# AN ECOLOGICAL SURVEY

of

# LAND AT REDLANDS FARM, WEY VALLEY, WEYMOUTH [WEY14]

for

## **Dorset Council**

August 2021

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**Dorset Environmental Records Centre** 



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Version control				
1	Report prepared by:	Bryan Edwards	24/08/21	
	Checked by:	Carolyn Steele	01/10/21	

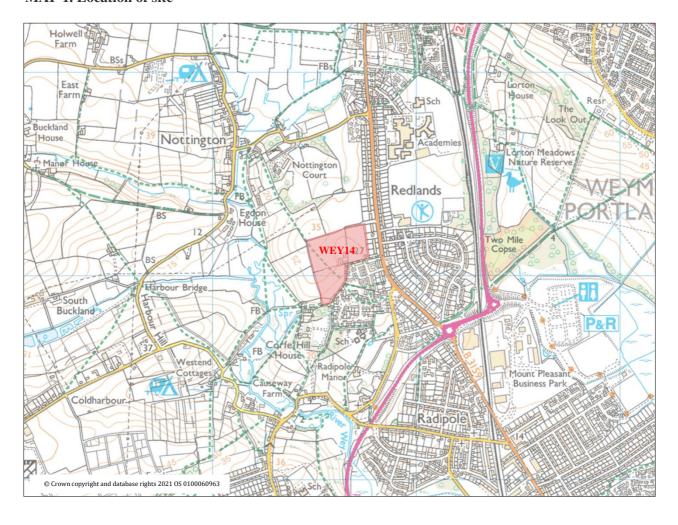
#### **SUMMARY**

- This report forms part of a suite of ecological surveys commissioned by Dorset Council's Strategic Planning and Natural Environment Teams. Together the survey reports form part of the evidence base for the Local Plan, containing extended Phase 1 survey information for the potential allocated sites, highlighting important habitats and the likelihood of protected species being present.
- > The three larger fields have been cultivated recently and supported a Maize crop and the smaller field has species-poor grassland, these are currently of **low ecological interest**.
- ➤ The older intact hedgerows have >80% of their length dominated by at least one native woody species and 849 metres qualify as hedgerows **Priority Habitat** and **habitat of principal importance** under Section 41 of the NERC Act (2006).

#### 1.0 INTRODUCTION

This report forms part of a suite of ecological surveys commissioned by Dorset Council's Strategic Planning and Natural Environment Teams. Together the survey reports form part of the evidence base for the Local Plan, containing extended Phase 1 survey information for the potential allocated sites, highlighting important habitats and the likelihood of protected species being present. The surveys have been carried out by Dorset Environmental Records Centre who are working with Dorset Council to ensure that ecological data for the Local Plan process is as up-to-date as possible.

MAP 1. Location of site



2.0 METHODS

The survey was undertaken on the 11th August 2021 in fine weather. The area was walked and a plant species

list compiled with frequencies assigned to each species using the DAFOR scale. Particular attention was paid

to the presence of any Section 41 or Red Listed species, and any that are on the Dorset Environmental

Records Centre (DERC) lists of Dorset Notable species (DERC, 2012). Habitats present were assessed for

their potential to support protected species (see Section 6.1), and visible signs for Badger such as setts,

latrines and paths were looked for. Each habitat type present and any species or features of particular note

were described using target notes (see Section 5.2.2).

A habitat map was produced in the field by drawing boundaries of the different vegetation types over a print

out of the latest aerial photograph. This was then digitized using DERCs Integrated Habitat System (IHS)

mapping process.

The sites are assessed for their ecological interest at the time of the survey (see Section 6.0). Those sites

assessed as being of Low Ecological Interest have very little interest and are generally improved grasslands

or arable fields. Those of Moderate Ecological Interest may support some interest such as one or more

Dorset Notable plant species, but do not qualify as a Site of Nature Conservation Interest (SNCI). Those of

High Ecological Interest are of SNCI quality and are therefore an important wildlife site within a county

context.

Nomenclature for plants follows Stace (2019).

The DAFOR scale records species according their abundance as follows:

 $\mathbf{D}$  = Dominant;  $\mathbf{A}$  = Abundant;  $\mathbf{F}$  = Frequent;  $\mathbf{O}$  = Occasional;  $\mathbf{R}$  = Rare;  $\mathbf{L}$  = Local (e.g.  $\mathbf{LF}$  = Locally

Frequent)

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#### 3.0 LEGISLATION & POLICY

#### 3.1 LEGISLATION

The following legislation may be of relevance to the proposed works. Full details of statutory obligations with respect to biodiversity and the planning system can be found in DCLG Circular 06/2005.

