuniculus) was seen here. Along the eastern edge of the woodland remains an old hedge with ditch and bank marking the boundary line. Hedge has developed into mature trees including beech (Fagus sylvatica) pollards with oak standards and occasional mature Holly (Ilex aquifolium). A section of the wood has been made into a cycle track.

SP37A6	**SP3060571931**	**11/12/2015**

Poor semi-improved grassland managed as a hay meadow with frequent Yorkshire-fog (Holcus lanatus), timothy (Phleum pratense), creeping bent (Agrostis stolonifera), creeping buttercup (Ranunculus repens) and a dock (Rumex spp.). Complete assessment required as full access wasn't obtained.

UPDATE 11/12/2015 CFT

A comprehensive assessment was impractical due to the time of survey visit, a further survey is recommended in early summer as to fully assess the poor semi-improved grassland which borders the Woodside Training Centre and Hotel.

SP37A7 SP3055671979 11/12/2015

Mixed semi-natural woodland with frequent ash (Fraxinus excelsior), pine (Pinus spp.) and oak (Quercus robur). The understorey contains hawthorn (Crataegus monogyna), young elm (Ulmus spp.), holly (Ilex aquifolium) and planted laurel (Prunus spp.). The ground flora is dominated by bramble (Rubus fruticosus agg.) and cleavers (Galium aparine) with frequent ivy (Hedera helix), ground-ivy (Glechoma hederacea) cow parsley (Anthriscus sylvestris), garlic mustard (Alliaria petiolata) and occasional red campion (Silene dioica).

UPDATE CFT 11/12/2015

Old mixed plantation woodland first appears on 1900 -1906 CS Maps named Victoria Spinney, indicative of a commerative woodland planted with Scots Pine (Pinus sylvestris) and native broad-leaved tree species detailed above plus Hart's-tongue (Phyllitis scolopendrium), common male-fern (Dryopteris filix-mas) and ground-ivy (Glechoma hederacea).

SP37B1 SP3082672510 11/12/2015

Un-mown semi-improved grassland with scattered planted conifers and broad-leaved trees with mown paths and amenity benches. Immediately adjacent is Kenilworth Golf Club, however the site has no public access.The grass sward is comprises of frequent Yorkshire-fog (Holcus lanatus) and false oat-grass (Arrhenatherum elatius) with scattered common cat's-ear (Hypochaeris radicata), bush vetch (Vicia sepium), hogweed (Heracleum sphondylium), meadow buttercup (Ranunculus acris) and red clover (Trifolium pratense).Sloping away from Crew Lane there is a small pond with some emergent vegetation including prominent sedges (Carex spp.) and rushes (Juncus spp.).

UPDATE CFT 11/12/2015

The grassland has now developed to a mixed plantation wood surrounding an open pond. The trees are a mix of species incluing eucalyptus (Eucalyptus spp.), cherry laurel (Prunus laurocerasus), various maples (Acer spp.) and pine trees (Pinus spp.).

SP37B2 SP3100872534 14/05/2011

Narrow road verge which supports frequent False oat-grass (Arrhenatherum elatius); Yorkshire Fog (Holcus lanatus); Cock's-foot (Dactylis glomerata); Cow Parsley (Anthriscus sylvestris); Cleavers (Galium aparine); Weld (Reseda luteola), common

nettle (Urtica dioica), bramble (Rubus fruticosus), mugwort (Artemisia vulgaris), hogweed (Heracleum sphondylium) and yarrow (Achillea millefolium) as well as less common scentless mayweed (Tripleurospermum inodorum), bush vetch (Vicia sepium), lesser trefoil (Trifolium dubium), prickly lettuce (Lactuca serriola), white campion (Silene latifolia), red campion (Silene dioica), hedge bedstraw (Galium mollugo) and common mallow (Malva sylvestris).

UPDATE 14/05/2011 MF

Defunct species-rich hedgerow along Crew Lane with hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), gorse (Ulex europaeus), crab-apple (Malus sylvestris), bramble (Rubus fruticosus agg.), English elm (Ulmus procera), dog-rose (Rosa canina) and pedunculate oak (Quercus robur). The hedgerow ground flora includes foxglove (Digitalis purpurea), red campion (Silene dioica) and white campion (Silene latifolia), cut-leaved crane's-bill (Geranium dissectum), hedgerow crane's-bill (Geranium pyrenaicum) and common vetch (Vicia sativa).

SP37B21 SP3102772519 14/05/2011

Poor semi-improved meadow dominated by fine grasses with common bird's-foot-trefoil (Lotus corniculatus), common sorrel (Rumex acetosa), ribwort plantain (Plantago lanceolata) and common cat's-ear (Hypochaeris radicata) withinthe sward. Small skipper noted here.

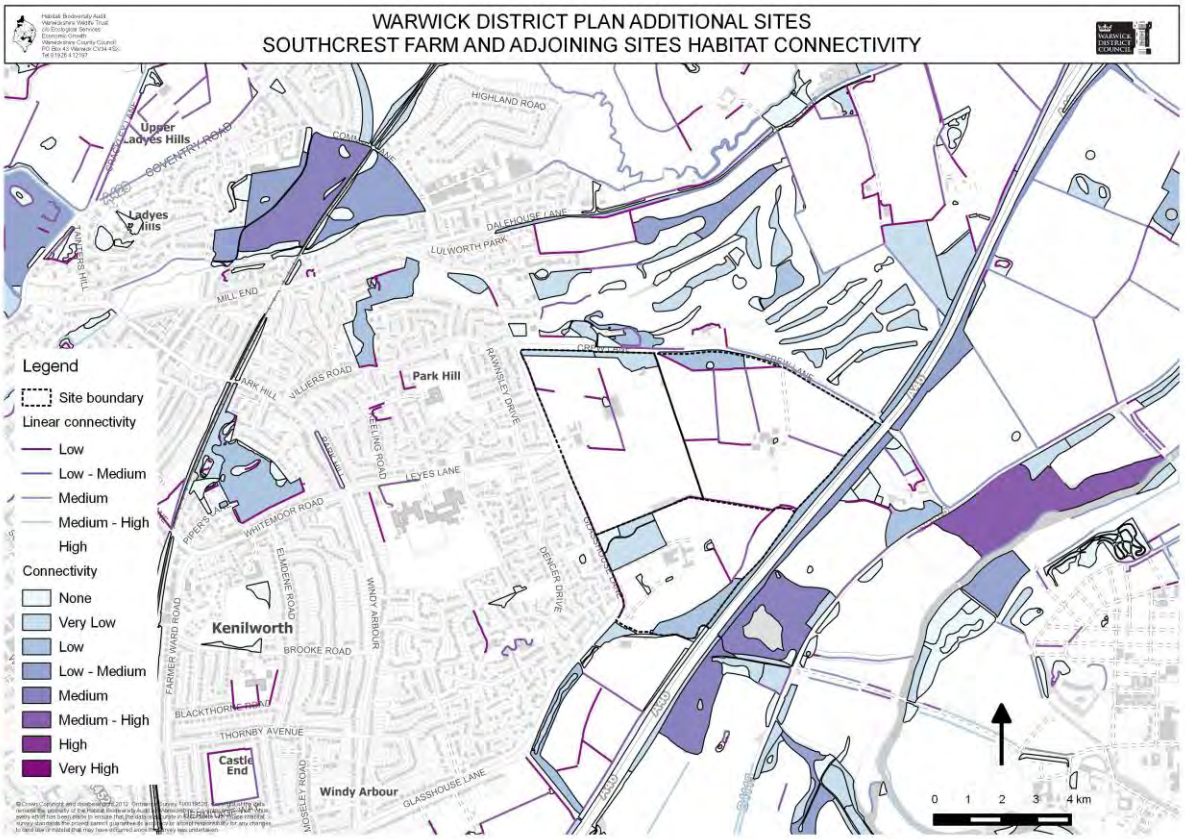
SP37B27 SP3082672510 11/12/2015

Un-accessible open pool viewed from the roadside. Sections of the pond are lined by linear trees particularly willow (Salix spp.) with sections fenced off from surrounding sheep grazed grassland and defunct hedges.

SP37B28 SP3082672510 11/12/2015

Linear mature broad-leaved woodland of beech (Fagus sylvatica), alder (Alnus glutinosa) and maple (Acer spp.) with beech (Fagus sylvatica) hedgerow and sections of mixed plantation with pine trees (Pinus spp.).

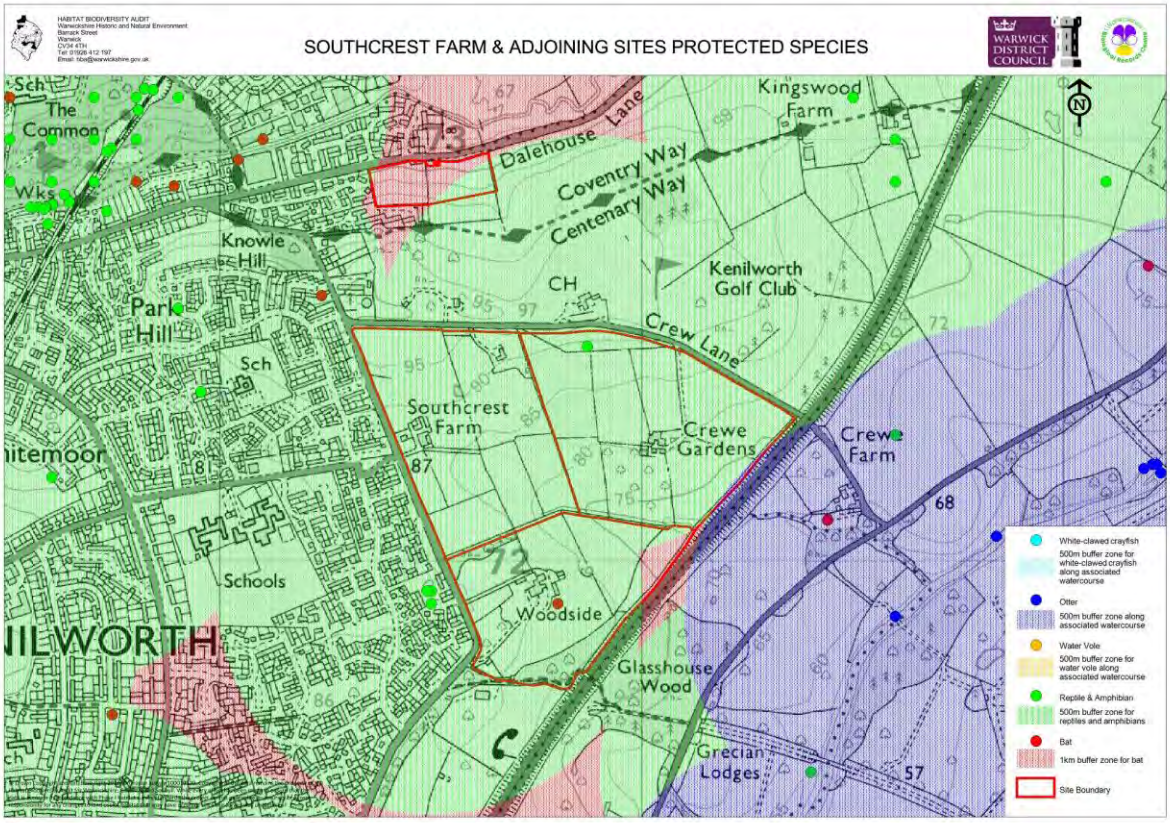
Habitat Connectivity



Protected Species

Surpassed foraging and roost bat records appear within the grounds of the Woodside Training Centre for brown long-eared bat (Plecotus auritus), a pipistrelle (Pipistrellus spp.) and an undetermined bat species (Chiroptera spp.) An external and internal bat survey will be required at an appropriate time of year and of an acceptable duration to determine the level of bat activity within the development parcel, given the presence of these existing occurences.

Likewise records for great crested newt (Triturus crestatus) occur within and immediately adjacent to the proposed development within residential properties and adjacent to Crew Lane. The presence or absence of great crested newts will need to be confirmed prior to development proposals and works. Should the presence of great crested newts be confirmed an assessment of the status and distribution of the population will be required.


SOUTHCREST FARM & ADJOINING SITES PROTECTED SPECIES
HABITAT BIODIVERSITY AUDIT
Warwickshire Historic and Natural Environment
Barrack Street
Warwick
CV34 4TH
Tel: 01926 412 197
Email: hbo@warwickshire.gov.uk
WARWICK DISTRICT COUNCIL
Sch
The Common
Wks
Knowle Hill
Park Hill
Sch
Dalehouse Lane
Coventry Way
Centenary Way
Kingswood Farm
Kenilworth Golf Club
CH
Crew Lane
Southcrest Farm
Crewe Gardens
Crewe Farm
Schools
Woodside
Glasshouse Wood
Grecian Lodges
NILWORTH
White-clawed crayfish
500m buffer zone for white-clawed crayfish along associated watercourse
Otter
500m buffer zone along associated watercourse
Water Vole
500m buffer zone for water vole along associated watercourse
Reptile & Amphibian
500m buffer zone for reptiles and amphibians
Bat
1km buffer zone for bat
Site Boundary

CUBBINGTON EAST

Area: 11.7 hectares

Overview

Two triangular arable fields dissected by the Rugby Road on the eastern periphery of Cubbington. Both border residential properties to the west with intensive farmland dominating the surrounding landscape to the north and east. The curtilage of Waverley Equestrian Centre adjoins the northern boundary of the northern parcel.

It is not possible to comment fully on the landscape and visual impact implications of the proposal until further information and clarification has been provided. In addition the impact of the HS2 Railine will require further consideration.

Key Features

- Broad-leaved scattered trees
- Dense scrub
- Hedgerows
- Open running water
- Poor semi-improved grassland

Recommendations

At least one main badger sett was identified directly on the eastern boundary of the proposed development, under the ash canopy and dense understorey of the ditch bank. The location of the sett suggests that tunnels and chambers may potentially extend into the proposed development area. It therefore seems possible that construction may result in damage to the badger sett. A presence/absence monitoring survey of the sett will be required at least two months prior to site works commencing.

An adequate buffer zone should be place between any proposed development and the adjacent wooded brook as not to adversely affect the character and value of the watercourse. Any proposed development at a minimum should not be within 8 metres of the brook, the vegetated buffer zone of native plant species will allow the retention of any trees and shrubs along this boundary.

The retention of existing boundary features is necessary to preserve the landscape character of the area.

All those hedgerows and trees that form the development boundary should be retained and enhanced. Each hedgerow and tree should be identified and protected to BS5837:2012.

Designated Sites

Local Wildlife Sites:

South Cubbington Wood SP36P1 Designated: 2000 Area: 15 hectares

This ancient semi-natural woodland **lies less than 500m from the southern development parcel**, 1km to the East of Cubbington. North Cubbington wood is adjacent to the North across the B4453. These woods are an outlying part of the Princethorpe Woods Complex, the largest concentration of semi natural woodland in Warwickshire.

South Cubbington wood is an excellent example of traditional Warwickshire woodland. It is surrounded by an intact boundary ditch and ridge and contains old coppice stools of Ash (Fraxinus excelsior) and Wild Service Tree (Sorbus torminalis). In the North East of the wood there is a high density of vigorous Hazel (Corylus avellana) stools, coppicing appears to have been practiced here relatively recently.

English Oak (Quercus robur) is the dominant standard tree in the North with some Ash and Birch (Betula) invading since the cessation of coppicing. The canopy is dense as is the shrub layer of Hazel stools. The ground layer is shaded to exclusion in the densest parts, elsewhere Bluebell (Hyacinthoides non-scripta) is the vernal dominant. The vegetation here is W10 Quercus robur-Pteridium aquilinum-Rubus fruticosus woodland (English Oak-Bracken-Bramble woodland). Moving South and West through the wood Oak decreases as a standard and Ash and Field Maple (Acer campestre) increase. In the Southern half of the wood the dominance of Bluebells decreases and is replaced by Wood anemone (Anemone nemorosa) as the vernal dominant. Here the vegetation is W8b Fraxinus excelsior-Acer campestre-Mercurialis perennis woodland, Anemone nemorosa subcommunity (Ash-Field Maple-Dogs Mercury woodland, Wood Anemone sub community), this vegetation occurs on heavy clay soils of impeded drainage. Notably some veteran Midland Hawthorn (Crataegus laevigata) trees contribute to the canopy and Wild Service Tree and Small Leaved Lime (Tilia cordata) are present. In this area of the wood there are several small shaded pools. Fallen dead stems of Ash and Birch are scattered throughout. Regeneration of Ash saplings is taking place sporadically, over most of the wood. Invasive non-native trees and shrubs are not a major problem, though Cherry Plum (Prunus cerasifera), Snowberry (Symphoricarpos rivularis) and

Sycamore (Acer pseudoplantus) are present. The wood is threatened by underplanting of cypress trees.

There is a good diversity of woodland indicator species including Moschatel (Adoxa moschatellina), Wood anemone, Wood Sedge (Carex sylvatica), Enchanters Nightshade (Circaea lutetiana), Ground Ivy (Glechoma hederacea), Bluebell, Wood Sorrel (Oxalis acetosella), Wild Service Tree, Yellow Archangel (Lamiastrum galeobdolon) Small Leaved Lime and the Butterfly, White Admiral (Ladoga camilla). Other notable historic records include breeding nightingales (Last record 1980) and abundant Purple Hairstreak butterflys (Quercusia quercus).

North Cubbington Wood SP36P5 Designated: 2015 Area: 16.3 hectares

North Cubbington Wood is a small replanted ancient woodland situated in the parish of Cubbington, **550 metres from the north development parcel** about 1 km to the north-east of the village and 4km north-east of the centre of Leamington Spa. It is situated at the south-west corner of the Princethorpe Woodlands Living Landscape Area and is only separated from the neighbouring Weston Wood (part of Weston and Waverley Wood LWS) by 100m width of grass field in the north-north-east corner. Across the B4453, which forms the southern boundary to the LWS, is its sister wood, South Cubbington Wood LWS. This is now partly severed from North Cubbington by several houses. Apart from two very small improved grass fields on the north side of the wood, it is otherwise bordered by arable fields, although the suburban part of Cubbington village lies just 0.75km to the south-west.

Semi-natural woodland is now mainly confined to the perimeter, particularly to the north-west corner; the rest now comprising pure plantations of Scots Pine, Larch, Norway Spruce, Western Red Cedar, Ash and Beech. However much of the ground flora has been left intact. The wood is criss-crossed by a grid-iron pattern of rides, many of which are quite wet in places.

Cubbington Wood is of ancient origin and once formed a single block of woodland which was divided only by the narrow lane running from Cubbington to Weston-under-Wetherley, which in the 20th century became the B4453 Leamington Spa to Rugby Road. In the First Edition of the One Inch OS map (surveyed 1830-32) the boundaries of the north wood were much as they are today, with the exception of the south-west corner now occupied by the saw mill and wood yard. The wood apparently remained largely semi-natural in character until the late 1940's or early 1950's when some conifer planting took place. In 1960 it was described by O'Shea (2006) as a deciduous wood containing a small central block of conifer plantation. At a later date a small saw mill was established in the south-west corner and since then a large block of woodland (including the southern section of the western north-south ride) in this corner has been replaced by the wood yard, containing three buildings

surrounded by storage yards. A small infrequently used storage yard is also situated within the wood to the north of the main wood yard.

