



PHASE I HABITAT SURVEY



SITE NAME J27 Housing Element	SITE CODE (if any) N/A	CENTRAL GRID REFERENCE ST043124
SURVEY TITLE Mid Devon Strategic Allocation Sites 2014	DATE SITE VISITED 18 th & 19 th June 2014	SITE AREA (ha) 121.0
DISTRICT / UNITARY Mid Devon	PARISH / WARD Halberton	SURVEYOR(S) Alex Worsley
LANDOWNER / AGENT NAME AND ADDRESS RABI – tenant is Mr Parrish Mr Dorse Mr Westcott		
Access permission from: Messrs Parrish, Dorse & Westcott		
CURRENT STATUS Part UWS - ST01/045 - Mountstephen Farm - Broadleaved woodland & UWS – ST01/046 – Mountstephen House - Broadleaved woodland		

SITE DESCRIPTION (including setting, major features, habitat and species interest, NVC affinities)

The Junction 27 Housing Element plan covers a large area and comprises 29 field units, 3 woodlands (two of which are listed as Unconfirmed Wildlife Sites) and a working farm with associated agricultural buildings. A few small ponds are also present on site.

The main points of interest are the hedgerows that separate the field units and the many mature and veteran trees growing from them. Some of the fields also contain very large veteran trees. Most of the field units contained either arable, species-poor semi-improved or improved grassland, although a couple of fields to the south of the site are slightly more species-rich.

Red kites, buzzard, chaffinch, chaffinch, roe deer and small tortoiseshell butterfly were all seen during the survey.

Field 1

This field harbours a number of livestock shelters and field enclosures which were inaccessible to survey directly. Some of these enclosures currently have fruit trees within them. The grass within these appears to be species-poor semi-improved grassland with frequent perennial rye-grass and Yorkshire fog and occasional creeping buttercup, common nettle, marsh thistle, rough meadow grass and a cudweed species. Some of the paddocks currently contain fowl and these tend to have a cover of broad leaved dock and common nettle in places.

Fields 2-6

These fields comprise species-poor semi-improved grassland with abundant perennial rye grass, frequent white clover and occasional rough meadow grass, cock's-foot and annual meadow grass. Field 4 is a small sheep grazed enclosure and contains a locally abundant cover of common nettle.

The hedgerows bordering this field contain many old oak standards and the hedges themselves contain blackthorn, hawthorn, pedunculate oak and hazel.

Some scrub and scattered trees are found along the length of the road border and this section is fenced not hedged.

Field 7

Field 7 was being harvested for hay on the day of the survey and the sward composition had to be examined from hay cuttings. The field appears to be species-poor semi-improved with perennial rye grass, white clover, rough meadow grass, Yorkshire fog and creeping buttercup present. Abundances were difficult to ascertain due to the work being carried out during survey.

The field includes some very mature standard oak trees which could provide ideal habitat for roosting bats and birds.

The hedgerow bordering fields 3 and 4 have been unmanaged and as a result have become slightly gappy in places as the trees have grown up. Species present in the hedgerow include ash, oak, hazel, blackthorn and elder.

The other hedgerows in this field are more compact and managed with oak, field maple, hazel, blackthorn, hawthorn and ash.

Field 8

This field is currently grazed by horses and comprises semi-improved grassland. Species present include frequent perennial rye grass, rough meadow grass, creeping buttercup, white clover, occasional broad leaved dock, creeping thistle, common mouse-ear, curled dock, marsh thistle.

Field 9-14

These fields all comprise arable land.

Field 15

This field consisted of bare earth, having recently been ploughed.

The main points of interest in fields 9-15 are the hedgerows and field margins. Most of the fields have been ploughed and/or seeded very close to the margins but there are a few areas of semi-improved grassland and a few areas of bare earth which has been colonised by water pepper, toad rush and mayweed species. The hedgerows are mature but not particularly species rich with most featuring blackthorn and hawthorn with the occasional oak, ash, elder, grey willow or hazel. However many of the hedgerows here also harbour large mature oak trees.