#### • The Conservation of Habitats and Species (Amendments) (EU Exit) Regulations 2019:

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into domestic law and ensures that the habitat and species protection and standards will continue to apply upon the UK's exit from the EU. The Regulations provide protection for a number of species including:

- ➤ All species of bat
- ➤ Dormouse (*Muscardinus avellanarius*)
- > Great crested newt (*Triturus cristatus*).

This legislation makes it an offence to deliberately capture, kill or injure individuals of these species listed on Schedule 2 and damage or destroy their breeding site or place of shelter. It is also illegal to deliberately disturb these species in such a way as to be likely to significantly affect: (i) the ability of any significant group of the species to survive, breed or rear or nurture their young; or (ii) the local distribution or abundance of the species.

This legal protection means that where development has the potential to impact on bats, or other species of national interest, the results of a protected species survey must be submitted with a planning application.

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are also protected under this legislation. These are a network of sites designated for supporting habitats or species of high nature conservation importance in the European context. Any activity that has a detrimental effect on these European sites3 is made an offence under the Regulations. Where a development is likely to have a significant impact on a European site, the Regulations require a rigorous assessment of the impacts, known as an Appropriate Assessment.

#### • The Wildlife and Countryside Act 1981 (and amendments):

Protected fauna and flora are listed under Schedules 1, 5 & 8 of the Act. Species likely to be of relevance include:

- All species of **bat**. It is an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost
- All species of **British reptile** (in particular grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*), adder (*Vipera berus*) and slow-worm (*Anguis fragilis*)). It is illegal to kill or injure these species
- > Great crested newt. It is illegal to obstruct access to any structure or place which great crested newts use for shelter or protection or to disturb any great crested newt while it is using such a place.

This Act also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built). In addition, it is an offence to disturb any nesting bird listed on Schedule 1 or their young.

Schedule 9 of the Act lists those species for which it is an offence to plant or cause their spread. Species listed under Schedule 9 that are most likely to be encountered are Japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*).

Sites of Special Scientific Interest (SSSIs) are also protected under the Wildlife and Countryside Act 1981. These are a network of sites identified as being of national nature conservation importance and hence afforded legal protection.

National Nature Reserves (NNRs) are also protected under the Act (section 35 (1)) and established under the National Parks and Access to the Countryside Act 1949. These are nature reserves which are considered to be of national importance by the relevant statutory bodies i.e. Natural England, Natural resource Wales.

#### Natural Environment and Rural Communities Act (NERC) 2006:

This Act enforces a duty on the planning authority and local council to conserve biodiversity (section 40). Additionally, section 41 encourages the local councils to be aware of the species and habitats of 'principal importance' and to act accordingly to protect and manage these habitats and species.

#### • The Countryside and Rights of Way Act 2000:

This Act strengthens nature conservation and wildlife protection through a number of mechanisms. It places a duty on Government Ministers and Departments to conserve biological diversity, provides police with stronger powers relating to wildlife crimes, and improves protection and management of SSSIs.

#### • The Protection of Badgers Act 1992:

This Act makes it an offence to wilfully take, injure or kill a badger (*Meles meles*); cruelly mistreat a badger; interfere with badger setts, sell or possess a live badger; mark or ring a badger. A licence is required for work affecting badgers and their setts.

#### • Wild Mammals (Protection) Act 1996:

This Act provides protection for all wild animals from intentional acts of cruelty.

#### • Hedgerow Regulations 1997:

These Regulations establish a set of criteria for assessing the importance of hedgerows. Where a hedgerow is deemed to be 'important' its removal is prohibited without consent from the local Planning Authority.

#### 3.2 POLICY

The following policy is of relevance to this report:

#### • National Planning Policy Framework (NPPF):

This sets out the Government's vision for biodiversity in England with the broad aim that planning, construction, development and regeneration should maintain and enhance, restore or add to biodiversity and geological conservation interests. NPPF (2018) includes sections on legally protected species and sites (see Section 2.1).

• Local Sites (including Sites of Nature Conservation Interest (SNCI), Local Nature Reserves (LNR), and Biological Notification Sites (BNSs)/County Wildlife Sites (CWSs)):

These are a network of sites designated for their nature conservation importance in a local context. Although they are not afforded legal protection they contribute towards local and national biodiversity.