The site is situated on a north-facing hill slope, with the altitude gently descending from around 95m ASL in the southern half of the wood down to about 80m ASL in the northern corner. The underlying geology consists of calcareous Pleistocene clays, although the abundance of Bracken and other calcifugous plants within the woodland suggests there is a thin capping of more acidic Pleistocene sand and gravel deposits over much of this.

The wood is managed for commercial forestry and there is no public access, although a public footpath runs along the outside of the north-west boundary.

Woodland

Most of the natural canopy of the woodland has been replanted during the post-war period and it now consists of mainly mono-specific plantations of Scots Pine, larch (probably mainly Japanese or its hybrid with European) and Norway Spruce, with Ash and Beech forming pure stands in the northern half of the wood. There are also localised stands of Western Red Cedar on the south and east sides, some of which is also under-planted below larch. American Red Oak is locally frequent along some of the compartmental boundaries. Semi-natural woodland is now confined to the perimeter of the wood and mainly comprises Downy Birch which may be locally abundant, together with occasional-locally frequent Ash and Pedunculate Oak, which also fringe some of the rides. Occasional species include Silver Birch, Aspen and Sessile Oak, while there is a mature specimen of Wych Elm by the road. The shrub layer is now very sparse in most of the denser plantations, but derelict Hazel coppice is still frequent in parts of the north and east of the wood. Occasional species include Field Maple, Hawthorn, Holly, Dog Rose and Elder. There is still a well-defined medieval wood bank on at least the northern boundary of the LWS and this is topped with a rather fragmented and derelict hedge of Blackthorn and Hazel. There is also occasional Field Maple, Dog Rose and occasional large standard oak trees.

Despite replanting, the field layer is still relatively diverse and retains many ancient woodland indicator plants. It most resembles the W10 Oak-Bracken-Bramble community as defined by the National Vegetation Classification (NVC), the type which is characteristic of the more acid soils in north, central and west Warwickshire and which is typical of the Princethorpe Woodlands complex as a whole. The ground flora across the wood is generally dominated by Bluebell, Bracken and Bramble, but in the denser plantations in the south of the wood this is often sparse or non-existent. There is also frequent- locally abundant False Brome, Broad Buckler-fern, Cleavers, Yellow Archangel, Honeysuckle, Wood Millet, Wood-sorrel, Greater Stitchwort and Common Dog-violet throughout the wood. Wood Melick is locally abundant on some of the drier banks and on the perimeter of the wood, while Hairy Wood-rush, Dog's

Mercury and Wood Sage are locally frequent and Foxglove occasional. Wood Anemone is reported to be present in the spring.

The richest flora is found along and close to the grassy rides, as it is in these areas that drainage is locally impeded and wet flushes are frequent. Here the ride flora includes abundant Bugle, Remote Sedge, Wood Sedge, Tufted Hair-grass, Herb Robert, Creeping Buttercup and Red Campion, together with frequent Wavy Bittercress, Pendulous Sedge, Enchanter's Nightshade, Great Horsetail, Common Marsh Bedstraw, Floating Sweet-grass, Soft Rush, Yellow Pimpernel, Barren Strawberry, Primrose, Selfheal, Wood Dock, Bog Stitchwort and White Clover. A wide range of other species were recorded at a rare-occasional frequency, including Wild Angelica, Lady Fern, Lady's Smock, Hairy Sedge, False Fox-sedge, Narrow Buckler-fern, Bearded Couch, Hoary and Pale Willowherbs, Giant Fescue, Square-stalked St.John's-wort, Marsh Birdsfoot-trefoil, Ragged Robin, Silverweed, Common Tormentil, Creeping Cinquefoil, Common Figwort, Lesser Stitchwort, Devilsbit Scabious, Brooklime and Wood Speedwell.

Fauna

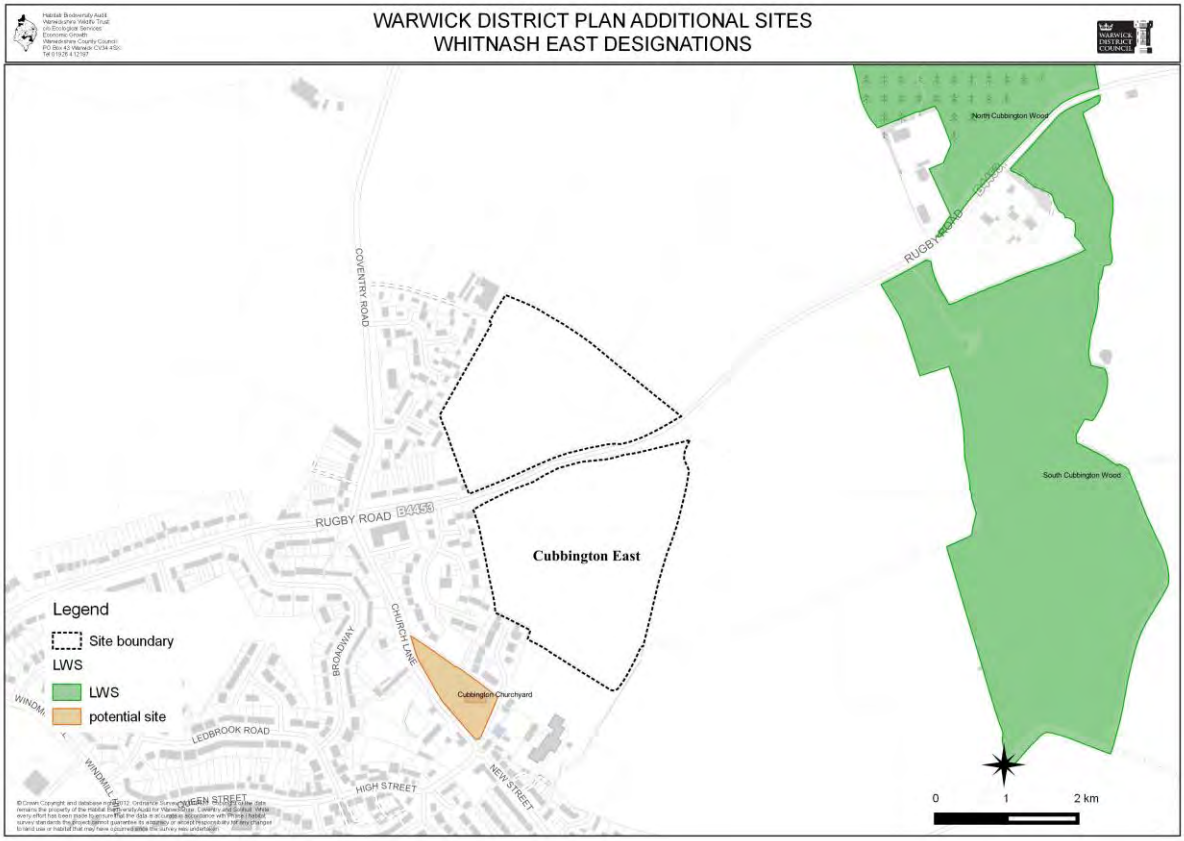
Despite being past the breeding season a very good selection of woodland birds were noted during the visit, all of which are considered to breed on site. These include Sparrowhawk, Common Buzzard, Tawny Owl, Green and Great Spotted Woodpeckers, Jay, Long-tailed Tit, Goldcrest (over 60 present), Marsh Tit, Willow Tit (family party), Coal Tit, Nuthatch, Treecreeper and Bullfinch. In addition a few Siskins, Lesser Redpolls and 1 Brambling were seen, which were migrants. Crossbills have been seen here in the last ten years. In the past, in common with other woods in the local area, there was a more diverse avifauna and O'Shea (2006) records that Woodcock and Nightingale were breeding here in 1960. White Admirals occur, with the most recent record in 2013 (Butterfly Conservation). Not much else is known about the fauna of the wood, though both Muntjac and signs of Badger activity were noted during the visit.

The woodland banks appear to hold a diverse moss flora, although these were not surveyed. There also appears to be a good fungal flora in the wood, including Fly Agaric (Amanita muscaria).

Potential Local Wildlife Sites:

Cubbington Churchyard (SP36P3) 0.66 hectares

The 12th and 13th century red sandstone church restored in the 19th century lies 100m from the southern site boundary separated by residental properties of Church Hill.



Habitat Description

The development parcels comprise predominately of arable farmland bordered in large by hedgerows with occasional oak (Quercus robur) and ash (Fraxinus excelsior) standards whilst enclosed on both western borders by fencing and patches of linear scrub and garden ornamentals from residential properties.

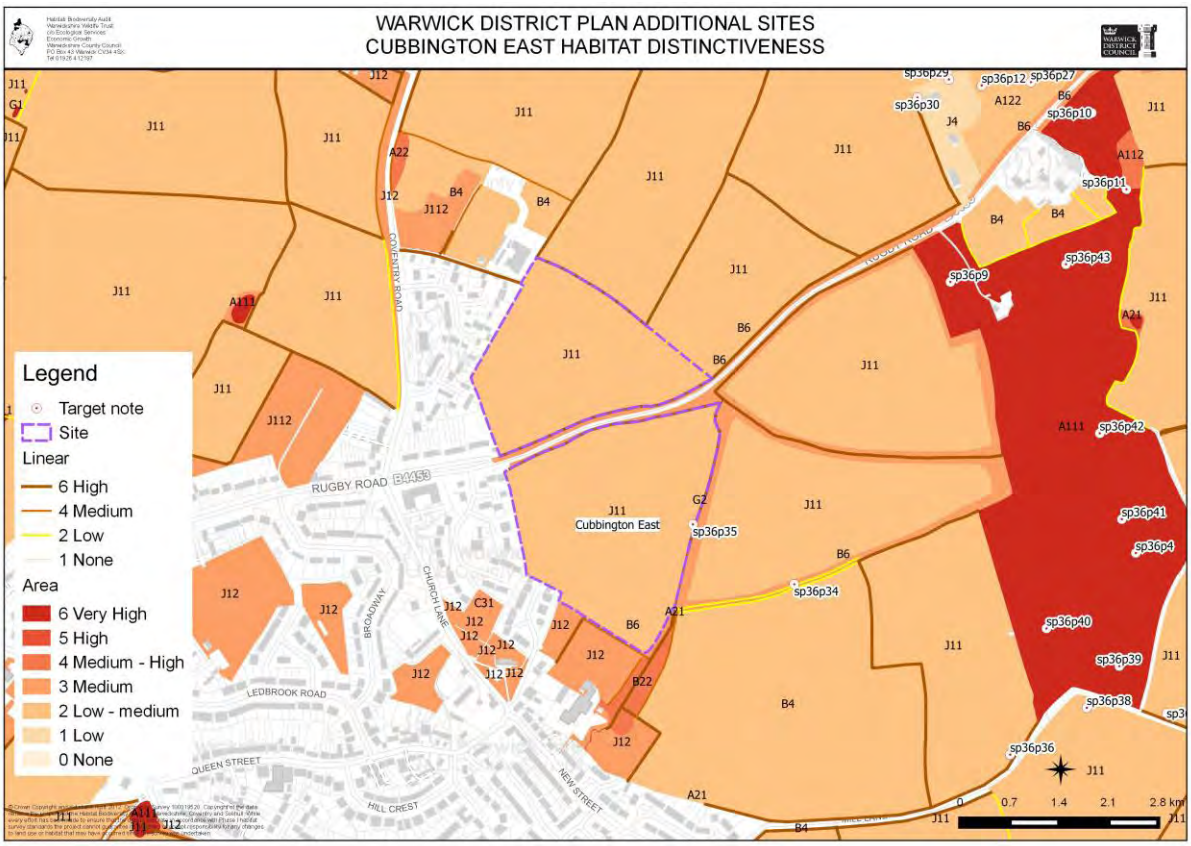
The southern parcel south of the Rugby Road is bordered on its eastern edge by a drainage ditch with leads to a small brook as a tributary to the River Leam lined by predominately ash (Fraxinus excelsior) trees with an understorey of blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna) and holly (Ilex aquifolium) with dominant ivy (Hedera helix) alongside young crack (Salix fragilis) and goat willow (S. caprea). Many of the arable fields support set-aside field margins of poor semi-improved grassland of cock's-foot (Dactylis glomerata), cleavers (Galium aparine), cow parsley (Anthriscus sylvestris), broad-leaved dock (Rumex acetosa) and hedgerow crane's-bill (Geranium pyrenaicum). The rank grassland merges with bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), creeping thistle (Cirsium arvense) and great willowherb (Epilobium hirsutum).

Progressing east of the development parcel a poor semi-improved grassland margin runs parallel alongside a dry ditch and a gappy but intact hedge with larger specimens of hawthorn (Crataegus mongyna), field maple (Acer campestre), elder

(Sambucus nigra), oak (Quercus robur) and ash (Fraxinus excelsior). The rank unmanged grassland strip supports cow parsley (Anthriscus sylvestris), cock's-foot (Dactylis glomerata), cleavers (Galium aparine), bramble (Rubus fruticosus agg.), great willowherb (Epilobium hirsutum), nettle (Urtica dioica), holly (Ilex aquifolium), dog rose (Rosa canina), blackthorn (Prunus spinosa), hedge woundwort (Stachys sylvatica) broad-leaved dock (Rumex obtusifolius), red clover (Trifolium pratense), ribwort plantain (Plantago lancelota), dandelion (Taraxacum officinale agg.) and wood avens (Geum urbanum). A mink (Neovison vison) was spotted at the time of the survey hunting wildfowl along this dry ditch.

Bird species observed during the survey included wren (Troglodytes troglodytes), blue tit (Cyanistes caeruleus) and raven overhead (Corvus corax)

The southern corner holds a small compartment of wet woodland and damp developing scrub succeeding to patches of shaded woodland. A larger specimen of oak (Quercus robur) prevails above an understorey of re-generating ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa) and elder (Sambucus nigra) which dominate the brook edge leading to the eastern fringe of the Cubbington Church of England Primary School. The dense understorey creates a shade-loving ground flora of cow parsley (Anthriscus sylvestris), lesser celandine (Ranunculus ficaria) and ground-ivy (Glechoma hederacea), whilst in lighter and less shaded areas, broad-leaved dock (Rumex obtusifolius) and nipplewort (Lapsana communis) dominant alongside grasses of cock's-foot (Dactylis glomerata) and bearded couch (Elymus caninus).The arable field of the development parcel is denoted between the school by wooden fencing with planted specimens of bird cherry (Prunus padus) and Norway maple (Acer platanoides) as is the edge of the arable field with the neighbouring Church Hill Playground. The edge of the Cubbington Conservation Area lies beyond Church Hill Playground encompassing Church Farm Cottages.



Target Notes

Number	Grid Reference	Survey Date
SP36P35	**SP3465568524**	**16/04/2011**

A neglected species-rich hedge, notably wide with a ditch holding running water.

UPDATE 17/04/2011 MF

Hedgerow includes crab apple (Malus sylvestris), ivy (Hedera helix), blackthorn (Prunus spinosa), hawthorn (Crataegus monogyna), dog-rose (Rosa canina), ash (Fraxinus excelsior), field maple (Acer campestre) and elder (Sambucus nigra). There is a large badger sett in the middle section of the hedgerow (Meles meles). The northern end of the hedgerow is dominated by crack willow (Salix fragilis) with the ditch becoming dry at the time of survey.

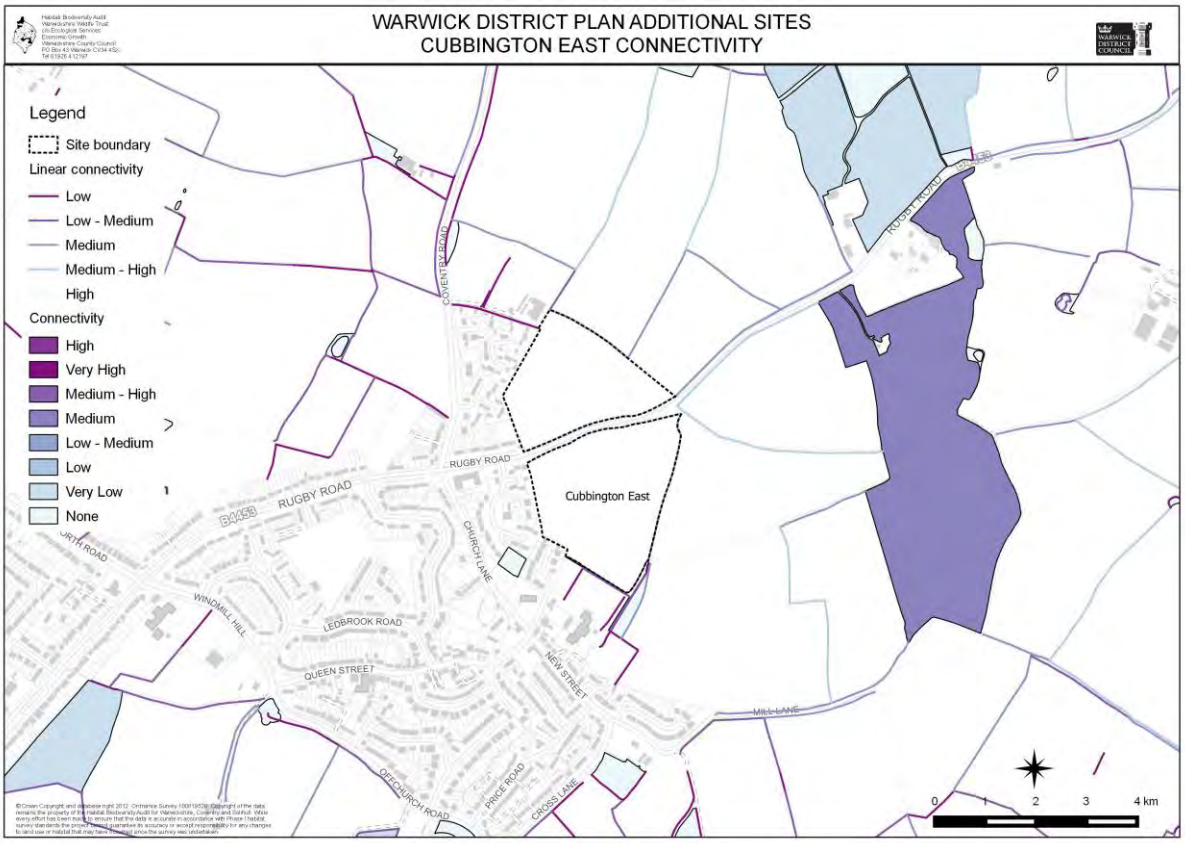
SP36P34	**SP3479868440**	**04/16/2011**

Species-rich hedgerow with oak (Quercus robur), ash (Fraxinus excelsior), field maple (Acer campestre), blackthorn (Prunus spinosa) and hawthorn (Crataegus mongyna) with a ground flora which includes lords-and-ladies (Arum maculatum).

UPDATE 17/04/2011 MF

Sections of hedge removed or have become defunct and replaced with a fence accompanying a dry ditch on the north side of the fence. There are six trees remaining including field maple (Acer campestre), ash (Fraxinus excelsior) and oak (Quercus robur). In places there are short strips of laid hawthorn (Crataegus monogyna).