A small pond is found on the border of Fields 7, 8, 10 and 15. A few trees border this pond with alder, ash, oak and elder and a few herb species including cleavers, common poppy and ox-eye daisy.

Fields 16 and 17

These fields are semi-improved with frequent perennial rye-grass, rough meadow grass, creeping buttercup and occasional white clover, curled dock, marsh thistle, annual meadow grass Yorkshire fog and common mouse-ear.

Fields 18-22

This series of fields comprise species-poor semi-improved pasture. Species present within these swards include frequent and in some areas abundant perennial rye grass, frequent white clover, frequent rough meadow grass and occasional Yorkshire fog, greater plantain and annual meadow grass. A large patch of toad rush is found in the south east corner of field 19. Fields 18 and 20 had recently been cut for hay.

Field 23

Field 23 had been cut and spread with manure shortly before the survey. Due to this it was difficult to ascertain the composition of the sward accurately although it would appear to be species poor semi-improved. Yorkshire fog, timothy, rough meadow grass, perennial rye grass and greater plantain all occur although their abundances are unclear.

Field 24 and 25

These fields comprise species rich semi-improved grassland, parts of field 24 being particularly diverse.

Field 24 contains locally abundant perennial rye grass, Yorkshire fog and rough meadow grass, frequent white clover, scarlet pimpernel, timothy, creeping buttercup and common mouse-ear, locally frequent annual meadow grass, marsh thistle, spear thistle, lesser trefoil, meadow foxtail, ox-eye daisy, toad rush, crested dog's tail and sweet vernal grass and occasional yarrow, perennial sow thistle, marsh fox tail, broad leaved dock, cat's ear and scented mayweed. Plants with a rare distribution include soft brome, dove's foot cranes bill and bristly ox-tongue. The centre of this field is less diverse with abundant grass and thistle cover.

A strip to the west of the field is more species rich with a shorter sward and more herbs to be found.

Field 25 is less species rich with abundant perennial rye-grass, frequent Yorkshire fog and rough meadow grass and locally frequent creeping buttercup, timothy, meadow fox tail and crested dogs tail. Marsh thistle, white clover and common mouse-ear are occasional and ox-eye daisy is also present with a rare distribution.

Both of these fields have animal tracks running through them and areas of flattened grass that appear to have been used by deer for laying up.

The hedgerows along the road between Pitt Farm and Braddons Farmhouse are mature and particularly species rich with field maple, blackthorn, hawthorn, holly, pedunculate oak, ash, spindle, English elm, dog wood, spindle and elder all present, with field rose, black bryony and honeysuckle growing through in many places. Some interesting herbs are also found along the hedge with meadowsweet, crosswort, wild angelica, meadow vetchling and bitter vetch all present in places. Added to this there are many mature oaks and other standards lining the hedge, in particular the stretch of road between the Pitt Farm entrance and the junction that leads on to the B3181. This whole length of hedgerow and standard trees is of immense value to a large variety of wildlife and should be retained in full.

Surrounding Pitt Farm is large agricultural yard with the occasional conifer hedge. The yard is of little interest in terms of biodiversity.

Field 26

Field 26 is being used as a chicken enclosure and was fenced off with electric fence at the time of survey. The ground here is very disturbed in places with and the sward semi-improved. Mayweed species, toad rush, broad leaved dock, creeping buttercup, white clover, rough meadow-grass and perennial rye-grass all occur.

Field 27-28

These fields had been cut for hay. The sward appears to be improved with few species found – both fields seemed entirely comprised of perennial rye-grass, creeping buttercup and rough meadow-grass. Although abundances were hard to discern it appears that perennial rye-grass was the most frequently occurring species.

A small section in Field 27 had been fenced off and featured a covering of scrub with planted alder, birch and hazel all present. The sward here was Yorkshire fog dominated with abundant broad-leaved dock and frequent creeping buttercup. There is also a small copse in this field with planted conifers.