#### • Natural England Protected Species Standing Advice:

The standing advice is used by local authorities as a fall-back position when in pre-application consultation or during the determination period to define habitat and species survey efforts and mitigation proposals.

#### 4.0 EXISTING DATA

The following summary is based on the desk study carried out by DERC for Dorset Council covering the Local Plan Emerging Site Allocations (DERC 2020). The species records are based on post-2010 data.

#### 4.1 PROTECTED SPECIES

Species	Status	Distance from site	Date/s of record/s
Badger	WCA	Within 1-km radius	Post-2010
Bats	EPS; WCA	Within 1-km radius	Post-2010
Dats	EFS, WCA	Within 1-Kiii faulus	F08t-2010
Dormouse	S41; EPS; WCA	Within 1-km radius	Post-2010
Otter	EPS; WCA	Within 1-km radius	Post-2010
Otto	LI 5, WCI	Within 1-kin radius	1 031-2010
Water Vole	S41; WCA	Within 1-km radius	Post-2010
Brown Hare	S41	-	
Hedgehog	S41	-	
Great Crested Newt	EPS; S41	-	
Reptiles	S41; WCA	-	

#### 4.2 PROTECTED HABITATS

None immediately adjacent to the site.

The following Section 41 habitat are found within a 1-km radius of the site:

Lowland Mixed Deciduous Woodland – Section 41; UK Priority Habitat

670 metres to the south

Lowland Meadows – Section 41; UK Priority Habitat

600 metres to the southwest

Reedbed - Section 41; UK Priority Habitat

1000 metres to the south

#### 4.3 PROTECTED SITES

None immediately adjacent to the site. The following are found within a 1-km radius of the site:

Radipole Lake Site of Special Scientific Interest (SSSI)
 Lorton Site of Special Scientific Interest (SSSI)
 Lodmoor Site of Special Scientific Interest (SSSI)
 650 metres to the east

#### 5.0 RESULTS

#### 5.1 SITE DESCRIPTION

The site comprises three medium-sized agricultural fields and one very small plot at Redland's Farm with the B3159 to the east and the River Wey and its floodplain to the west. The fields are on high ground to the east of the floodplain and overlies the Cornbrash and Kellaway Beds producing a slightly calcareous clay soil and there are some areas that appear to be wet in the winter. From looking at aerial photographs on Dorset Explorer the three larger fields appears to have been grassland in the past but at the time of the current survey all had been cultivated and supported a Maize crop. The fields are partially bordered by mature, mostly untrimmed, straight hedgerows.

#### 5.2 HABITAT DESCRIPTION

#### Fields and field margins

The three main fields supported a maize crop which was 6-7 foot high at the time of the survey and planted right up the field margins, linear gaps had been left (or cut) along the line of the footpaths. Where there was space at the margins there were a mixture of ruderal plants and coarse grasses, some characteristic of heavy clay soils. The grassy areas had False Oat-grass Arrhenatherum elatius, Cock's-foot Dactylis glomerata, Perennial Rye-grass Lolium perenne, Creeping Bent Agrostis stolonifera and Common Couch Elytrigia repens. Herbs include typical robust 'weed' species such as Creeping Thistle Cirsium arvense, Spear Thistle Cirsium vulgare, Ragwort Jacobaea vulgaris and Stinging Nettle Urtica dioica, plus those found on disturbed calcareous clay including locally abundant Field Bindweed Convolvulus arvensis plus Creeping Cenquefoil Potentilla reptans, Teasel Dipsacus fullonum and Bristly Oxtongue Helminthotheca echioides. In places ruderal plants characteristic of disturbed, enriched ground are present including large patches or stands of Knotgrass Polygonum aviculare, Common and Spear-leaved Orache Atriplex patula and A. prostrata, Fat Hen Chenopodium album and Red Goosefoot Chenopodium rubrum, with the less common Many-seeded Goosefoot Chenopodium polyspermum and uncommon Maple-leaved Goosefoot Chanopodium hybridum also noted.