Habitat Connectivity



Protected Species

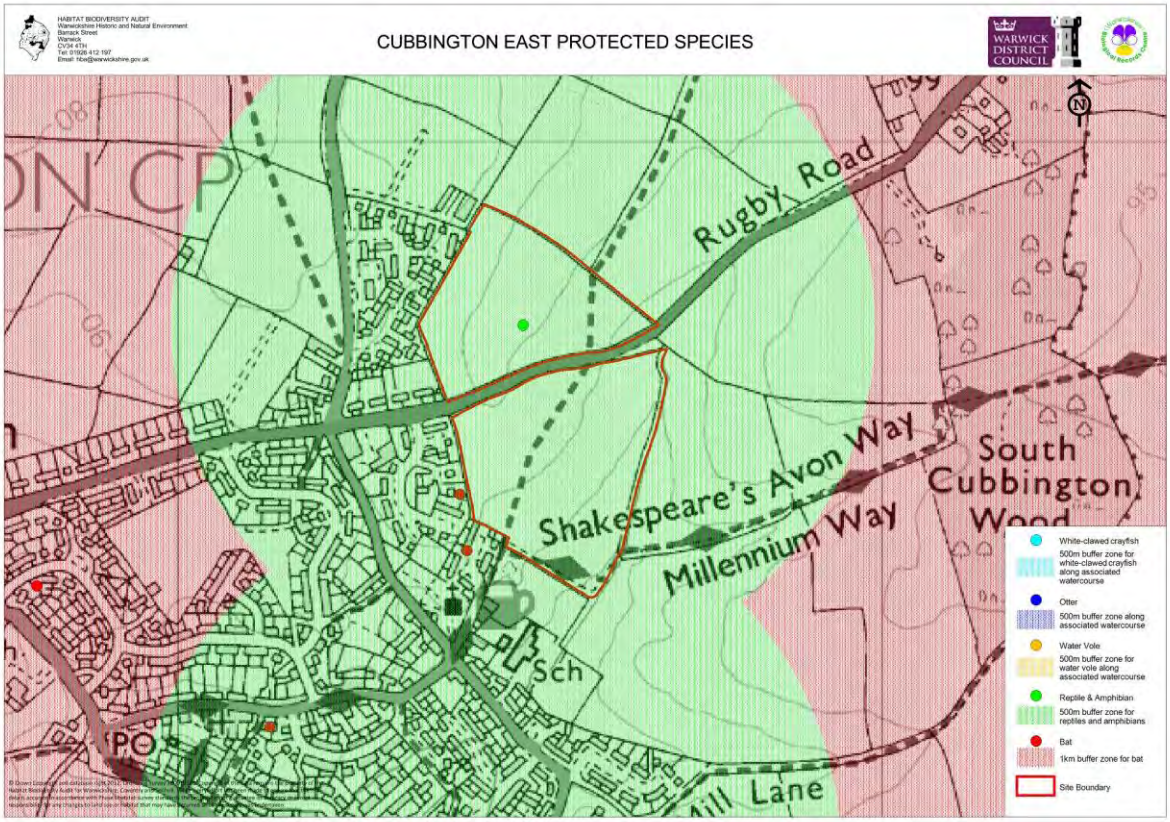
A main badger sett with well-used entrances was noted within the banks of the ditch under cover by surrounding ash trees clad in ivy and an understorey of blackthorn and hawthorn bushes. The surrounding area provides suitable foraging habitat for badgers including forging habitat within the development parcel. A well-used mammal path leads from the entrance of the sett along the margins of the adjacent arable field adjoining both the western and eastern parts of the ditch.

There is a confirmed common pipistrelle maturity roost within residential properties with the village of Cubbington close to the boundary of the development parcel. Although the development proposal might not directly effect the existing curritage of

residential properties, bat populations might use the linear scrub, hedgerows and trees associated with the ditch/brook for foraging. The extent to which bat populations use South Cubbington Wood and the surrounding farmland will have to be determined prior to development proposals.

A dated and isolated record for great crested newt from a garden pond occurs within 500m of the development parcel surrounded by un-passable residential properties of south Cubbington.

There are also numerous other records of protected species nearby including bats (common pipistrelle, Soprano pipistrelle and indeterminate species), common frog, skylark, willow warbler, harvest mouse and a range of notable invertebrate species including white-letter hairstreak. Japanese Knotweed (Fallopia japonica)



HAZELMERE AND LAND AT LITTLE ACRE

Area: 3.5 hectares

Overview

Hazelmere is a small triangular shaped field with the north edge bounded by the mainline railway into Leamington and the southern boundary along Golf Lane which becomes a track way and public footpath from Park Farm and continues south towards Harbury. The track way separates Hazelmere from Little Acre which is a larger rectangular shaped field, bounded to the east by the Leamington and County Golf Course. There is a public footpath between the Golf Course and Little Acre field. To the south and east the field looks out over large arable fields.

Key Features

- Semi-improved grassland
- Species rich hedgerows

Recommendations

A detailed Local Wildlife Site survey is required for Hazelmere and Whitnash potential local wildlife site (pLWS) along with a resurvey of Mollington Hill LWS taking in an additional survey of the grassland extension to the LWS on the western edge of the Leamington Golf Course down to Harbury Lane.

The hedgerow along Golf Lane should be retained and enhanced. The hedgerow and any tree should be identified and protected to BS5837:2012.

Re-instating the hedgerow on either side of the trackway between Little Acre and Hazelemere will enhance habitat connectivity from Mollington Hill south to the Railway Line.

Designated Sites

Local Wildlife Sites:

Mollington Hill LWS Designation Year: 2008 Area: 24.19 hectares

The LWS (SINC) consists of several disconnected areas of species-rich semi-improved limestone grassland, forming roughs within the Leamington and County Golf Course on the southern edge of Whitnash, 3 km south-south-west of Leamington Spa. The golf course is bounded on the north by modern suburban

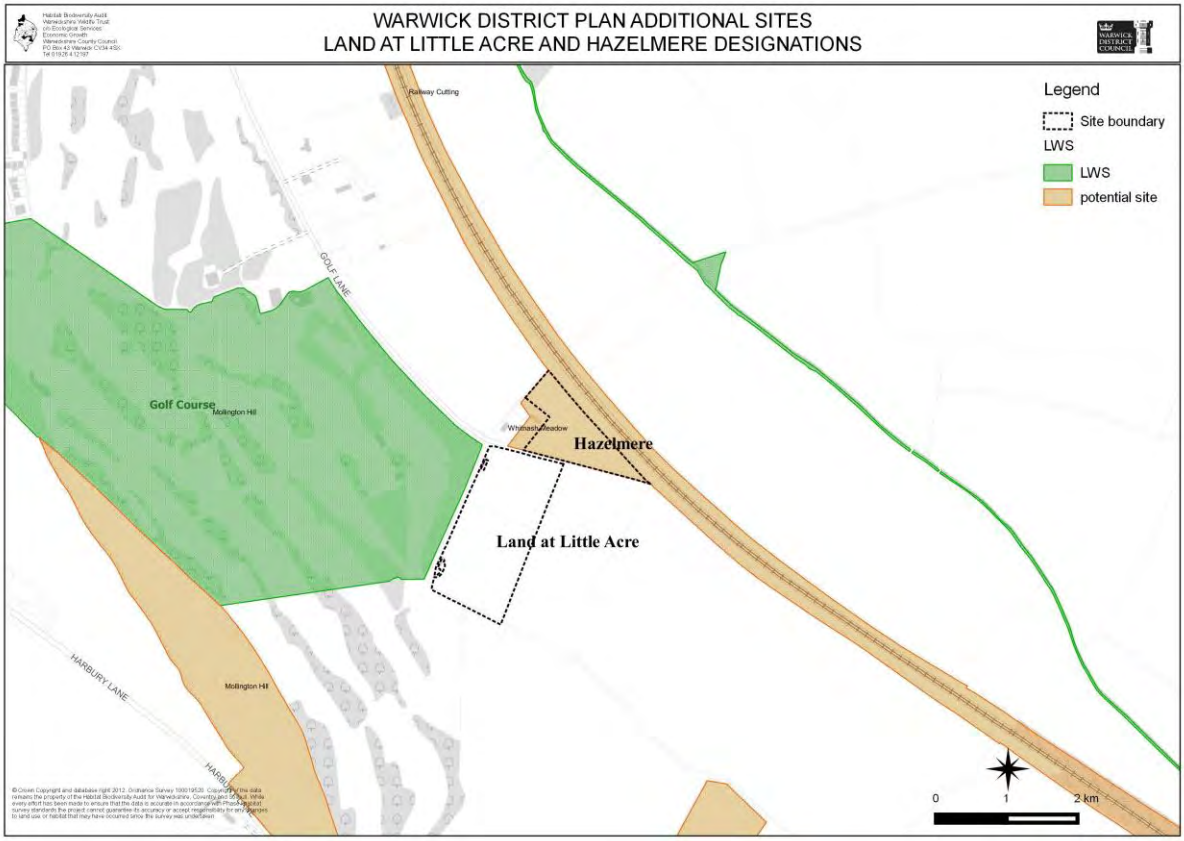
development and on the other sides by medium-large arable and improved pasture fields. Throughout the golf course there are traces of old ridge-and furrow.

Species-rich calcareous grassland is now a scarce habitat within Warwickshire. Two ponds with a variety of unusual aquatic plants are also associated with this grassland, but some of the plants were probably introduced over the last thirty years.

There are four areas of rough semi-improved species-rich limestone grassland within the course which merit SINC status. These areas have been extended in recent years by the Greens Keeper, with further expansion planned for the future.

Potential Local Wildlife Sites:

- Whitnash Meadow (SP36G2) 1.2 hectares
- Mollington Hill Extension (SP36G5) 5.9 hectares
- Railway Cutting (SP36K1) 27 hectares



Habitat Description

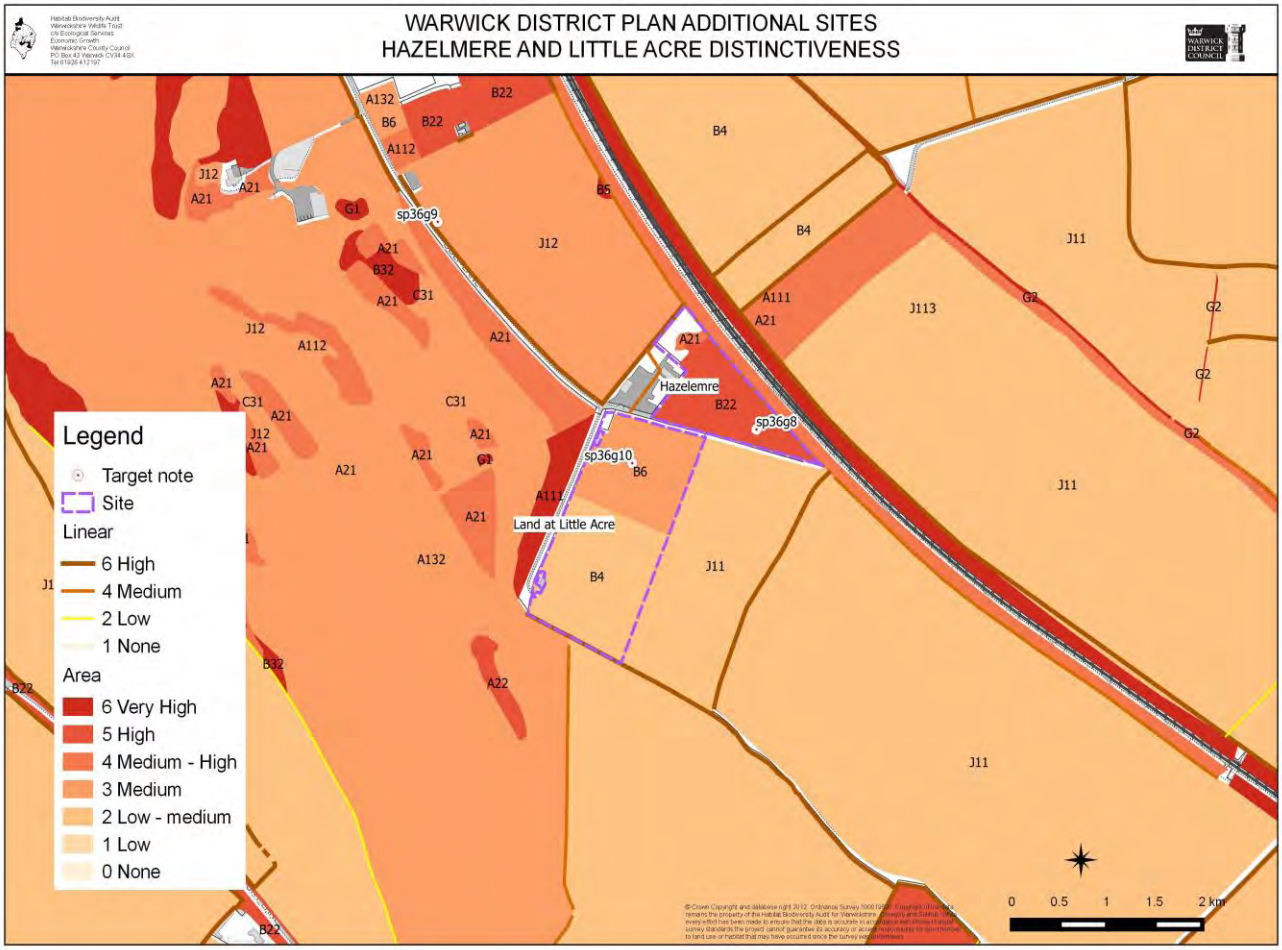
Hazelmere

Target Note: SP36G8 noted semi-improved grassland (B22) and a potential Local Wildlife Site (pLWS). The grassland has not been managed for wildlife but has largely been left to revert to open scrub and tall ruderal vegetation. Occasional grazing appears to have retained the grassland areas. Interesting plants were noted which indicate the grassland is similar to that found on the nearby Mollington Hill LWS which is characteristic of calcareous grassland. The grassland would provide some continuity with the Mollington Hill LWS and the Railway Line pLWS.

Little Acre

The field has been subdivided into two sections with the lower section noted as improved grassland (B4) and the upper section remaining species poor semi-improved grassland (B6) detailed in Target Note: SP36GB. Previously the field was recorded in 1998 as arable. Since then the field appears to have been converted to horse grazed pasture. The field has less botanical interest then Hazelmere which appears to have been a continuously grazed field with little improvement or intensification.

Other habitats of note include a species-rich hedgerow along Golf Lane leading down to Hazelmere and Little Acre described in Target Note: SP36G9. The hedgerow provides continuous habitat connectivity from Mollington Hill LWS to the Leamington Golf Course continuing along the Golf Lane Trackway and connecting to the linear scrub along the Railway Line. Arable fields lie immediately beyond.



Target Notes

Number	Grid Reference	Survey Date
SP36G8	**SP3336962154**	**13/10/2015**

Semi-improved field besides the Chiltern Main Railway Line. The un-mown and un-grazed grassland provides good habitat for a variety of butterflies including marbled white (Melanargia galathea) and meadow brown (Maniola jurtina). The grass sward grazed only by rabbits includes frequent Yorkshire-fog (Holcus lanatus), false oat-grass (Arrhenatherum elatius), timothy (Phleum pratense), cock's-foot (Dactylis glomerata), creeping bent (Agrostis stolonifera), red fescue (Festuca rubra) and patches of crested dog's-tail (Cynosurus cristatus). There is a wide rich diversity of forb species including frequent creeping cinquefoil (Potentilla reptans), creeping thistle (Cirsium arvense), white clover (Trifolium repens), selfheal (Prunella vulgaris), broad-leaved dock (Rumex obtusifolius), common nettle (Urtica dioica), creeping buttercup (Ranunculus repens), field mouse-ear (Cerastium arvense) and scattered areas of common cat's-ear (Hypochaeris radicata), tufted vetch (Vicia cracca), agrimony (Agrimonia eupatoria), common ragwort (Senecio jacobaea), meadow vetchling (Lathyrus pratensis), cut-leaved crane's-bill (Geranium dissectum), bush vetch (Vicia sepium), mugwort (Artemisia vulgaris), hard rush (Juncus inflexus),

common sorrel (Rumex acetosa), lesser trefoil (Trifolium dubium), ribwort plantain (Plantago lanceolata), oxeye daisy (Leucanthemum vulgare), goat's-beard (Tragopogon pratensis), wild parsnip (Pastinaca sativa), yarrow (Achillea millefolium), wild teasel (Dipsacus fullonum), common bird's-foot-trefoil (Lotus corniculatus), black knapweed (Centaurea nigra), lesser stitchwort (Stellaria graminea) and ribbed melilot (Melilotus officinalis). Other species recorded at the site on separate visits include bee orchid (Ophrys apifera), wild carrot (Daucus carota), pepper saxifrage (Silaum silaus), fairy flax (Linum catharticum), woolly thistle (Cirsium eriophorum) and red bartsia ssp. (Odontites vernus).

UPDATE 13/10/2015 CFT

Neglected un-grazed grassland comprising of mostly grasses with patches of creeping thistle (Cirsium arvense), frequent common knapweed (Centaurea nigra), selfheal (Prunella vulgaris), agrimony (Agrimonia eupatoria), wild carrot (Daucus carota), common ragwort (Senecio jacobaea) and ribwort plantain (Plantago lanceolata). The grassland remains semi-improved neutral grassland however a lack of management has decreased its botanical value and as a consequence jeopardizes its current plws status. Further assessment is required.

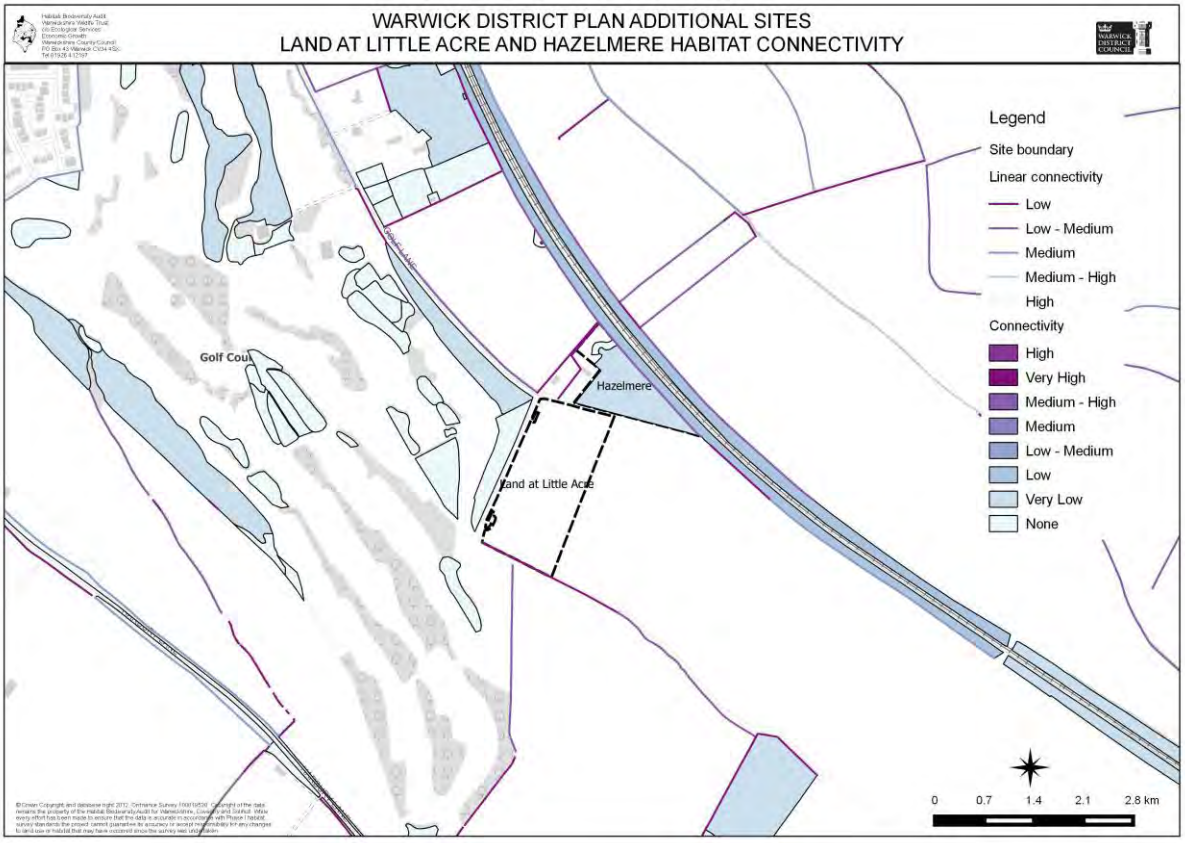
SP36G9 SP3308462325 13/10/2015

Species-rich hedgerow with mature ash (Fraxinus excelsior) and willow (Salix spp.), with a shrub layer of hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), crab-apple (Malus sylvestris), wild privet (Ligustrum vulgare), dog-rose (Rosa canina), English elm (Ulmus procera). The hedge continues along Golf Lane with field maple (Acer campestre), elder (Sambucus nigra), wild plum (Prunus domestica ssp.), becoming progressively shrubby. Verge is rank grassland with common nettle (Urtica dioica) and dock (Rumex spp.). A dry ditch runs alongside the boundary of Leamington Golf Course mergeing into a scrub area.