Field 28 features mature and veteran oak trees with dead wood and cracked limbs allowing for possible bat roosting sites. A mature ash and oak trees line the entire western field boundary.

Field 29

This is a small horse paddock and schooling area. The sward here is semi-improved with frequent timothy, perennial rye grass, Yorkshire fog and broad leaved dock and occasional daisy and creeping thistle.

Woodlands

Homebush Plantation and Woodrows Close Copse are both Unconfirmed Wildlife Sites.

Homebush Plantation is being used to rear pheasants (with a large pheasant enclosure within) and is unmanaged, as such it is very dark with little ground flora – although it may have been more diverse earlier in the year. The canopy is made up of locally abundant conifer, frequent beech, locally frequent sycamore, downy birch and ash and occasional pedunculate oak and sweet chestnut. The shrub layer includes frequent holly, locally frequent hazel and occasional rowan, pedunculate oak, elder and hawthorn. Ground flora includes abundant ivy and bramble, frequent ash saplings, hogweed and nettle, occasional broad-buckler fern, scaly male fern and hart's-tongue fern. Lords and ladies and enchanter's nightshade have a rare distribution.

Brickyard Plantation features a canopy of abundant oak and frequent ash with occasional sycamore, beech and horse chestnut. The shrub layer comprises locally frequent ash, sycamore, holly and occasional hawthorn, pedunculate oak, beech and elder. English elm is present with a rare distribution. Ground flora includes frequent creeping soft-grass, ivy, bramble and bluebells, locally frequent common nettle and wood dock and occasional broad buckler-fern, soft rush, foxglove, cleavers, herb Robert, wood avens and hard fern. A small pond is found in the eastern section of this wood which is currently home to a pair of mallards and their ducklings.

A grey heron was seen perched in an ash tree before flying off and five red kites were circling above the wood. A roe deer was also seen here during the survey.

A further small section of woodland is found to the south of Brickyard Plantation (south-east section of Field 9) with abundant ash, frequent oak and occasional sycamore. The shrub layer here consists of frequent ash and sycamore and occasional elder and hawthorn and the ground flora consists of abundant common nettle and ivy, occasional hart's-tongue fern, cleavers, wood avens, wood dock, cow parsley and creeping soft-grass.

Woodrows Close Copse is also being used to rear pheasants. The canopy here is made up of locally abundant ash and locally frequent beech. The shrub layer is comprised of locally frequent hazel, sycamore and occasional elder, blackthorn and cherry. Ground flora includes locally abundant bluebell, bracken and bramble, locally frequent nettle and occasional creeping soft-grass, wood dock, greater stitchwort and cleavers.

Local records held by DBRC:

Within site boundary:

Unconfirmed Wildlife Site at ST040132 (ST01/045 - Mountstephen Farm - Broadleaved woodland) & at ST045134 (ST01/046 – Mountstephen House - Broadleaved woodland)

Outside of site boundary:

- Within 300m of site boundary – Other Site of Wildlife Interest at ST055132 (ST01/051 – No Man's Land Plantation - Secondary broadleaved woodland).
- Adjacent to site boundary - Unconfirmed Wildlife Site at ST052126 (ST01/053 - Old Bridwell - Broadleaved woodland)
- Within 700m of site boundary Unconfirmed Wildlife Site at ST059125 (ST01/066 – Bridwell – Parkland).
- Within 200m of site boundary Unconfirmed Wildlife Site at ST033119 (ST01/068 - Yeo Farm - Burn Rew Farm Marsh - Possible floodplain grazing marsh).
- Within 1.5km of site boundary - County Wildlife Site at SS963123-SS999136 (SS91/079 – Grand Western Canal - Canal with associated wetland flora & marshy grassland).
- Within 500m of site boundary - Unconfirmed Wildlife Site at ST044114 (ST01/047 - Quick's Farm - Broadleaved woodland).
- Within 1km of site boundary Unconfirmed Wildlife Site at ST067122 (ST01/067 - Culmstock - Willand Marsh - Possible floodplain grazing marsh).
- Adjacent to southern site boundary Unconfirmed Wildlife Site at ST038117 (ST01/071 - Braddons Orchard – Orchard)

No species records within the site boundary.