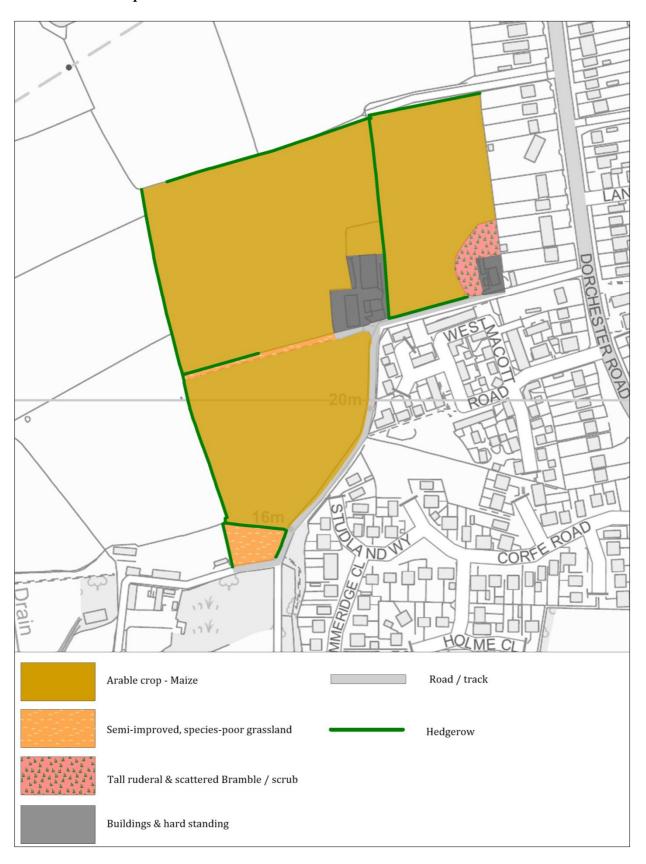
## Hedgerows & hedgebanks

There are eight hedgerows five of which are on the 1947 aerial photo plus three that are more recent and either planted or have developed naturally along fence lines. The older hedges are all on banks and straight which is typical of post-enclosure act landscapes. The most abundant woody species are Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna*, with frequent suckering English Elm *Ulmus procera* and Elder *Sambucus nigra*. There are small quantities of Ash *Fraxinus excelsior*, Maple *Acer campestre*, Dogwood *Cornus sanguinea*, Holly *Ilex aquifolium*, Dog Rose *Rosa canina* and Short-styled Dog Rose *Rosa stylosa*. The hedges are tall and generally untrimmed and the shaded hedgebank and adjoining ground beneath is dominated by dense Ivy *Hedera helix* with few other species present apart from occasional Cuckoo Pint *Arum maculatum*. Along the hedge margins Bramble *Rubus fruticosus* agg. is abundant with Stinging Nettle *Urtica dioica*, Cow Parsley *Anthriscus sylvestris*, Cleavers *Galium aparine* and False Oat-grass *Arrhenatherum elatius* all frequent to abundant. Other species noted include Ground Ivy *Glechoma hederacea*, Black Horehound *Ballota nigra*, Hedge Bedstraw *Galium album*, Stinking Iris *Iris foetidissima*, False Brome *Brachypodium sylvaticum* and Tor-grass *Brachypodium pinnatum*.

#### Other habitats

There are two sets of old buildings with associated tracks, hard standing and enriched ground which now supports short or tall ruderal vegetation and dense Bramble.

## 5.2.1 Habitat map



## 5.2.2 Target notes



No.	Grid Ref	Target Note
001	SY6655 8187	<b>Field A.</b> A very small plot with a large chicken pen, the surrounding grassland is semi-improved and species-poor. The coarse sward comprises False Oat-grass, Cock's-foot and Yorkshire Fog, with smaller quantities of Perennial Rye-grass and Rough Meadow-grass. Herbs are not very diverse with Broad-leaved Dock with Creeping Buttercup locally frequent.
002	SY6656 8189	<b>Field A.</b> Small recent hedge between fields A & B with English Elm, Hawthorn and Ash.
003	SY6658 8196	<b>Field B.</b> A Maize crop planted tightly to the field margins with a space left for the footpath. At the margins the coarse grasses False Oat-grass and Cock's-foot are abundant, with herbs typical of ruderal enriched sites including Creeping Thistle, Spear Thistle and Ragwort, plus those found on clay, Field Bindweed, Teasel and Bristly Oxtongue.