SP36G10 SP3328962083 13/10/2015

Neglected semi-improved grassland probably horse grazed but not at time of visit with frequent common knapweed (Centaurea nigra), selfheal (Prunella vulgaris), red clover (Trifolium pratense), wild carrot (Daucus carota), creeping bent (Agrostis stolonifera), agrimony (Agrimonia eupatoria), bush vetch (Vicia sepium), ribwort plantain (Plantago lanceolata), creeping buttercup (Ranunculus repens), crested dog's-tail (Cynosurus cristatus), red fescue (Festuca rubra) with occasional wild teasel (Dipsacus fullonum) and patches of creeping thistle (Cirsium arvense).

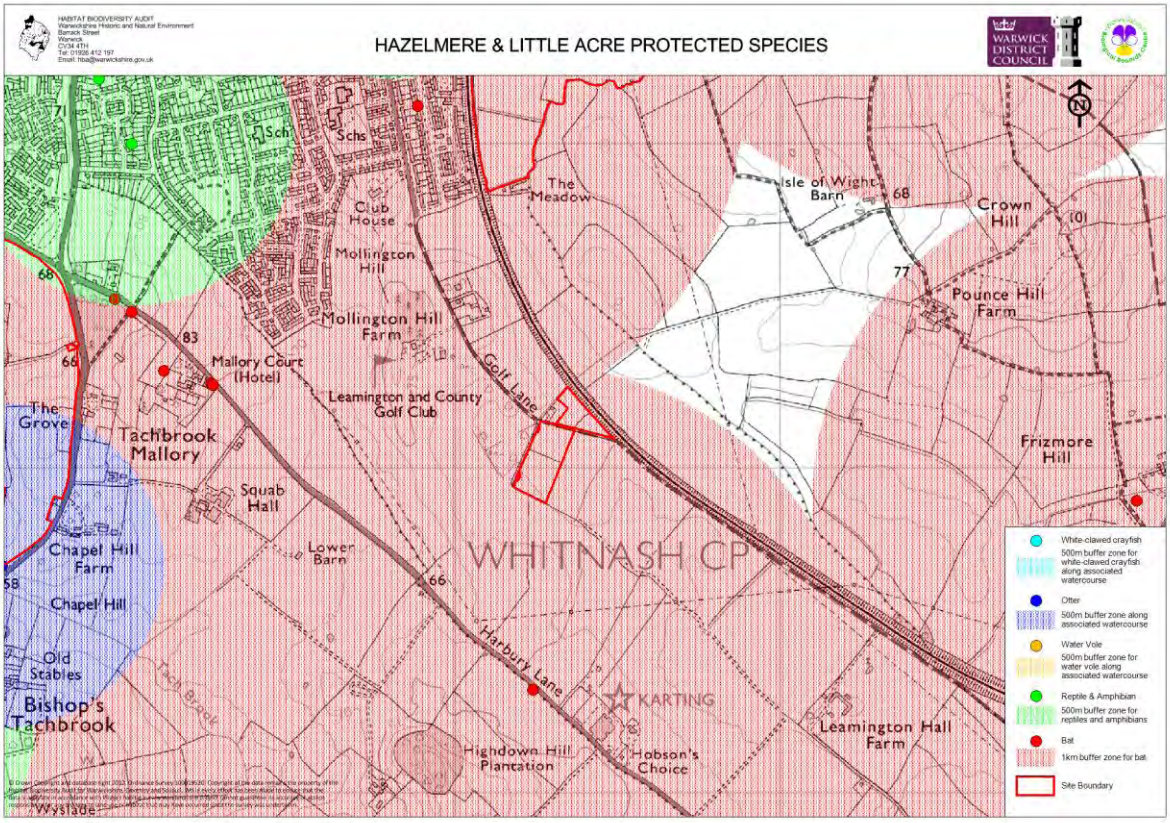
Habitat Connectivity



Protected Species

There are no protected or notable species records located within the site boundaries. There are records of protected species nearby including badgers (Meles meles) and common pipistrelle bats with notable species of red kite (Milvis milvis), house martin (Delichon urbicum), quaking grass (Briza media), dyer's greenweed (Genista tinctoria) and small heath (Coenonympha pamphilus).

We recommend that protected species are taken into consideration through more detailed ecological assessments. Please take note than an absence of species records does not mean an absence of species.


HAZELMERE & LITTLE ACRE PROTECTED SPECIES
WARWICK DISTRICT COUNCIL
HABITAT BIODIVERSITY AUDIT
Warwickshire Historic and Natural Environment
Barrack Street
Warwick
CV34 4TH
Tel: (01926 412 197
Email: hba@warwickshire.gov.uk
WHITNASH CP
The Meadow
Isle of Wight Barn
Crown Hill
Pounce Hill Farm
Frizmore Hill
Club House
Mollington Hill
Mollington Hill Farm
Mallory Court (Hotel)
Leamington and County Golf Club
Golf Lane
The Grove
Tachbrook Mallory
Squab Hall
Lower Barn
Chapel Hill Farm
Chapel Hill
Old Stables
Bishop's Tachbrook
Tach Brook
Harbury Lane
KARTING
Highdown Hill Plantation
Hobson's Choice
Leamington Hall Farm
Wyslade
White-clawed crayfish
500m buffer zone for white-clawed crayfish along associated watercourse
Otter
500m buffer zone along associated watercourse
Water Vole
500m buffer zone for water vole along associated watercourse
Reptile & Amphibian
500m buffer zone for reptiles and amphibians
Bat
1km buffer zone for bat
Site Boundary

KINGSLEY SCHOOL PLAYING FIELDS

Area: 6.8 hectares

Overview

The development parcel comprises a playing field designated as amenity grassland comprising of a hand standing tennis/basketball court and a changing room/amenity facility. Immediately adjacent to the south and the east lies two further amenity playing fields within the curtilage of the current North Leamington School and the derelict former school grounds of the Leamington College for Girls accessed from Cloister Way. The development parcel is bordered on the western side by Kenilworth Road and to the north by arable fields designated as another potential development site.

Key Features

- Amenity grassland
- Buildings and hard standing
- Hedgerow with trees

Recommendations

The mown amenity grassland used as a playing field holds limited ecological value and therefore the retention of existing boundary features alongside a habitat buffer with enhancement by filling any hedgerow gaps with native species and the inclusion of occasional ash or oak standards is preferable.

The mature boundary hedge and trees which mark the site boundary adjacent to the A452 carriageway of Kenilworth Road should be preserved and protected to BS5837:2012.

Designated Sites

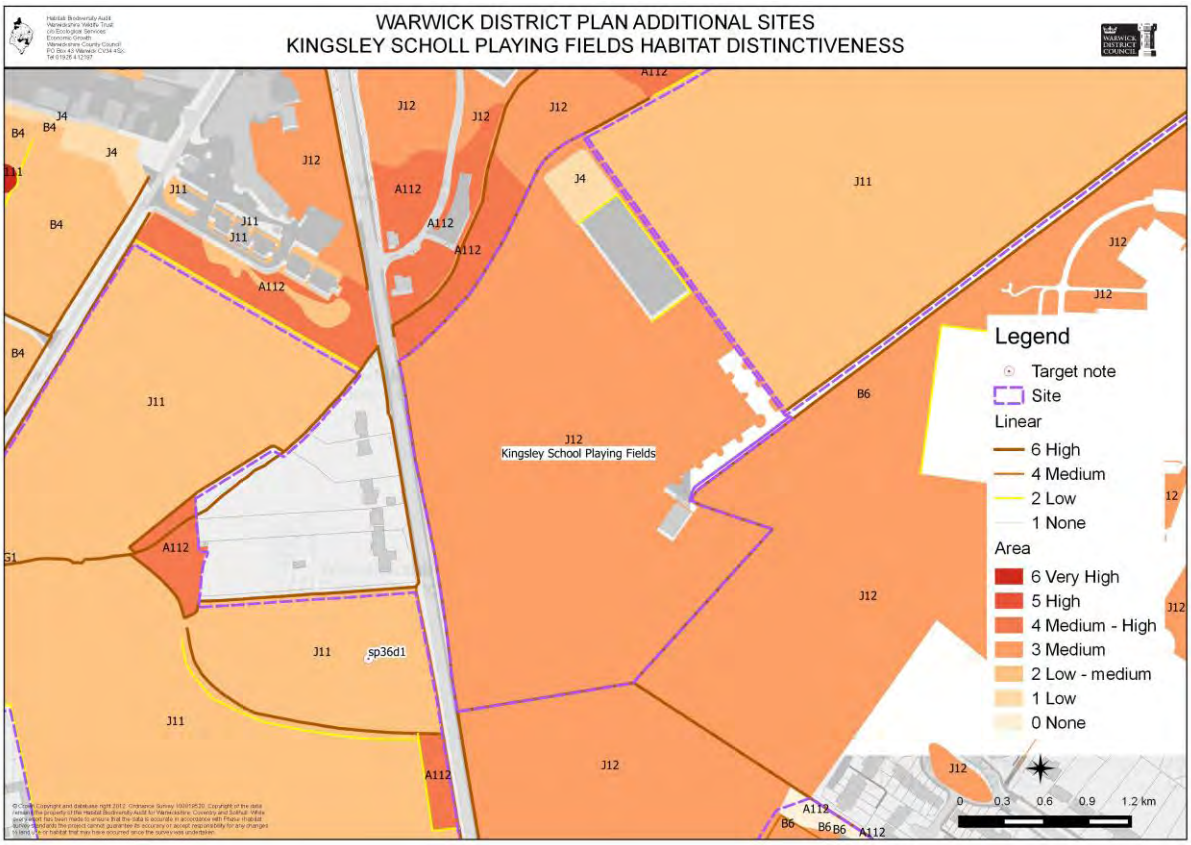
Within the Site itself there are no designated sites.

A tributary of the River Avon LWS lies just outside the boundary of the Site continuing southwards across Kenilworth Road joining the River Avon north-wards of Old Milverton.

River Avon SP15Li8F LWS **Designated: 2010**

Area: 102 km – Tributeries – 205km

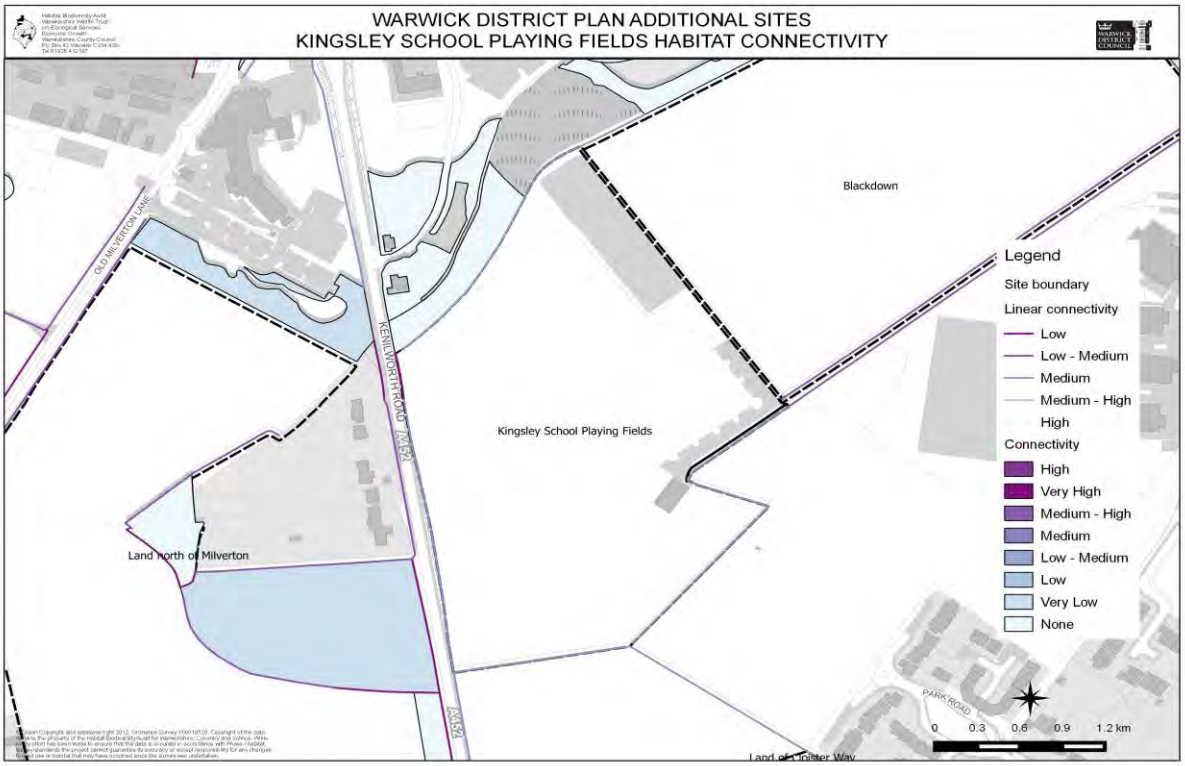
Habitat Description



Target Notes

Within the Site itself there are no existing Target Notes.

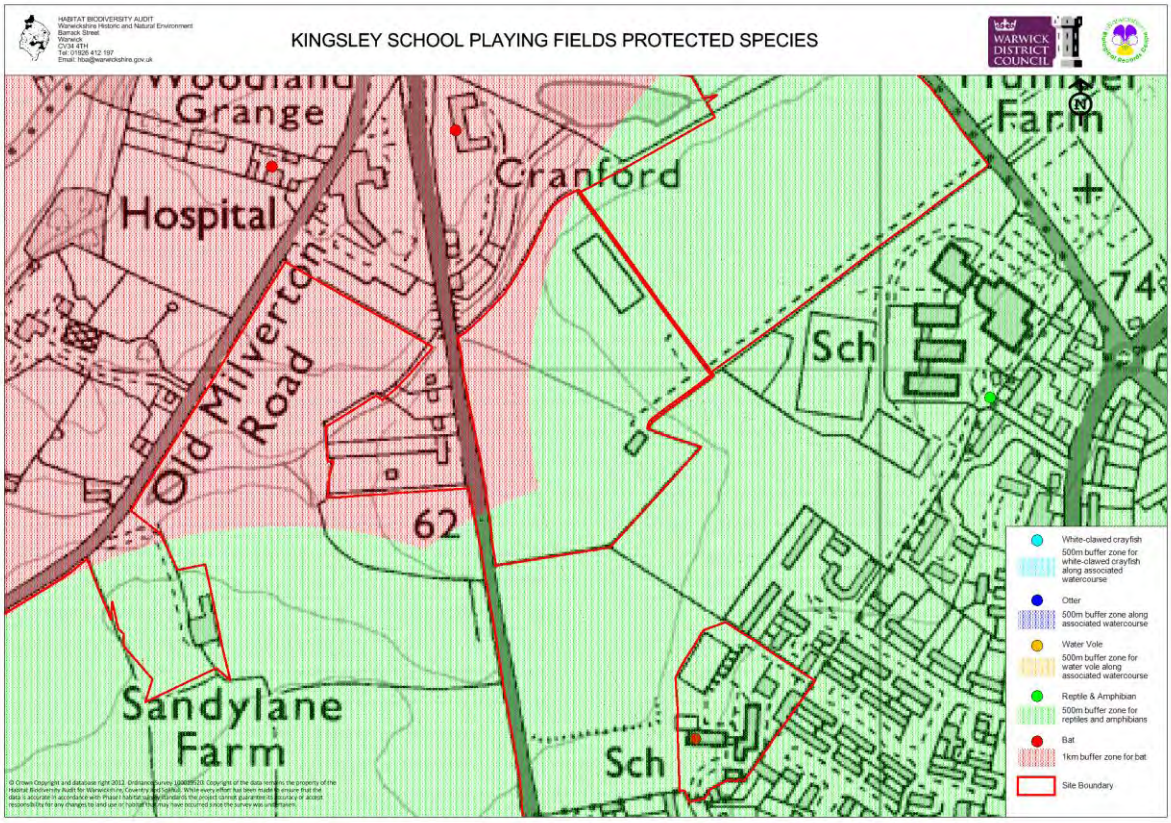
Habitat Connectivity



Protected Species

There are no protected or notable species records located within the Site boundaries. There are records of protected species nearby including a potential roost site for both brown-eared bat (Plecotus auritus) and pipistrelle (Pipistrellus sp.) bats.

We recommend that protected species are taken into consideration through more detailed ecological assessments. Please take note than an absence of species records does not mean an absence of species.


KINGSLEY SCHOOL PLAYING FIELDS PROTECTED SPECIES
HABITAT BIODIVERSITY AUDIT
Warwickshire Historic and Natural Environment
Barrack Street
Warwick
CV34 4TH
Tel: (01926 412 197
Email: hba@warwickshire.gov.uk
WARWICK DISTRICT COUNCIL
Woodland Grange
Hospital
Cranford
Farm
Old Milverton Road
Sch
62
Sandylane Farm
Sch
White-clawed crayfish
500m buffer zone for white-clawed crayfish along associated watercourse
Otter
500m buffer zone along associated watercourse
Water Vole
500m buffer zone for water vole along associated watercourse
Reptile & Amphibian
500m buffer zone for reptiles and amphibians
Bat
1km buffer zone for bat
Site Boundary

LAND AT BLACKDOWN

Area: 15 hectares

Overview

The development parcel contains compartments of intensive arable farmland and amenity grassland. Large parts of the development parcel are open and free from development. The northern boundary of Sandy Lane is characterised by North Leamington Secondary School and Blackdown Hall. The northern component consists of two arable fields bisected by a brook which leads from beyond Sandy Lane to a large pond within the grounds of Lakeside Lawns and Cranford House. The brook further upstream from Sandy Lanes continues to bisect two arable fields being characterised initially by a line of five oak trees (Quercus robur). Large oak and ash standards presumably planted with the previous curitage of the Blackdown Hall estate dominate the managed hedgerows. Running parallel along Sandy Lane, the hedgerows form wooded compartments which border both sides o fthe carriageway immediately opposite Blackdown Hall alongside a compartment of poor semi-improved grassland. Leamington Spa sits roughly 700m from the edge of Blackdown.