Outside of site boundary:

- Lesser Horseshoe Bat & Brown Long-eared Bat adjacent to site boundary at Mount Stephen House.
- Otter from A361 & M5 (roadkill) approx. 700m north of site boundary
- Badger records from A361 & M5 (roadkill) approx. 800m north and 300m west of site boundary.
- Dormouse approx. 100m south of site boundary.
- Barn owl approx. 900m south-west of site boundary.

MANAGEMENT SUGGESTIONS, MITIGATION MEASURES REQUIRED AND FEATURES TO BE MAINTAINED

Many of the standard trees lining the hedgerows in this section are mature and in some cases veteran or possibly ancient and should be retained with a 3 – 5m buffer around them, as they are likely to support a host of species. These should also remain unlit to allow nocturnal species such as bats to continue to forage around them.

The hedgerows themselves present support valuable habitat for a range of species such as commuting, foraging and roosting bats, foraging and hibernating hedgehogs, commuting, foraging and hibernating reptiles and amphibians, nesting and foraging birds, foraging badger and commuting, foraging and hibernating dormouse.

In addition many of the hedgerows on site are likely to be considered as “important” under the Hedgerow Regulation Act 1997. As such it is recommended that all hedgerows on site are retained along with an adjacent buffer strip. The hedgerows should be managed every 3-5 years on a rotational basis to maintain their wildlife value. Full survey of the hedgerows should be carried out if further development dictates that they need to be removed (partially or wholly).

The woodlands are largely unmanaged and work to remove the sycamore and open up the canopy would be immensely beneficial.

Field 24 and to a lesser extent 25 feature some areas of species-rich semi-improved grassland and some of the herb rich areas should be retained in some form. Areas of species-rich semi-improved grassland should be targeted for an optimised management regime in order to provide biodiversity gains within the site. It is considered that a change of management will be easier and more likely to be successful rather than attempting to produce a wildflower meadow elsewhere in areas previously subject to agricultural improvement. This would require these areas to be managed as a traditional hay meadow, with a single hay cut being undertaken between July and August.

This site has the potential to support dormouse, roosting, commuting and foraging bats, reptiles, dormice, badger and barn owl and as such further surveys should be carried out before development is considered any further.

SURVEYORS SITE EVALUATION (context including diversity and notability of species, habitats and features)

This site covers a large area and features a variety of habitat types, including Biodiversity Action Plan habitats. The many mature trees found throughout are massively important for biodiversity and the hedgerows act as wildlife corridors

The hedgerows and woodlands / copses add to the structural diversity and wildlife potential of the site. If the site is developed upon it is recommended that the hedgerows and woodlands are retained where possible. The hedgerow running along the road from Braddons Farmhouse to the B3181 junction is particularly species rich in places.

Field 24 is the most species rich field within the site boundary and retaining and managing this field would be beneficial for biodiversity purposes.

UK and Devon Biodiversity Action Plan (BAP) habitats and species recorded on site include:

- Hedgerows (UK and Devon BAP)
- Lowland mixed deciduous woodland (UK BAP)

UK and Devon Biodiversity Action Plan (BAP) species and protected species with the potential to be supported by the site:

- Bat species
- Badger
- Dormouse (UK and Devon BAP)
- Barn Owl
- Hedgehog (UK BAP)
- Amphibian species
- Reptile species
- Nesting birds