No.	Grid Ref	Target Note
004	SY6651 8159	<b>Field B.</b> Western hedgerow, a tall hedge with abundant English Elm and Hawthorn, plus Hawthorn, Elder and Dog Rose. The shaded ground layer is dominated by Ivy; the margins have a flora typical of enriched soils with abundant Stinging Nettle, Cleavers and Cow Parsley, plus Ground Ivy and Black Horehound.
005	SY6662 8204	<b>Field B.</b> The Northern margin of the field is an old track supporting improved grassland with abundant Perennial Rye-grass and White Clover plus plants of ruderal compacted ground such as Greater Plantain and Knotgrass.
006	SY6656 8203	<b>Field B.</b> Northern hedge between Fields B & C with abundant Hawthorn and Elder, with rare Ash and Holly. Bramble is abundant. Ivy dominates the ground layer, with Cleavers and Cow Parsley at the margins
007	SY6656 8212	<b>Field C.</b> A Maize crop planted tightly to the field margins with a space left for the footpath. Margins similar to Field B but there also patches of Fat Hen and Red Goosefoot with a plant of the uncommon Maple-leaved Goosefoot in the south
008	SY6648 8209	<b>Field C.</b> Western hedge with abundant Blackthorn and frequent Elder and Hawthorn, plus rare Ash, Field Maple and Short-styled Dog Rose. Ivy dominates the ground layer with Ground Ivy present locally and several clumps of Sinking Iris. The margins have Cow Parsley, Stinging Nettle and Cleavers.
009	SY6655 8220	<b>Field C.</b> Northern hedge with abundant Blackthorn and frequent Hawthorn plus rare Dogwood, English Elm and Short-styled Dog Rose. Ivy dominated the shaded ground layer with Ground Ivy towards the edge. On the very narrow hedgebank there are several large patches of Tor-grass with Stinking Iris locally frequent and rare Hedge Bedstraw.
010	SY6670 8217	<b>Field D.</b> A Maize crop planted tightly to the field margins. The margins have a mixture of ruderal and arable plants including Creeping Buttercup, Many-seeded Goosefoot, Creeping Thistle, Spear Thistle, Creeping Bent, Cock's-foot and False Oat-grass.
011	SY6666 8216	<b>Field D.</b> Western hedge between Fields C & D. Blackthorn abundant with Hawthorn plus suckering English Elm and towards the southern end several Ash. The shaded ground layer is dominated by Ivy with scattered Cuckoo Pint, Stinking Iris and False-brome. At the margins Bramble is frequent with Stinging Nettle, Cleavers, Hedge Bindweed and Wood Dock.
012	SY6670 8225	<b>Field D.</b> Northern hedge, Blackthorn abundant, occasional to locally frequent Hawthorn, Ash and English Elm, plus scattered Dog Rose. The shaded ground layer is dominated by Ivy with scattered Cuckoo Pint. At the margins Bramble is abundant with Ground Ivy frequent and several clumps of Stinking Iris. The local hoverfly <i>Volucella zonaria</i> was noted on Bramble flowers.
013	SY6670 8207	<b>Field D.</b> Southern hedgerow appears to be more recent in origin and is dominated by Hawthorn with few other species present apart from rare Sycamore. Bramble is abundant along the margins along with frequent Hedge Bindweed.

No	. Grid Ref	Target Note
014	SY6674 8212	Old buildings and associated ground supporting patches of dense Bramble scrub and short and rank ruderal vegetation with species typical of enriched ground.

#### 6.0 ASSESSMENT

The three main large fields had been cultivated and at the time of the survey supported a maize crop and therefore are currently considered to be of **low ecological value**. The small field in the south is semi-improved, species-poor grassland and of **low ecological value**. The older hedgerows are on distinct banks and support a range of woody shrubs and 849 metres has one or more native woody species and therefore qualifies as hedgerows **Priority Habitat**, and **habitat of principal importance** under Section 41 of the NERC Act (2006).

#### 6.1 PROTECTED SPECIES ASSESSMENT

Species	Status	Habitat Potential	Future surveys
Badger	WCA	No sett seen, several animal paths noted through hedgerows that may be this species.	
Bats	EPS; WCA	The older, untrimmed hedgerows may provide suitable foraging habitat and flightlines for bats. The buildings on site are in poor condition and wood or tin and considered to be sub-optimal for roosting bats.	Survey required
Dormouse	S41; EPS; WCA	Mature hedgerows support suitable habitat for this species	
Otter	EPS; WCA	No permanent water on site.	
Water Vole	S41; WCA	No permanent water on site.	
Brown Hare	S41	Habitat is currently sub-optimal for this species.	
Hedgehog	S41	Suitable habitat is present in the hedgerows.	
Great Crested Newt	EPS; S41	No permanent water on site.	
Reptiles	S41; WCA	Areas around the old buildings and along some of the sunny hedgebanks may support Slow Worm.	