Key Features

- Arable farmland
- Open running water
- Veteran trees
- Hedgerow with trees

Recommendations

An adequate buffer zone should be place between any proposed development and the brook separating the two arable fields, as not to adversely affect the character and value of the watercourse. Any proposed development at a minimum should not be within 8 metres of the brook. The vegetated buffer zone of native plant species will allow the retention of any trees and shrubs along this boundary.

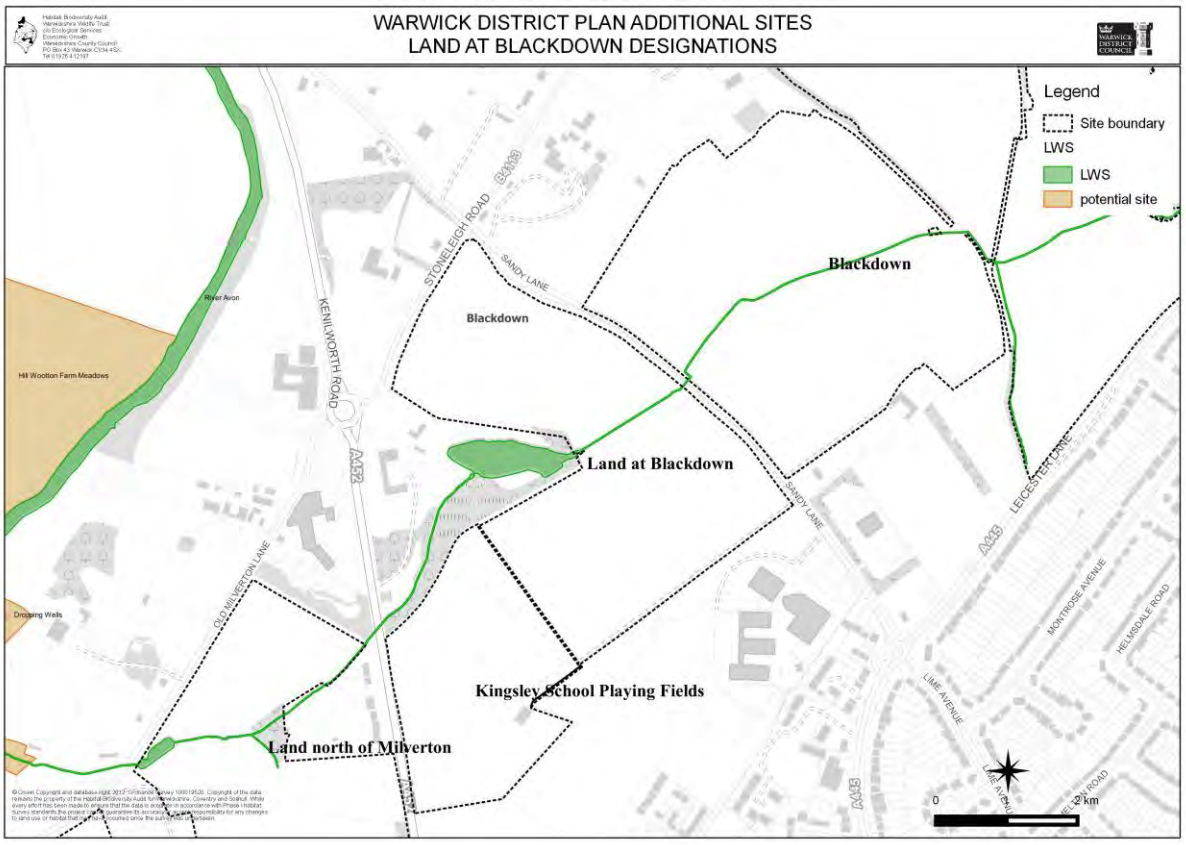
All those hedgerows and trees that form the development boundary should be retained and enhanced. Each hedgerow and tree should be identified and protected to BS5837:2012.

Designated Sites

Local Wildlife Sites:

A tributary of the River Avon LWS dissects the two fields of arable farmland comprising the development parcel entering a large pond within the grounds of Lakeside Lawns and Cranford House before continuing southwards beyond Warwick Hospital and Land North of Milverton.

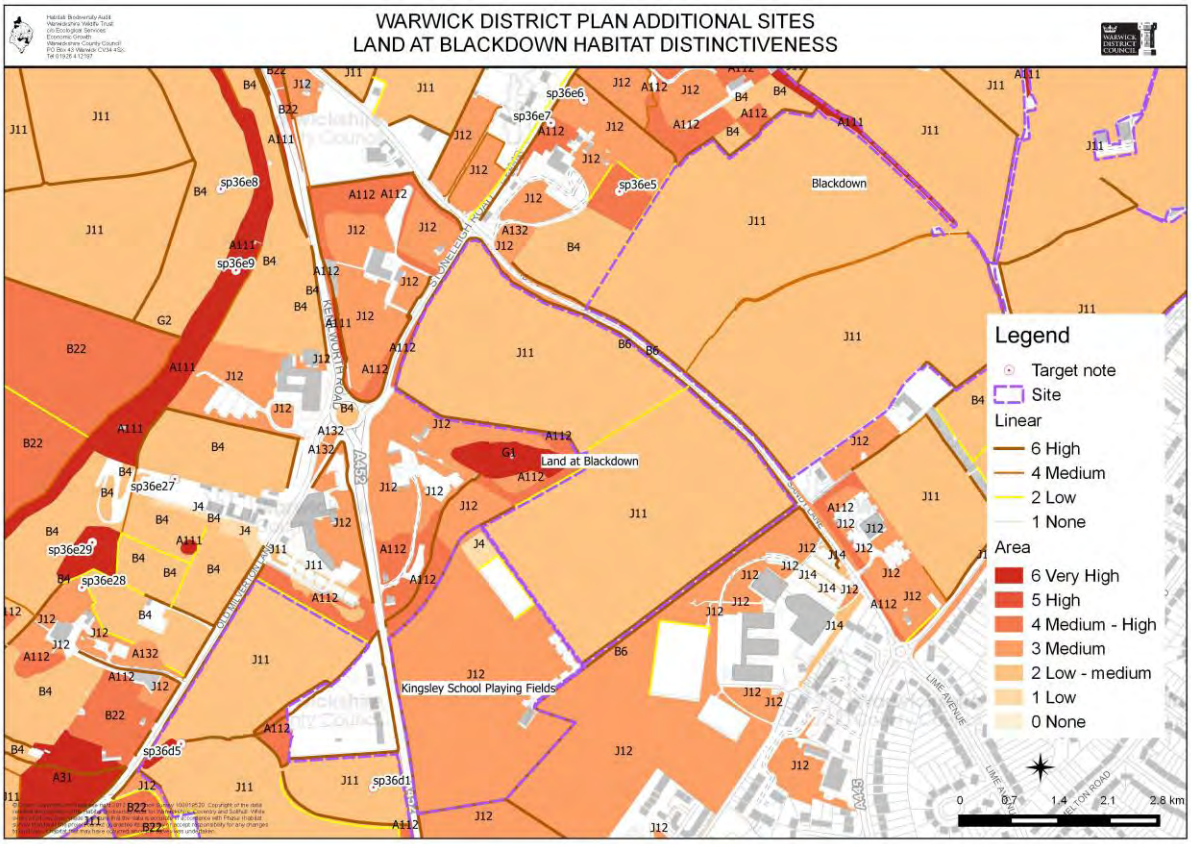
River Avon SP15Li8F LWS **Designated: 2010**
Area: 102 km / Tributeries – 205km



Habitat Description

The development parcel holds 15 hectares of arable farmland bisected by 160 metre length of a small brook leading to a large pond within Lakeside Lawns and Cranford House designated as part of the River Avon LWS.

The hedgerows forming the boundary of the development parcel comprise predominately of intact hedgerows and hedgerows with trees.



Target Notes

Number	Grid Reference	Survey Date
SP36E5	SP3186868657	08/23/2011

A horse-grazed orchard with some old elder (Sambucus nigra) and holly (Ilex aquifolium) trees marking the boundary

UPDATE 23/08/2011 GRT

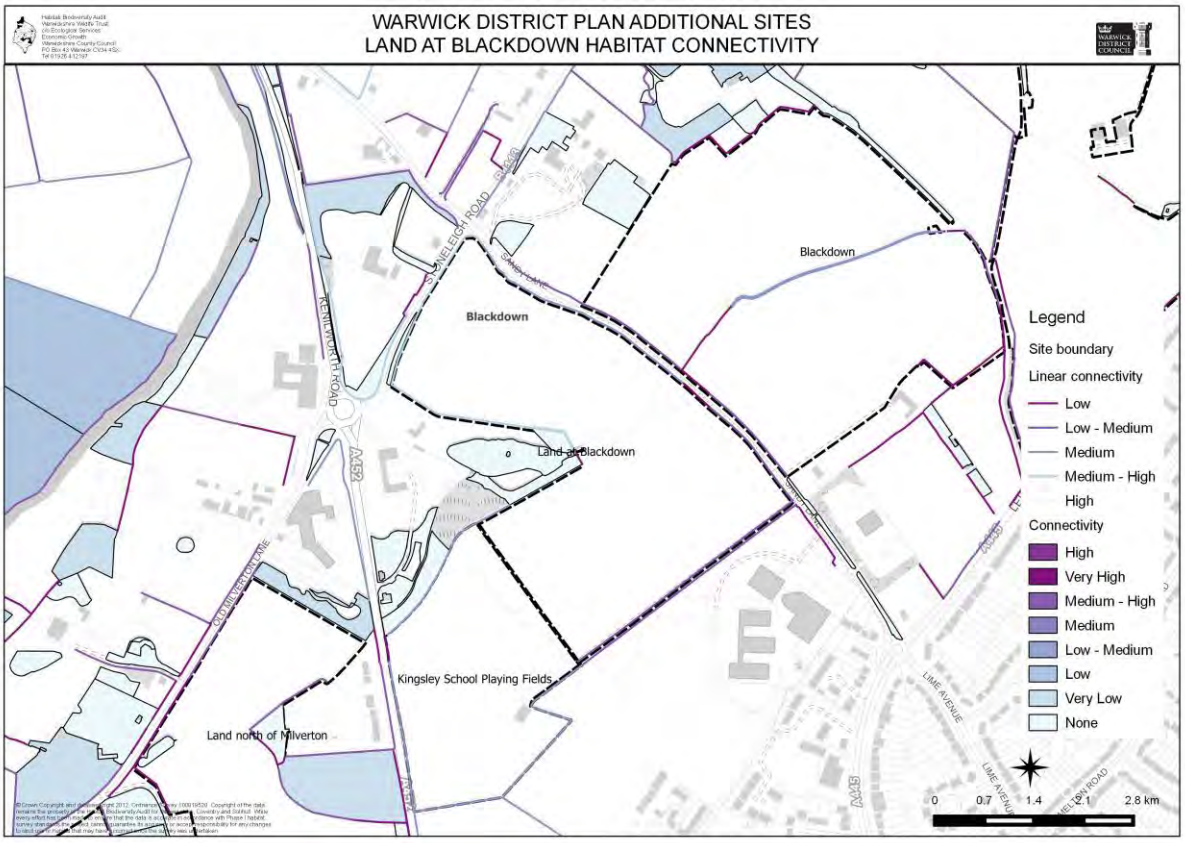
The current owner was never discovered. Sandy Lane runs along the southern boundary of this habitat parcel. Originally classified as broad-leaved plantation, the parcel now comprises of scattered scrub and poor semi-improved grassland.

Dead, dying and fallen trees are among the few signs of the orchard's previous land use, now with only a dying pear (Pyrus communis), a couple of stunted overgrown apples (Malus pumila) including one eating and one crab apple (Malus sylvestris agg.) with only wild plum (Prunus domestica) showing any vigour with sapling growth at the edges. Bramble (Rubus fruticosus agg.) scrub is taking over & where absent common nettle (Urtica dioica) predominates. Other trees & shrubs include sycamore (Acer pseudoplantanus), beech (Fagus sylvatica), holly (Ilex aquifolium) & elder (Sambucus nigra). Grasses found include sweet vernal-grass (Anthoxantum odoratum), false oat-grass (Arrhenatherum elatius) & cocksfoot (Dactylis glomerata).

Forbs include yarrow (Achillea millefolium), burdock (Arctium spp.), borage (Borago officinalis), large bindweed (Calystegia silvatica), Creeping & Spear Thistle, Russian-vine (Fallopia baldschuanica), lady's bedstraw (Galium verum), ground-ivy (Glechoma hederacea), common ivy (Hedera helix), hogweed (Heracleum sphondylium), white dead-nettle (Lamium album), apple mint (Mentha villosa), green alkanet (Pentaglottis sempervirens), dock (Rumex spp.), common ragwort (Senecio jacobaea), prickly sow-thistle (Sonchus asper) & hedge woundwort (Stacys sylvatica). A change in species compostion occurs to the south-west of this old orchard, with poor semi-improved grassland becoming dominant over scrub & common nettle. A previous fence boundary has been removed. Additional trees & shrubs include horse chestnut (Aesculus hippocastanum), hawthorn (Crataegus monogyna), Portugal laurel (Prunus lusitanica), turkey oak (Quercus cerris), rhododendron & lime (Tilia sp.), while forbs include lords-and-ladies (Arum maculatum) & ribwort plantain (Plantago lancelota).

.

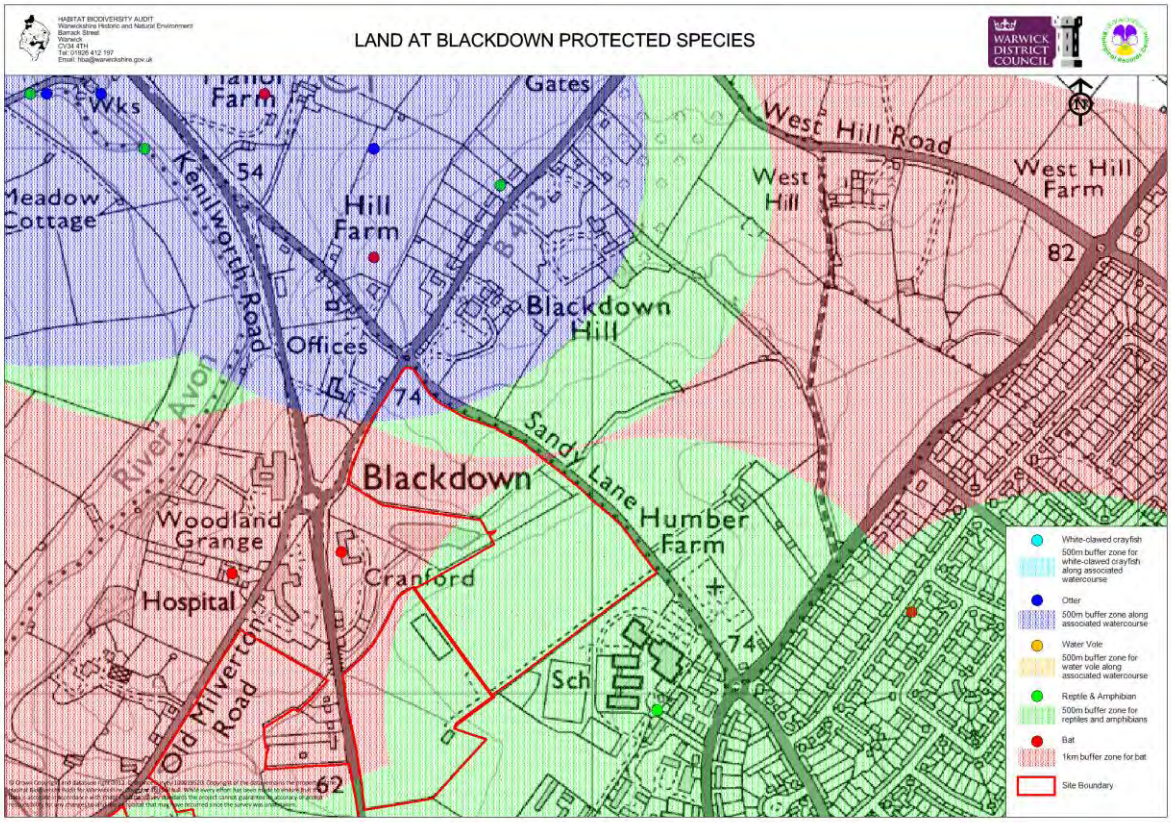
Habitat Connectivity



Protected Species

There are no protected or notable species records located within the Site boundaries. There are records of protected and notable species nearby including bats (common pipistrelle (Pipistrellus pipistrellus), brown long-eared (Plecotus auritus), pipistrelle species (Pipistrellus spp.), grass snake (Natrix natrix), red kite (Milvus milvus), redwing (Turdus iliacus), swift (Apus apus), hedgehog (Erinaceus europaeus), otter (Lutra lutra) and badgers (Meles meles).

We do not anticipate that protected or locally rare and endangered species will preclude the proposed development sites from proceeding. However, should the proposal go ahead, we recommend that protected species are taken into consideration through more detailed ecological assessments. Please take note than an absence of species records does not mean an absence of species.


LAND AT BLACKDOWN PROTECTED SPECIES
HABITAT BIODIVERSITY AUDIT
Warwickshire Historic and Natural Environment
Barrack Street
Warwick
CV34 4TH
Tel: (01926 412 197
Email: hba@warwickshire.gov.uk
WARWICK DISTRICT COUNCIL
Wks
Farm
Gates
West Hill Road
West Hill
West Hill Farm
82
Meadow Cottage
Kenilworth Road
54
Hill Farm
Blackdown Hill
Offices
74
River Avon
Sandy Lane
Blackdown
Woodland Grange
Humber Farm
Cranford
Hospital
Old Milverton Road
Sch
74
62
White-clawed crayfish
500m buffer zone for white-clawed crayfish along associated watercourse
Otter
500m buffer zone along associated watercourse
Water Vole
500m buffer zone for water vole along associated watercourse
Reptile & Amphibian
500m buffer zone for reptiles and amphibians
Bat
1km buffer zone for bat
Site Boundary

LAND AT CRACKLEY LANE, COVENTRY ROAD AND PLAYING FIELDS

Area: 12.1 hectares

Overview

The development parcel comprises two large arable fields and an amenity playing field of Crackley Hall School. The arable fields when bordered by Crackley Lane and Coventry Road are edged by flailed intact hedgerows comprising of dominant field maple (Acer campestre). The development parcel snakes around the Kenilworth Tennis and Squash Club along with isolated residential properties sloping towards the boundary of Crackley Farm. Crackley farm is separated by linear scrub and a wet ditch with a fluctuating water level which runs past industrial units of Princes Drive form the eastern border with residential properties of Ladyes Hills beyond Coventry Road on the southern boundary.