SPECIES LIST

Name (Stace 1999)	English name
<i>Acer campestre</i>	Field Maple
<i>Acer pseudoplatanus</i>	Sycamore
<i>Achillea millefolium</i>	Yarrow
<i>Aesculus hippocastanum</i>	Horse-chestnut
<i>Agrostis capillaris</i>	Common Bent
<i>Alnus glutinosa</i>	Alder
<i>Alopecurus geniculatus</i>	Marsh Foxtail
<i>Alopecurus pratensis</i>	Meadow Foxtail
<i>Anagallis arvensis</i>	Scarlet Pimpernel
<i>Angelica sylvestris</i>	Wild Angelica
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Arum maculatum</i>	Lords-and-Ladies
<i>Bellis perennis</i>	Daisy
<i>Betula pubescens</i>	Hairy Birch
<i>Blechnum spicant</i>	Hard-fern
<i>Bromus hordeaceus</i>	Soft Brome
<i>Calystegia sepium</i>	Hedge Bindweed
<i>Castanea sativa</i>	Sweet Chestnut
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Circaea lutetiana</i>	Enchanter's-nightshade
<i>Cirsium arvense</i>	Creeping Thistle
<i>Cirsium palustre</i>	Marsh Thistle
<i>Cornus sanguinea</i>	Dogwood
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Cruciata laevipes</i>	Crosswort
<i>Cynosurus cristatus</i>	Crested Dog's-tail
<i>Dactylis glomerata</i>	Cock's-foot
<i>Digitalis purpurea</i>	Foxglove
<i>Dryopteris affinis</i>	Scaly Male-fern
<i>Dryopteris dilatata</i>	Broad Buckler-fern
<i>Euonymus europaeus</i>	Spindle
<i>Fagus sylvatica</i>	Beech
<i>Festuca rubra</i> agg.	Red Fescue
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleavers
<i>Geranium molle</i>	Dove's-foot Cranesbill
<i>Geranium robertianum</i>	Herb-Robert
<i>Geum urbanum</i>	Wood Avens
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Holcus mollis</i>	Creeping Soft-grass
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Hypochaeris radicata</i>	Cat's-ear
<i>Ilex aquifolium</i>	Holly
<i>Juncus bufonius</i>	Toad Rush

Name (Stace 1999)	English name
<i>Juncus effusus</i>	Soft-rush
<i>Lathyrus linifolius</i>	Bitter-vetch
<i>Lathyrus pratensis</i>	Meadow Vetchling
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Matricaria recutita</i>	Scented Mayweed
<i>Mercurialis perennis</i>	Dog's Mercury
<i>Papaver rhoeas</i>	Common Poppy
<i>Persicaria hydropiper</i>	Water-pepper
<i>Phleum pratense sens.lat.</i>	Timothy
<i>Phyllitis scolopendrium</i>	Hart's-tongue
<i>Picris echioides</i>	Bristly Oxtongue
<i>Plantago major</i>	Greater Plantain
<i>Poa annua</i>	Annual Meadow-grass
<i>Poa trivialis</i>	Rough Meadow-grass
<i>Prunus avium</i>	Wild Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Pteridium aquilinum</i>	Bracken
<i>Quercus robur</i>	Pedunculate Oak
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rosa arvensis</i>	Field-rose
<i>Rubus fruticosus agg.</i>	Bramble
<i>Rumex crispus</i>	Curled Dock
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Rumex sanguineus</i>	Wood Dock
<i>Sambucus nigra</i>	Elder
<i>Silene dioica</i>	Red Campion
<i>Sonchus arvensis</i>	Perennial Sow-thistle
<i>Sorbus aucuparia</i>	Rowan
<i>Tamus communis</i>	Black Bryony
<i>Taraxacum aggregate</i>	Common Dandelion
<i>Trifolium dubium</i>	Lesser Trefoil
<i>Ulmus procera</i>	English Elm
<i>Urtica dioica</i>	Common Nettle
Additional species	
<i>Buteo buteo</i>	Buzzard
<i>Capreolus capreolus</i>	Roe Deer
<i>Fringilla coelebs</i>	Chaffinch
<i>Milvus milvus</i>	Red Kite
<i>Fringilla coelebs</i>	Chaffinch
<i>Aglais urticae</i>	Small Tortoiseshell