### **REFERENCES**

DERC 2012 Dorset Notable Species Lists. Dorset Environmental Records Centre, Dorchester

**DERC** 2020 Local Plan Emerging Site Allocations: Ecological Data. [Unpublished report for Dorset Council)

**Stace, C.A. 2019** New Flora of the British Isles (4<sup>th</sup> Ed). C & M Floristics, Suffolk.

## **APPENDIX I: Plant species recorded August 2021**

Species	Common Name	Frequency
Acer campestre	Field Maple	R
Acer pseudoplatanus	Sycamore	R
Achillea millefolium	Yarrow	R
Agrostis stolonifera	Creeping Bent	O-LF
Anthriscus sylvestris	Cow Parsley	O-LA
Arrhenatherum elatius	False Oat-grass	F-LA
Arum maculatum	Cuckoo Pint	0
Atriplex patula	Common Orache	R-O
Atriplex prostrata	Spear-leaved Orache	0
Ballota nigra	Black Horehound	R-O
Bellis perennis	Daisy	R
Brachypodium pinnatum	Tor-grass	R-LF
Brachypodium sylvaticum	False-brome	О
Calystegia sepium	Hedge Bindweed	O-LF
Chenopodium album	Fat-hen	O-LF
Chenopodium hybridum	Maple-leaved Goosefoot	R
Chenopodium polyspermum	Many-seeded Goosefoot	R-O
Chenopodium rubrum	Red Goosefoot	O-LA
Cirsium arvense	Creeping Thistle	O-LF
Cirsium vulgare	Spear Thistle	0
Conium maculatum	Hemlock	0
Convolvulus arvensis	Field Bindweed	F-LA
Cornus sanguinea	Dogwood	R
Crataegus monogyna	Hawthorn	0
Dactylis glomerata	Cock's-foot	O-LF
Dipsacus fullonum	Teasel	O-LF
Elytrigia repens	Common Couch	О
Fraxinus excelsior	Ash	О
Galium aparine	Cleavers	F-LA
Galum album	Hedge Bedstraw	R
Geranium dissectum	Cut-leaved Crane's-bill	0
Geranium molle	Dove's-foot Crane's-bill	R
Glechoma hederacea	Ground Ivy	O-LA
Hedera helix	Ivy	F-LA
Helaminthotheca echioides	Bristly Oxtongue	0
Heracleum sphondylium	Hogweed	0
Holcus lanatus	Yorkshire Fog	О
Ilex aquifolium	Holly	R
Iris foetidissima	Stinking Iris	O-LF
Jacobaea vulgare	Ragwort	О

Species	Common Name	Frequency
Lolium perenne	Perennial Rye-grass	O-LF
Malva sylvestris	Common Mallow	R
Plantago lanceolata	Ribwort Plantain	R
Plantago major	Greater Plantain	0
Poa trivialis	Rough Meadow-grass	0
Polygonum aviculare	Knotgrass	O-LF
Potentilla reptans	Creeping Cinquefoil	F-LA
Prunus spinosa	Blackthorn	F-LA
Pulicaria dysenterica	Common Fleabane	R
Ranunculus repens	Creeping Buttercup	0
Rosa canina	Dog Rose	0
Rosa stylosa	Short-styled Dog-rose	R
Rubus fruticosus agg.	Bramble	F-LA
Rumex obtusifolius	Broad-leaved Dock	O-LF
Rumex sanguineus	Wood Dock	R-O
Sambucus nigra	Elder	O-LF
Sisymbrium officinale	Hedge Mustard	0
Smyrnium olusatrum	Alexanders	R
Trifolium repens	White Clover	O-LA
Tripleurospermum inodorum	Scenless Mayweed	O-LF
Ulmus procera	English Elm	O-LF
Urtica dioca	Stinging Nettle	F-LA

**D** = Dominant; **A** = Abundant; **F** = Frequent; **O** = Occasional; **R** = Rare; **L** = Local (e.g. **LF** = Locally Frequent)

## **APPENDIX II: Invertebrates recorded August 2021**

Common Name
Gatekeeper
Meadow Brown
Roesel's Bush-cricket
Common Field Grasshopper
Meadow Grasshopper
Western Honey Bee
Red-tailed Bumble Bee
Common Carder Bee
Buff-tailed Cuckoo Bee
Hornet Hoverfly