Key Features

- Arable farmland
- Amenity grassland
- Intact hedgerows
- Veteran trees
- Open running water

Recommendations

Any proposed development should stick strictly within the curitage of the Site and the existing boundary infrastructure. Retaining the original boundary features of intact hedgerows with those medium sized to mature or veteran trees will retain much of the original biodiversity. Each hedgerow and tree should therefore be identified and protected to BS5837:2012.

The mature hedges that abound much of Coventry Road and Crackley Lane should be retained in-situ as the removal of the hedges and subsequent re-planting would not provide adequate mitigation given the character and age of the existing hedges.

The creation of arable and grassland buffers close to the existing hedges will provide some compensatory habitat for the arable farmland being lost. The enhancement and appropriate management of the north western boundary of linear scrub and the

ditch to provide marginal areas of grassland which seasonally flood will greatly enhance this margin for wildlife.

Designated Sites

Local Wildlife Sites:

Within the Site itself there are no designated sites.

Crackley Wood Nature Reserve lies less than 100m form the north-west corner of the development parcel.

Crackley Wood Nature Reserve SP27W5 Designated: 2011 Area: 14.9 hectares

The site consists of a rectangular block of ancient semi-natural woodland in Kenilworth parish, 2km N of the town. The surrounding habitats consist of arable and improved grassland with several woodlands in close proximity such as Broadwells Wood LWS, Whitefield Coppice LWS and Rough Knowles Wood rejected pLWS. The wood continues north, bisected by the disused railway, however the northern section of the wood remains to be surveyed. The southern section which is an LNR, is mostly semi-natural with many mature planted trees scattered throughout and a small area of Sycamore plantation. There are two grassy glades one of which is more diverse than the other.

Historically the wood was traditionally managed as coppice with standards but coppicing was abandoned over the last century and non-native species such as Sweet Chestnut, Sycamore and conifers were introduced. A new regime of coppicing has been introduced to restore the woodland composition. The woodland was once part of the Forest of Arden and can be recorded from at least 1600. Early records show it was part of the Stoneleigh Abbey estate until 1922 when it was purchased by a timber merchant. Between 1922 and 1948 larger trees were therefore felled for timber. The woodland was then purchased by Warwick District Council between 1948 and 1952. The site lies at approximately 85-95m ASL and the underlying geology is Permian Kenilworth Sandstone.

The reserve is open to the public and the paths around the wood are very well used. A disabled access path was created in 2000, establishing a circular walk around the site. Unofficial minor paths into the woodland have been created by public use. The site is also connected to the 'Green Way' which is now undergoing an improvement.

The woodland is generally quite dry and fairly acidic and contains two small grassy glades, which may have been created by the Wildlife Trust. The woodland canopy has been replanted throughout some of the wood and is dominated by Sweet Chestnut and English Oak and frequent Silver and Downy Birch. Some areas are

dominated by dense Sycamore while other areas have abundant Beech and Cherry with some Horse Chestnut and Larch trees.

The shrub layer is moderately well-developed and dominated by Hazel and Rowan, with locally frequent Hawthorn and Elder, and with some Blackthorn near the boundaries. There are many young tree species present in the shrub layer, particularly Ash and Sycamore with some Aspen. Other species in the shrub layer includes rare-occasional Cultivated Apple, Alder, Holly, Dog Rose, Grey Willow and Field Maple.

The field layer is dominated in most parts by Bramble, Bracken and Bluebell, with some more diverse areas in the north of the site with frequent to abundant Wood Millet, Tufted Hair Grass, Wood Sedge and Herb Robert, occasional species include Male Fern, Rough Meadow Grass, Wood Speedwell, Wood False Brome, Red Campion, Hogweed, Broad Buckler Fern, Enchanter's Nightshade, Wood Anemone, Pignut, Remote Sedge, Greater Stitchwort, Creeping Buttercup, Raspberry, Wood Dock and Herb Bennet. Where the canopy opens up species such as Nettle, Cleavers and Cow Parsley dominate. Other more rare species include Pendulous Sedge, Marsh Bird's-foot Trefoil, Yellow Pimpernel, Foxglove, Three-nerved Sandwort, Heath Wood-rush, Wood Sorrel, Common Figwort and Common Hemp-nettle.

Grassland Glades

Glade A

The glade consists of an area of semi-improved grassland divided by a path. The grassland on the west side of the path is quite different from that on the east side. It is comprised of a tall sward of mostly coarse grasses with some forbs. The dominant grasses include Cocksfoot and Yorkshire Fog with frequent Rough Meadow Grass and occasional Smooth Meadow Grass, Meadow Fescue, Meadow Foxtail and Soft Brome. Annual Meadow Grass can be found along the edges of the path. Forbs include locally frequent Yellow Rattle and Common Sorrel. Bracken is encroaching around the woodland edges. The east side of the path is comprised of a much shorter sward and less dominated by grasses. The abundant grass is mainly Perennial Rye Grass with frequent Crested Dog's-tail and Red Fescue while the majority of the area is dominated by Common Catsear.

Glade B

This smaller glade is less diverse and is comprised of improved grassland with Perennial Rye Grass dominating. Forbs consist of Creeping Buttercup, Ribwort and Greater Plantain and Broad-leaved Dock. The surrounding woodland consists of open canopy Birch with frequent Hazel and Rowan. A second entrance to the

reserve is located just north of the glade, extending the open grassy feature alongside the path. Species such as Rosebay Willowherb, Common Vetch, Self Heal and White Clover proliferate along the edges.

A good range of woodland birds are present, which includes Buzzard, Sparrowhawk, Tawny Owl, Green and Great Spotted Woodpeckers, Song Thrush, Garden Warbler, Blackcap, Chiffchaff, Willow Warbler, Marsh Tit, Nuthatch, Treecreeper, Spotted Flycatcher, Jay and Bullfinch. Of special note, Lesser Spotted Woodpecker has bred in very recent years; this is now considered to be a nationally rare species. Wood Warbler has been recorded on spring passage here and Woodcock in winter (per J J Bowley).

Kenilworth Common lies 155 m from the southern boundary of the development parcel separated by residential properties of Ladyes Hills and was last surveyed as a local wildlife site on the 23/06/2009.

Kenilworth Common LWS SP27W4 Designated: 2010 Area: 12.8 hectares

Kenilworth Common is an irregularly shaped piece of acidic Oak-Birch woodland situated on the northern edge of Kenilworth, about 1 km north-east of the town centre. The area is divided into two parts by the main London-Oxford-Birmingham railway line which lies in a deep cutting, but otherwise it is fully open to the general public and a network of paths cross the area. It is now managed as a nature reserve by the WWT. The common is hemmed in by suburban development, with former industrial sites now developed with new housing. There are several important connective corridors linking the site to the open countryside and nearby woodlands, namely the Finham Brook which forms the southern boundary, the main railway, and a second dismantled railway which heads off to the north and eventually becoming the Coventry Way. This latter corridor provides a direct link with nearby Crackley Wood Nature Reserve.

The site is very steeply undulating with the altitude ranging from about 75m ASL along the southern side to over 100m ASL in the north-western corner. The underlying geology consists of a thick deposit of Pleistocene sands and gravels. The common, which was once open heathland, is all that remains of the once extensive Odybarn Heath which was largely enclosed during the 18th century. By about 1830 (first edition one inch OS) only the south-eastern corner of this heath remained and soon after the common took its present size and shape, when the final parcels of land were divided up. The reasons for its survival is probably due to its use as a sand quarry, and very deep eroded pits still scar the surface of the common to the west of the railway, one of these containing a small rather barren pond.
The common was much visited by nineteenth century botanists with records going back to the 1820's, and it appears to have possessed a fine heathland flora at that time. From a contemporary sketch the common was still at least partly open in the

1920's, but with some Victorian landscape planting of Beech, Oak and Scots Pine; but since then with the total cessation of grazing by commoners animals the site has through natural succession and some planting become climax woodland, apart from one small area of short acid grassland east of the railway.

The predominant habitat is secondary W10 Oak-Bracken-Bramble woodland, as defined by the National Vegetation Classification (NVC), the main type of natural woodland occupying acidic soils over much of northern, central and western Warwickshire.

The woodland canopy is extremely variable in age and density with the oldest timber existing on the perimeter of the former quarry west of the railway and in the extreme south-western corner, where some Victorian landscape planting is evident. The canopy is largely dominated by Pedunculate Oak and Silver Birch, while Rowan and more locally, Downy Birch are frequent. There are also local stands of Beech around the quarry and Sessile Oak in the south-western corner, which survive from old plantations, while occasional Scots Pines near the quarry are also survivals. Along the border of the Finham brook there are also more recently planted poplars, with locally frequent Ash, Sycamore and occasional Alder, Aspen and Crack Willow. Aspen also forms a pure stand on the northern edge of the common where the dismantled railway joins with the main line. Birch has consistently invaded any unmanaged open ground, and has covered most of the railway banks within the cutting.

The shrub layer is generally sparse over much of the common and mainly restricted to frequent Holly and regenerating birch and Rowan, but more locally there is also frequent Apple (including some Crab Apple) and Hawthorn, with occasional Hazel, Elder and relict Gorse, the latter locally frequent along the railway. Species of rare frequency include Wild Cherry and one specimen of Dwarf Cherry. The shrub layer is best developed in the longer-established woodland in the south-west corner.
The field layer is fairly continuous, although there are eroded areas such as within the quarry and on the hill slopes where constant disturbance has created largely bare ground. Typical species of W10 woodland dominate the ground flora with Bramble and Bracken predominating, but with more locally abundant Bluebell. Grasses are also locally abundant, particularly Red Fescue and Wavy Hair-grass where the canopy is more open, and in these areas Sheep's Sorrel is often abundant. In the darker areas of closed-canopy woodland Ivy is often dominant. Where there are clearings and on the more open areas of the railway banks, Rosebay Willowherb, Bracken, Common Nettle and Bramble are dominant. Species of frequent occurrence within the woodland include Lesser Burdock, Foxglove, Broad Buckler-fern, Common Male-fern, Broad-leaved Willowherb, Cleavers, Herb Bennet, Creeping Soft-grass, Honeysuckle, Wood Forgetmenot and Wood Sage, while the damper areas along the brook also have frequent Garlic Mustard, False Brome, Hairy Brome, Enchanter's Nightshade, Herb Robert, Soft Rush, Nipplewort,

Raspberry and Wood Dock. Rare-occasional species recorded include Pendulous, Remote and Wood Sedges, Marsh Thistle, Scaly Male-fern, Wild Strawberry, Compact Rush, Hartstongue, Wood Meadow-grass, Hard Shield-fern, Red Campion and Greater Stitchwort. Heath Bedstraw and Heather were once present in several parts of the eastern woodland but are now almost extinct, with only one tuft of the latter species located near the road.

Acid grassland

This small oval-shaped area of very short semi-improved grassland situated by the railway to the east of the line, is easily the most bio-diverse part of the LWS, and probably represents a habitat that was widespread on the common while it was still being grazed. It is apparently close-grazed by rabbits, while constant trampling by visitors also helps to keep the sward short. In places there are areas of loose sand where erosion has occurred. The grassland dominated apparently by Red Fescue, Common Bent and Meadow-grass is extremely forb-rich, and this type of grazed acid grassland turf is now very unusual in the county, particularly away from the north-west. Forbs are dominated by abundant Yarrow, Common Mouse-ear, Birdsfoot, Sheep's Sorrel, Procumbent Pearlwort, Slender Trefoil and White Clover, while Parsley Piert, Hairy Sedge, Heath Grass, Sheep's Fescue, Heath Bedstraw, Field Wood-rush, Lesser Stitchwort and Thyme-leaved Speedwell are all locally frequent. Rare-occasional species here include Small-flowered Cranesbill, Slender Sheep's-sorrel, Annual Pearlwort, Sand Spurrey and Green Field-speedwell. On the north-western side of the grassland is a steep eroded sandy slope alongside the railway, with locally frequent patches of Gorse. Rare Silvery Hair-grass is found here as well as occasional Hawkweeds.

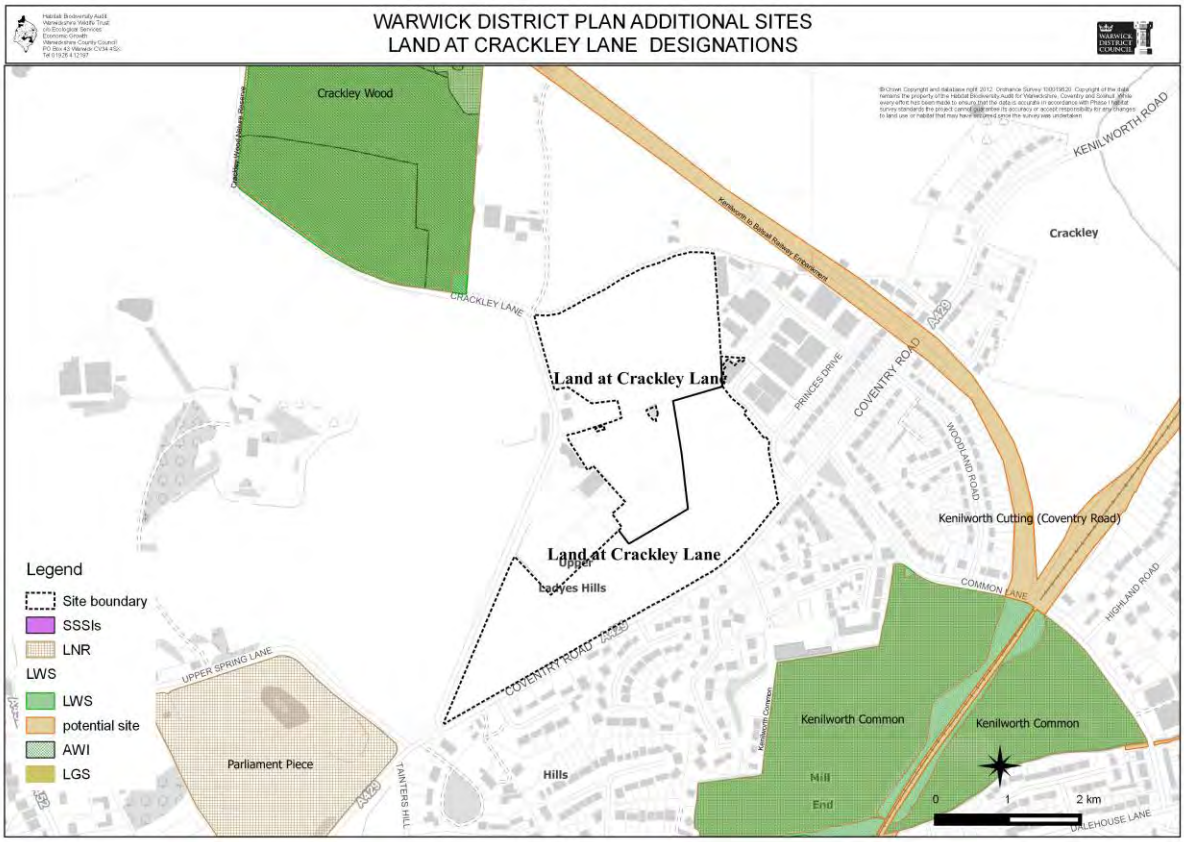
Fauna

Due to the rather sparse shrub layer and its suburban setting, the avifauna of the site is not especially varied, but a good selection of common woodland birds are present, including breeding Tawny Owl, Green and Great Spotted Woodpeckers, Song and Mistle Thrushes, Blackcap, Chiffchaff, Willow Warbler, Goldcrest, Spotted Flycatcher, Coal Tit, Nuthatch, Treecreeper, Jay and Bullfinch.

The common has very small populations of both Common Lizard and Slow-worm, both now scarce in Warwickshire, with the former almost extinct away from the north of the county. The Common Lizard is mainly found along the railway embankments, where Adders have been seen in the past, although the latter species was reputably an introduction which may now be extinct. Grass Snakes frequent marginal grassland areas along the brook.

Glow-worm, a scarce invertebrate in Warwickshire, occurs on the common particularly in the acid grassland.

Kenilworth to Balsall Railway Embankment (SP27Li9n) plws 38 hectares



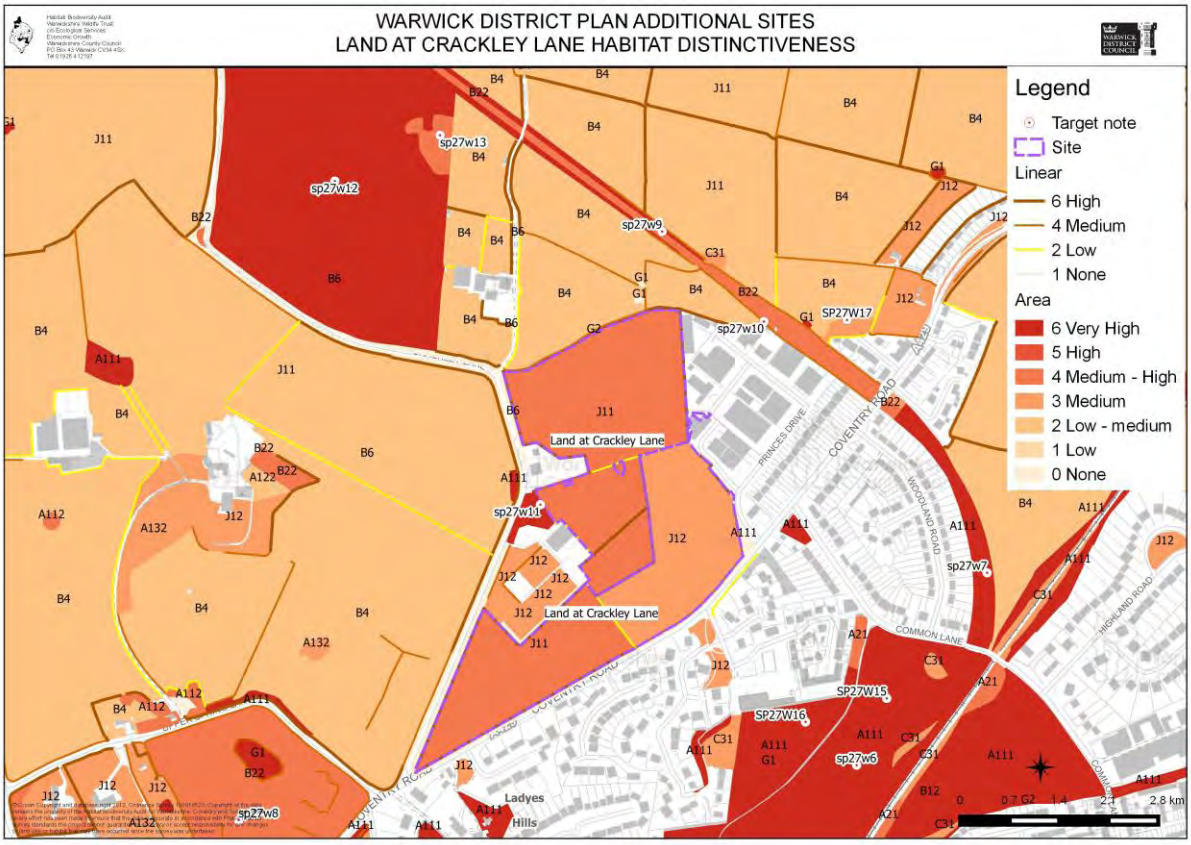
Habitat Description

The western hedge which bounds a stretch of Crackley Lane from the junction of Coventry Road to the Kenilworth Tennis and Squash Club is composed of predominately field maple (Acer campestre) along with frequent elder (Sambucus nigra) and a ground flora of dominant ivy (Hedera helix), bramble (Rubus fruticosus agg.), common nettle (Urtica dioica), broad-leaved dock (Rumex obtustifolius) and green alkanet (Pentaglottis sempervirens).

The hedge continues to shape the boundary of the Kenilworth Tennis and Squash Club overshadowed by a line of aspen trees (Populus tremula) supporting mistletoe (Viscum album) whilst developing woodland scrub of self-seeding sycamore (Acer pseudoplatanus) marks the entrance of the Kenilworth Tennis and Squash Club. The developing woodland holds an understorey of scattered specimens of hawthorn (Crataegus monogyna) and holly (Ilex aquifolium) and a ground flora of cow parsley (Anthriscus sylvestris), bramble (Rubus fruticosus agg.) and ivy (Hedera helix). The flailed intact hedge abutting the Coventry Road contains three medium sized trees of sycamore (Acer pseudoplatanus) and ash (Fraxinus excelsior) and a dry ditch with a fluctuating water table. The hedge predominately comprises of flailed field maple (Acer campestre) with a ground flora of lesser celandine (Ranunculus

ficaria), common nettle (Urtica diotica), cow parsley (Anthriscus sylvestris), ivy (Hedera helix), bramble (Rubus fruticosus agg.) and hogweed (Heracleum sphondylium).

Crackley Hall School Playing Field is bounded by wooden fencing separating the amenity playing pitches from Coventry Road. The wooden fence erected in 2012 is supported by bare-root blackthorn plantings (Prunus spinosa) as part of replanting after clearance of the original hedge with trees. This boundary should be enhanced as part of any mitigation works to compensate for the biodiversity loss resulting from the original removal and those inadequate compensation/mitigation measures previously implemented. A veteran oak (Quercus robur) still remains.



Target Notes

Number	Grid Reference	Survey Date
SP27W11	**SP2923273361**	**08/1/1997**

Dried up farm pond over-shadowed by sycamore (Acer pseudoplatanus), oak (Quercus robur), crack willow (Salix fragilis), elder (Sambucus nigra), bramble (Rubus fruticosus agg.) and common nettle (Urtica dioica).

UPDATE 03/02/2016 GP

Water-filled pond overshadowed by developing woodland and scrub of oak (Quercus robur), sycamore (Acer pseudoplatanus), ash (Fraxinus excelsior), crack willow (Salix fragilis) and elder (Sambucus nigra) with a ground flora of common nettle (Urtica dioica) and green alkanet (Pentaglottis sempervirens). A small patch of Japanese knotweed (Fallopia japonica) exists within the understorey presumably originating from dumped material.

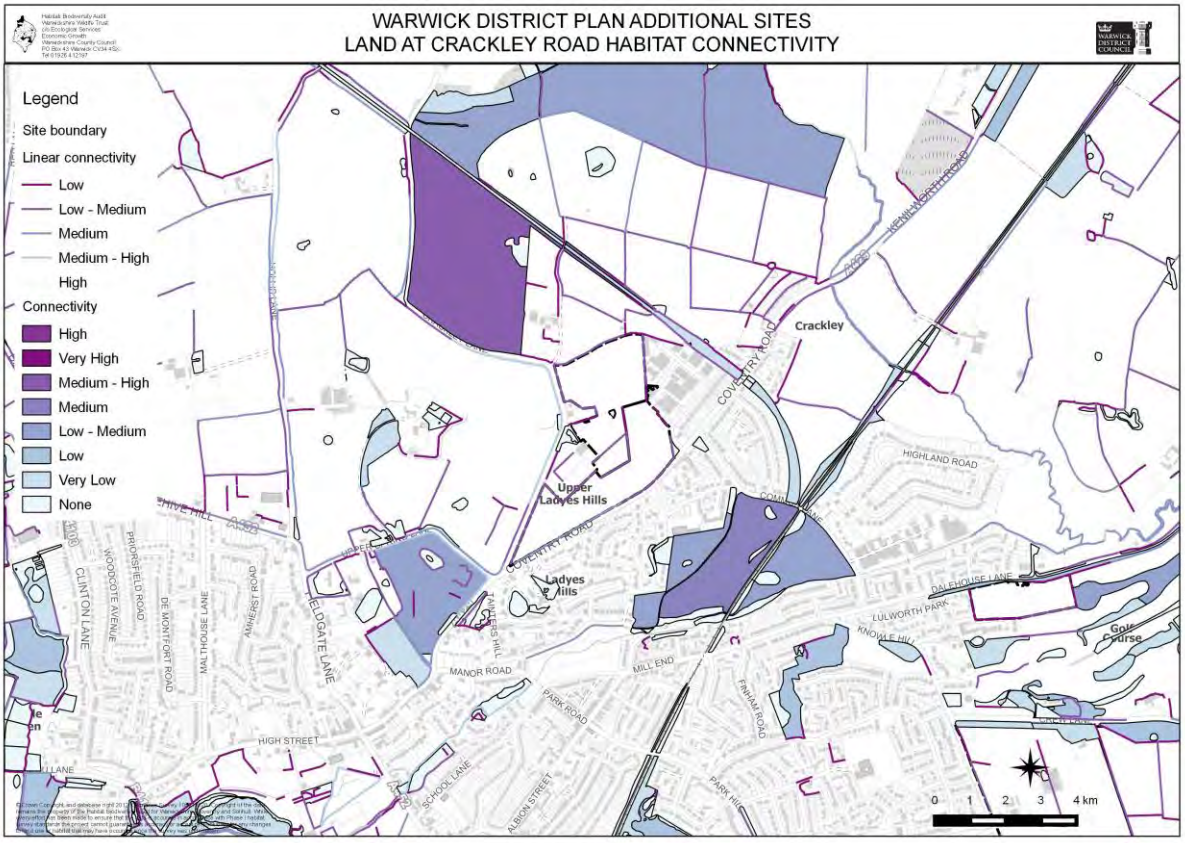
SP27W10	**SP2954873620**	**05/21/2011**

Farm pond, heavily overshadowed by oak (Quercus robur), ash (Fraxinus excelsior) and hawthorn (Crataegus mongoyna) scrub.

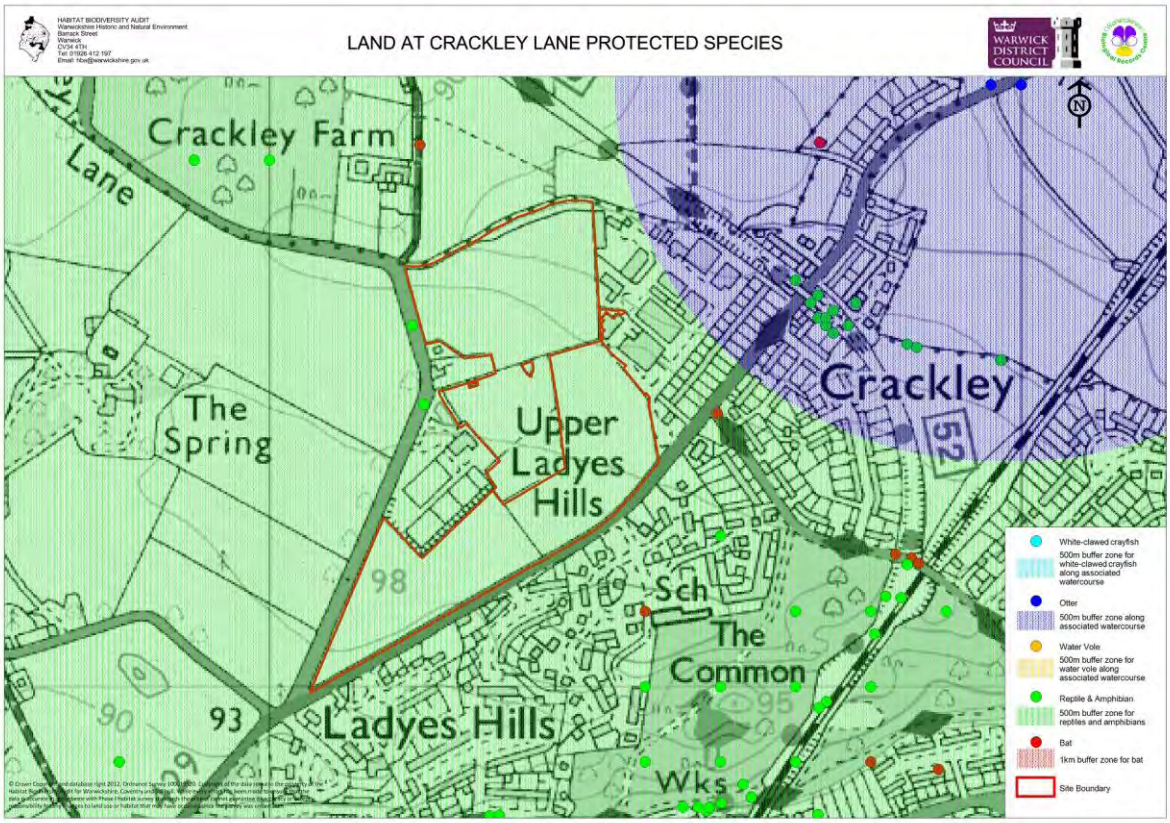
UPDATE 21/05/2011 MF

The farm pond is no longer evident and area may be classified as tall ruderal.

Habitat Connectivity



Protected Species



A concentration of recent species occurences for slow worm (Anguis fragilis), grass snake (Natrix natrix) and common lizard (Zootoca vivipara) prevail on the disused Kenilworth to Balsall Railway Embankment. Likewise high concentrations of occurences with varying levels of currency occur within Kenilworth Common representing strong populations of slow worm, grass snake and common lizard (Zootoca vivipara). In addition, to amphibians of common frog (Rana temporaria) and common toad (Bufo bufo).

Records for common toad along Crackley Lane indicate a probably toad breeding pond within the Kenilworth Tennis and Squash Club. Recent records also represent use of the Canley Brook by otter (Lutra Lutra) and smooth newt (Lissotrition vulgaris) and common frog within Crackley Wood.

Foraging asnd commuting bat records are present reasonably close to the site for foraging and commuting bats of lesser noctule (Nyctalus leisleri) and un-identified bats foraging around Crackley Farm.

A recent and confirmed breeding pond for great crested newt lies north of Crackley Wood, less than 500m from the Site boundary.

WHITNASH EAST

Area: 33 hectares

Overview

Whitnash East is an area of predominantly arable farm land and mixed grassland between the Leamington Railway Line to the east and the Whitnash Brook to the west. To the north of the site, the former arable field has been removed and is now a building development site which extends along the boundary of Whitnash Brook Local Nature Reserve. The site narrows to the south where it meets Fieldgate Lane.

The Whitnash Brook which borders the Site is partially within the EA Flood Zone 3 and is liable to flooding at the wide meander section of the Brook.

Key Features

- Open running water
- Semi-improved grasslands
- Species rich hedgerows
- Wetland habitats associated with Whitnash Brook

Recommendations

The most important habitat features are those associated with the Whitnash Brook, which provides a mix of wetland habitats acts as an important wildlife corridor and flood alleviation channel. The Whitnash Brook South plws should be incorporated into the existing Whitnash Brook LWS including wetland grassland and should be surveyed as an extension to the existing LWS. Consideration should be given to maintaining the vegetation buffer along Whitnash Brook to include the existing semi-improved grassland and open scrub on the western edge of the proposed development site.

An adequate buffer zone should be place between any proposed development and the brook, as not to adversely affect the character and value of the watercourse. Any proposed development at a minimum should not be within 8 metres of the brook, the vegetated buffer zone of native plant species will allow the retention of any trees and shrubs along this boundary.

Consideration should be given to maintaining the possible flood protection zone along the Whitnash Brook by maintaining the natural buffer in addition to conserving the associated wetland as a wildlife habitat.

The hedgerows along the field boundaries noted as being species rich should also be recorded and maintained to BS5837:2012. They form part of the important local landscape and act as wildlife corridors to the south of Radford Semele.

Designated Sites

Local Nature Reserves:

- Leam Valley
- Whitnash Brook

Local Wildlife Sites:

Whitnash Brook LWS SP36G1 Designated: 20/05/2013 Area: 14.03 hectares

Whitnash Brook LWS is a linear site comprising a mosaic of wet carr woodland, scrub, tall herb, swamp, marsh and semi-improved grassland extending for 1.25 km along the Whitnash Brook corridor on the boundary between Leamington Spa and the rural parish of Radford Semele. The LWS extends from the Grand Union Canal at the north end to the bridleway between Church Lane, Whitnash and Radford Semele at the southern end. The part of the LWS on the west side of the brook is also a designated Local Nature Reserve.

It is important as a landscape feature as it marks the eastern edge of the built up area of Leamington, with modern housing estates (developed since 1999) in the suburb of Sydenham bordering the site to the west for the whole length except for the last 200m where there is still an arable field. Large arable fields dominate the landscape to the east, apart from some factory units at the north end near the canal and some small paddocks at the southern end. The stretch of brook within the LWS is unusual in the county as it has remained largely natural and clean, retaining its numerous meanders and riffle and pool system.

The site is also an important wildlife corridor linking the open country to the south with both the **Grand Union Canal** corridor and the **Leam Valley at Newbold Comyn** LWS, the latter situated just 200m to the north.

The brook corridor has been used by local people for generations for recreation, a well-known picnicking and paddling spot being situated on a small promontory half way along known as “Pebble Island”. Watercress was also traditionally picked along

here. In 1974 a nature walk was proposed by the parish council but it was not until 1994 that LNR status was given. During the commencement of building the new estates in 1999-2000, several balancing pools were constructed along the southern section for flood alleviation and these have subsequently developed as marsh and reed swamp. These partly occupy the basin of the “Great Pool” constructed as a millpond in 1242 and which also covered the pasture to the south of the LWS. The site of the medieval water mill, also within the LWS, is a listed county archaeological site.

There is public access to the land on the west bank of the brook, while much of the woodland on the east side is less accessible and in private ownership. A public footpath crosses the brook.

Newbold Comyn LWS Designated: 2015 Area: 63.91 hectares

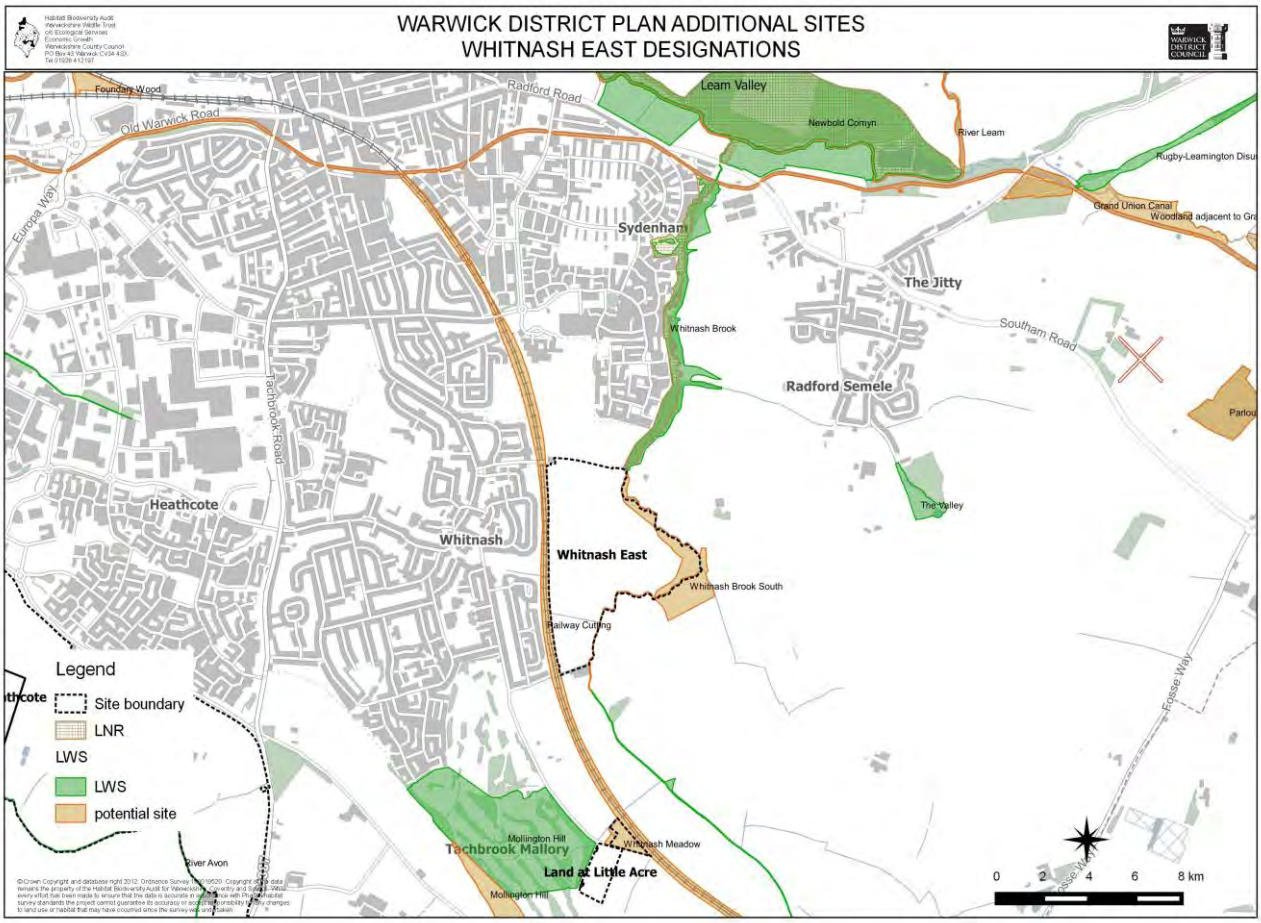
Newbold Comyn LWS is a 2.5km long corridor of varied habitats situated on either side of the River Leam pLWS, extending eastwards from Willes Bridge almost in the centre of Leamington Spa out to where the river bends sharply to the north at the corner of Offchurch parish. Within the corridor the habitats include Welch’s Meadow Nature Reserve, Leamington Spa Reservoir, the Leam Valley Wetland LNR and four wet meadows on the south side of the river in Radford Semele parish. The corridor acts as an important green lung for the residents of Leamington who extensively use it for sport and recreation and it forms part of Newbold Comyn Country Park.

Apart from containing the River Leam, the LWS feeds into two other important long distance wildlife corridors at the eastern end, namely the Grand Union Canal pLWS and the disused Rugby to Leamington Spa Railway LWS, now a greenway. Otherwise the nearest LWSs are a small woodland called The Runghills 1km to the north and the Whitnash Brook LWS/LNR (itself a local wildlife corridor) which almost joins the Site on the south side of the A425 Radford Road, which forms the southern boundary of the LWS.

Potential Local Wildlife Sites:

Nearby potential Local Wildlife Sites (pLWS) include:

- Whitnash Brook South (SP36G6) 6 hectares
- Railway Cutting (SP36K1) 27 hectares
- Grand Union Canal (SP18Li2b) 60.2 hectares
- River Leam (Sp36Li20h) 60.3 hectares

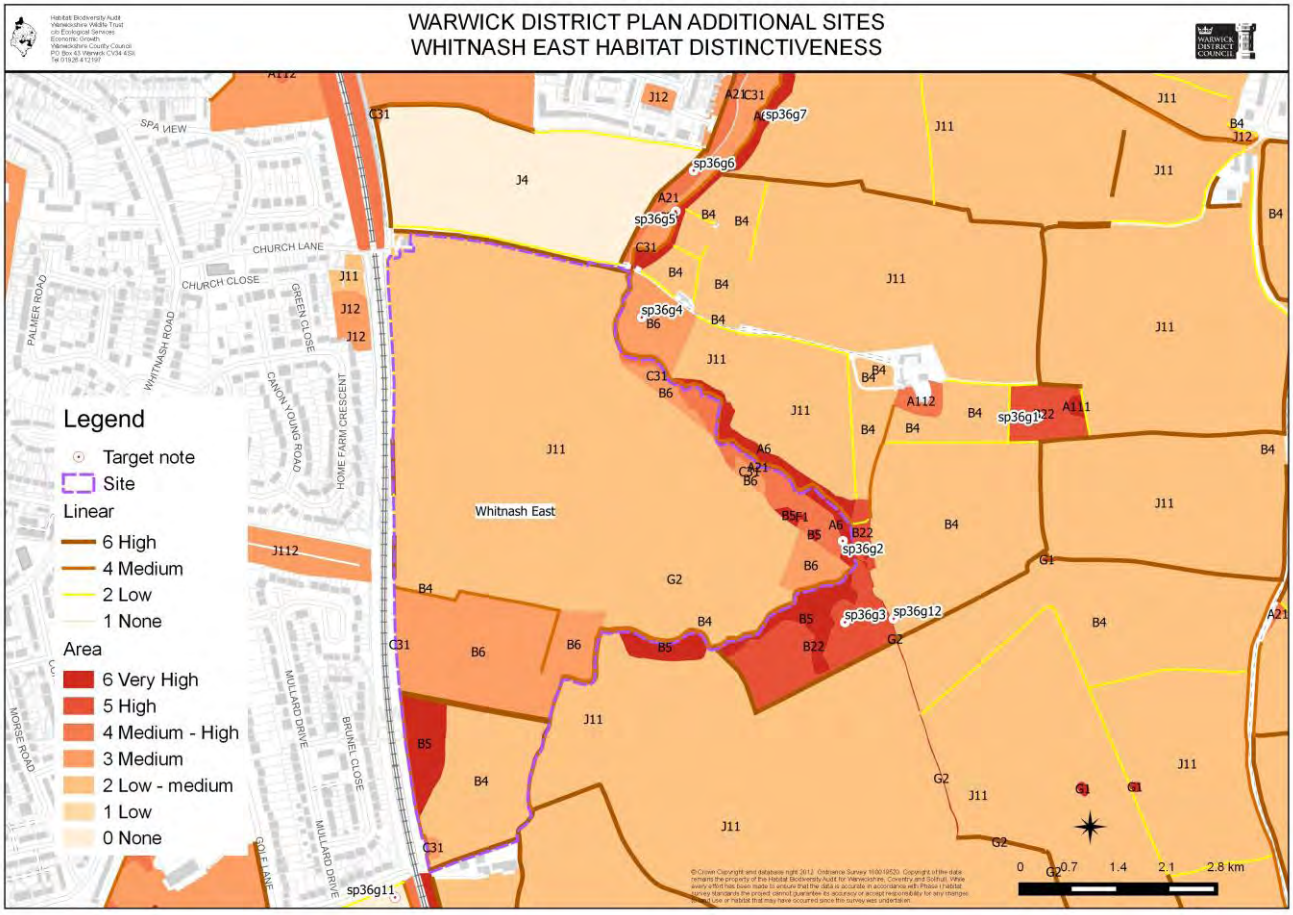

WARWICK DISTRICT PLAN ADDITIONAL SITES
WHITNASH EAST DESIGNATIONS
Foundary Wood
Old Warwick Road
Radford Road
Leam Valley
Newbold Comyn
River Leam
Rugby-Leamington Disu
Grand Union Canal
Woodland adjacent to Gra
Europa Way
Sydenham
The Jitty
Whitnash Brook
Southam Road
Radford Semele
Parlou
Tachbrook Road
Heathcote
Whitnash
Whitnash East
Whitnash Brook South
The Valley
Railway Cutting
Fosse Way
Legend
Site boundary
LNR
LWS
LWS
potential site
Mollington Hill
Tachbrook Mallory
Whitnash Meadow
Land at Little Acre
Mollington Hill
River Avon
0 2 4 6 8 km

Habitat Description

The proposed development Site is arable farmland bordered by the semi-improved grasslands (B22 & B6) and wetland habitats associated with the Whitnash Brook this includes important areas of high distinctiveness, namely wet grassland (B5) at Target Note: SP36G3 and wet woodland (A6) at Target Note: SP36G2. Further up the Whitnash Brook on the the southern boundary of the LNR/LWS, meets horse-grazed fields of varying grazing intensity detailed with Target Note: SP36G4 and SP36G1.These fields have probably declined from semi-improved grassland (B22) to poor semi-improved (B6) and improved grassland (B4) with low-medium habitat distinctiveness. Beyond the Whitnash Brook to the west are large open arable fields (J12) interspersed with smaller fields of improved grassland.

The other distinctive habitats to the north are those associated with Whitnash Brook described in the Whinash Brook LWS Citation and noted in Target Notes: SP36G5, SP36G6, SP36G7, SP36H12 and SP3613.

Species-rich hedgerows noted in Target Note: SP36G12 fringe the public footpath which tracks the edge of the wet grassland to Barn Farm and Radford Barn and continuing south to the trackway.



Target Notes

Number	Grid Reference	Survey Date
SP36G1	**SP3397063495**	**13/10/2015**

Horse grazed semi improved grassland on a hill side with frequent black medick (Medicago lupulina), clover, dove's-foot crane's-bill (Geranium molle), common mouse-ear (Cerastium fontanum), thyme-leaved Speedwell (Veronica serpyllifolia), germander speedwell (Veronica chamaedrys), common vetch (Vicia sativa) and beaked hawk's-beard (Crepis vesicaria) and occasional common ragwort (Senecio jacobaea). The grasses are dominated by sweet vernal-grass (Anthoxanthum odoratum) with frequent timothy (Phleum pratense), Yorkshire-fog (Holcus lanatus), Cock's-foot (Dactylis glomerata) and Meadow Foxtail (Alopecurus pratensis).

UPDATE 14/10/2015 CFT

Species poor semi-improved grassland still horse grazed.

SP36G2	**SP3368963317**	**13/10/2015**

Shaded stream lined with mature willow and elder trees with the eastern bank covered with common nettle (Urtica dioica) and cow parsley (Anthriscus sylvestris) and the western bank covered with ivy (Hedera helix).

UPDATE 13/10/2015 CFT

This section of the stream is part of the Whitnash Brook LWS not yet surveyed and is part of the brook that continues to Target note SP36G3 and consists of linear wet wood and scrub consisting of alder (Alnus glutinosa), white willow (Salix alba) and crack willow (Salix fragilis) with hawthorn (Crataegus monogyna), ash (Fraxinus excelsior) and field maple (Acer campestre) on the steeper parts of the bank.

SP36G3	**SP3369263200**	**13/10/2015**

Semi-improved field with a stream running along one side with tussocky grasses of frequent timothy (Phleum pratense), cock's-foot (Dactylis glomerata) and sweet vernal-grass (Anthoxanthum odoratum). As well as frequent pignut (Conopodium majus), field wood-rush (Luzula campestris), hogweed (Heracleum sphondylium), common sorrel (Rumex acetosa), broad-leaved dock (Rumex obtusifolius), common nettle (Urtica dioica), cleavers (Galium aparine), daisy (Bellis perennis), bedstraw (Gallium sp.), creeping buttercup (Ranunculus repens), common chickweed (Stellaria media), occasional cowslip (Primula veris) and woolly thistle (Cirsium eriophorum). Damper areas hold frequent soft rush (Juncus effusus), Lady's smock (Cardamine pratensis) and field horsetail (Equisetum arvense). The narrow stream

contains frequent hard rush (Juncus inflexus), lady's smock (Cardamine pratenis) and creeping buttercup (Ranunculus repens).

UPDATE 13/10/2015 CFT

Remains semi-improved grassland with a central area of marshy grassland with a section of the Whitnash Brook that is still plws and requires incorporation into the exisitng LWS. Marshy area is a depression which is part of the flood area for the Whitnash Brook which also has compact rush (Juncus conglomeratus), tufted hair-grass (Deschampsia caespitosa), greater pond-sedge (Carex riparia), meadowsweet (Filipendula ulmaria), wild angelica (Angelica sylvestris) and Jointed Rush (Juncus articulatus). Drier parts with anthills possible MG5a grassland with additional plants not previously noted including common mouse-ear (Cerastium fontanum), crested dog's-tail (Cynosurus cristatus). A band of wet woodland fringes Whitnash Brook.

SP36G4 SP3340163637 13/10/2015

Small semi-improved field beside a stream with frequent cock's-foot (Dactylis glomerata), sweet vernal-grass (Anthoxanthum odoratum), timothy (Phleum pratense) and false oat-grass (Arrhenatherum elatius). As well as frequent creeping buttercup (Ranunculus repens), hogweed (Heracleum sphondylium), common nettle (Urtica dioica), cleavers (Galium aparine), white dead-nettle (Lamium album), germander speedwell (Veronica chamaedrys), dock (Rumex spp.); cow parsley (Anthriscus sylvestris) and common chickweed (Stellaria media).

UPDATED 14/10/2015 CFT

Horse grazed paddocks sub-divived with fencing. Poor semi-improved grassland alongside Whitnash Brook was excluded as part of the LWS.

SP36G5 SP3344963789 14/10/2015

Stream lined with mature willow which has been pollarded but is now neglected. Horse-grazed fields lie to the east and a semi improved field to the west. In more open areas the banks support frequent fool's- watercress (Apium nodiflorum), betony (Stachys officinalis), wavy bittercress (Cardamine flexuosa), common nettle (Urtica dioica), dock (Rumex sp.) clover; creeping buttercup (Ranunculus repens), greater willowherb (Epilobium hirsutum) and patches of lesser pond-sedge (Carex acutiformis).

UPDATE 14/10/2015 CFT

Section of stream now part of Whitnash Brook LWS and LNR managed by WWT with mature pollarded willows and improved horse grazed paddocks to the west.

SP36G6 SP3347563847 14/10/2015

Narrow semi-improved field on the site of a former mill with frequent cock's-foot (Dactylis glomerata), false oat-grass (Arrhenatherum elatius), red fescue (Festuca rubra), meadow foxtail (Alopecurus pratensis) and timothy (Phleum pratense). There is also frequent common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris), lesser celandine (Ranunculus ficaria), cleavers (Galium aparine), broad-leaved dock (Rumex obtusifolius), great willowherb (Epilobium hirsutum), creeping buttercup (Ranunculus repens) and creeping thistle (Cirsium arvense). There is some bramble (Rubus fruticosus agg.) and blackthorn (Prunus spinosa) scrub encroaching from the hedge. The ground is very hummocky and is prone to flooding.

UPDATE 14/10/2015 CFT

Forms part of the Whitnash Brook LWS and LNR managed by Warwickshire Wildlfe Trust. No longer grassland now mostly tall ruderal and scrub. Alongside the site is a new housing development with pathways being made to join the main path through the LNR. The LNR is separated from the development by tall dense scrub.

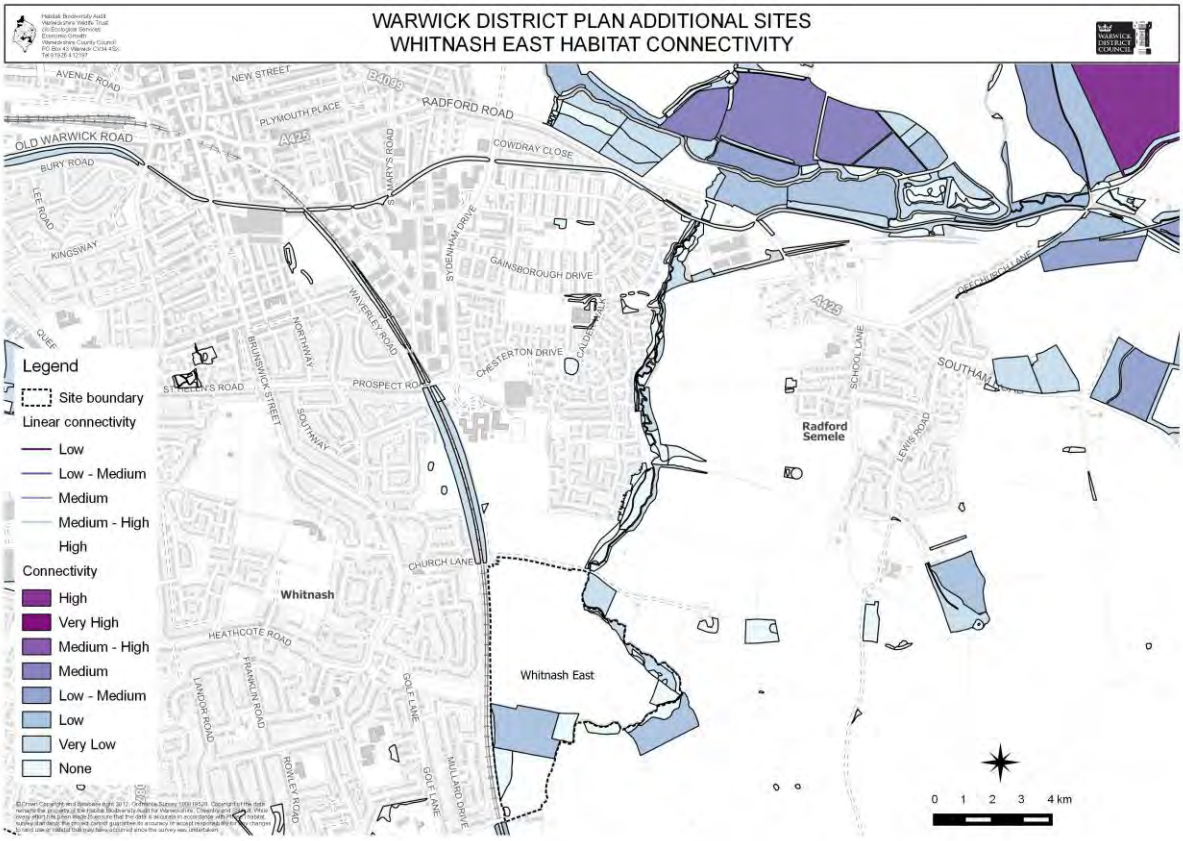
SP36G7 SP3357963928 19/10/2015

Strip of willow (Salix spp.) trees and scrub with frequent blackthorn (Prunus spinosa) and hawthorn (Crataegus monogyna) alongside occasional young oak (Quercus robur). In the ground cover there is frequent common nettle (Urtica dioica), cleavers (Galium aparine) lesser celandine (Ranunculus ficaria) a dock (Rumex spp.), creeping buttercup (Ranunculus repens), hogweed (Heracleum sphondylium), cow parsley (Anthriscus sylvestris) and ivy (Hedera helix).

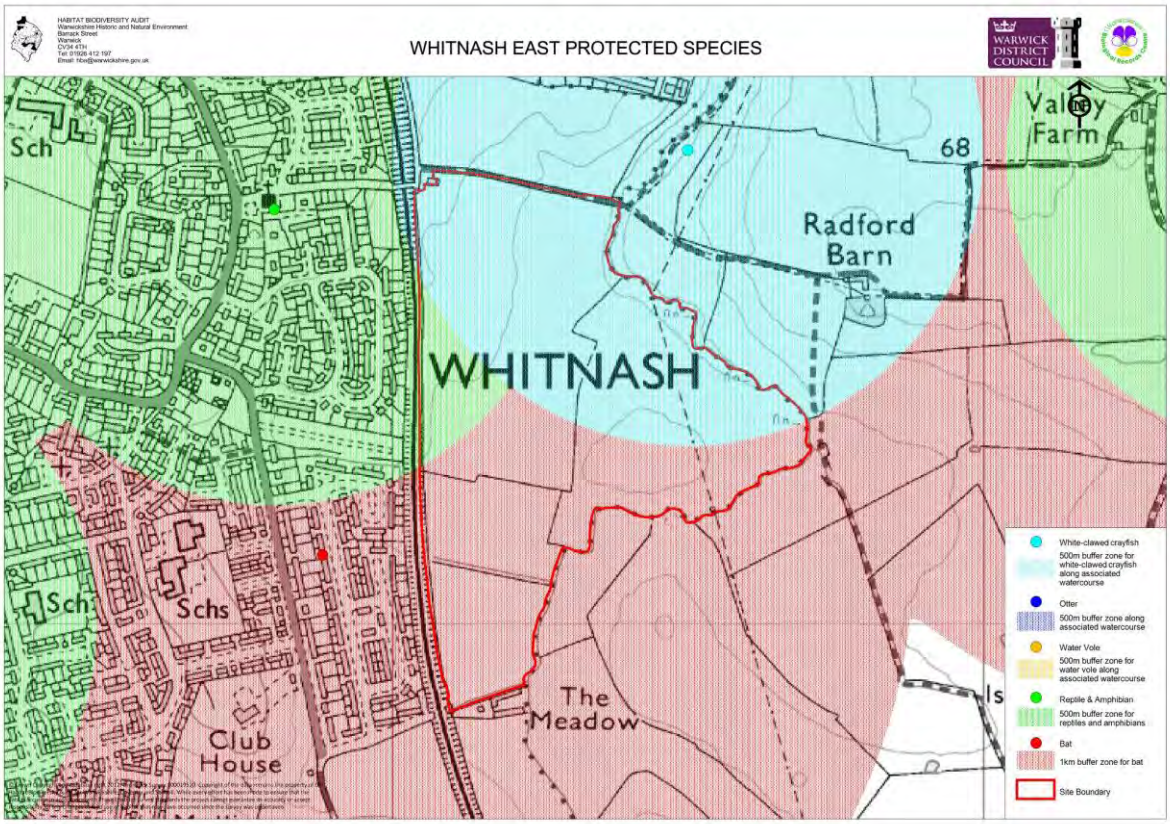
UPDATE CFT 19/10/2015

Forms part of Whitnash Brook LWS and LNR. Linear wet woodland consisting of formerly pollarded crack willow (Salix fragilis) with osier (Salix viminalis) and other willow species as well as Alder (Alnus glutinosa).

Habitat Connectivity



Protected Species



The suitability of the Whitnash Brook and the presence of a previous but dated occurrence north of the development parcel require's a presence or absence survey to determine whether white-clawed crayfish are currently present within the brook.

Records for common frog (Rana temporaria) and smooth newt (Lissotrition vulgaris) coincide with a possible bat roost record within sub-urban Whitnash.

A record for great crested newt (Triturus cristatus) occurs close to Radford Semele, 1km away from the development Site.