# AN ECOLOGICAL SURVEY

of

# LAND WEST OF TUNNEL ROAD, BEAMINSTER

# [BEAM03]

for

# **Dorset Council**

November 2021

**Bryan Edwards** 

**Dorset Environmental Records Centre** 



# **CONTENTS**

Sum	Summary			Page 2
1.0	Introduction		Page 3	
2.0	Metl	nods		Page 4
3.0	Legi	slation &	z policy	Page 5
4.0	Exis	ting data		Page 8
	4.1	Prote	ected species	Page 8
	4.2		ected habitats	Page 8
	4.3		ected sites	Page 8
5.0	Resu	lta		Page 9
5.0	Kest	1115		rage 9
	5.1	Site of	lescription	Page 9
	5.2	Habi	tat description	Page 9
		5.2.1	Habitat map	Page 11
		5.2.2	Target notes	Page 12
6.0	Asse	essment		Page 15
	6.1	Prote	ected species assessment	Page 15
Refe	rences			Page 16
APP	ENDIX	I:	Plant species recorded	Page 17
APPENDIX II:			Photographs	Page 19

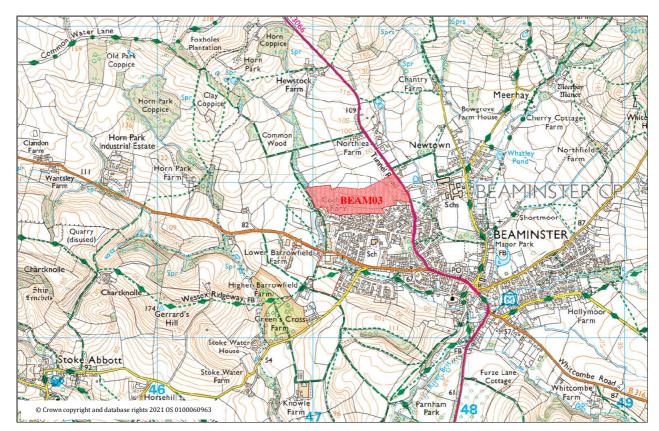
Version control					
1	Report prepared by:	Bryan Edwards	26/11/21		
	Checked by:	Carolyn Steele	06/12/21		

# 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 grasslands are all improved or semi-improved with a low diversity of herbs and are currently of low ecological interest.
- There are 1,202 metres of older hedgerow which qualify as Hedgerows Priority Habitat and Section 41 Habitat of Principal Importance in having at least one native woody species over more than 80% of their length.
- The 135 metre length of sunken stream in the west of the site is in a natural condition with wooded margins and acts as an important ecological corridor and is therefore considered to be a feature of High Ecological Importance.

# 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 4<sup>th</sup> November 2021 in fine weather. The area was walked and a plant species list compiled with frequencies assigned to each species using the DAFOR scale<sup>1</sup>. 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).

<sup>1</sup>The DAFOR scale records species according their abundance as follows:

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

# 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
Badger	WCA	Within 100 metre radius
Bats	EPS; WCA	Within 100 metre radius
Dormouse	S41; EPS; WCA	Within 1-km radius
Otter	EPS; WCA	Within 1-km radius
Water Vole	S41; WCA	-
Brown Hare	S41	-
Hedgehog	S41	-
Great Crested Newt	EPS; S41	Within 100 metre radius
Reptiles	S41; WCA	-

# 4.2 **PROTECTED HABITATS**

None adjacent to the site.

Lowland Mixed Deciduous Woodland – Section 41; UK Priority Habitat620 metres to the southwestLowland Fens – Section 41; UK Priority Habitat640 metres to the southwestLowland Meadows – Section 41; UK Priority Habitat680 metres to the northWet Woodland – Section 41; UK Priority Habitat790 metres to the southwestLowland Dry Acid Grassland – Section 41; UK Priority Habitat1,090 metres to the southwest

#### 4.3 **PROTECTED SITES**

None adjacent to the site.

Horn Park Quarry Site of Special Scientific Interest (Geological)	1,110 metres to the west
---	--------------------------

#### 5.0 **RESULTS**

#### 5.1 SITE DESCRIPTION

The site lies on the northern edge of Beaminster to the west of Tunnel Road and comprises a series of small to medium size grassland fields that at the time of the survey were used for grazing; the fields are divided by hedgerows. The area is gently undulating sloping down to Tunnel Road to the east and a small sunken stream to the west and overlies the Fuller's Earth which produces a seasonally wet clayey soil. There is a small exposure of Oolitic limestone in the stream in the southwest corner.

#### 5.2 HABITAT DESCRIPTION

#### Grasslands

All the grassland is of a neutral type and has been agriculturally improved to varying degrees. The two largest field are improved grassland dominated by Perennial Rye-grass *Lolium perenne*, with varying quantities of Creeping Bent *Agrostis stolonifera* and Yorkshire Fog *Holcus lanatus*. Herbs are few and largely restricted to Creeping Buttercup *Ranunculus repens*, White Clover *Trifolium repens* and Dandelion *Taraxacum officinale* agg. with patchy weed species such as Stinging Nettle *Urtica dioica*, Broad-leaved Dock *Rumex obtusifolius* and Creeping Thistle *Cirsium arvense*.

The smaller fields are semi-improved and species-poor. Perennial Rye-grass is still present and locally frequent with Yorkshire Fog and Creeping Bent the most abundant grasses with smaller quantities of Cock's-foot *Dactylis glomerata*. Herbs are largely restricted to Creeping Buttercup, Meadow Buttercup *Ranunculus acris*, White Clover and Dandelion with smaller quantities of Common Sorrel, plus the scattered weeds mentioned above.

#### **Hedgerows**

The hedgerows mostly appear to be old, some are tall and overgrown, others such as the one by Tunnel Road are flailed. Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna* are the most abundant species with varying amounts of Ash *Fraxinus excelsior*, Field Maple *Acer campestre*, Dog Rose *Rosa canina*, Dogwood *Cornus sanguinea*, Hazel *Corylus avellana*, Grey Willow *Salix cinerea* and Elm *Ulmus* species. Bramble *Rubus fruticosus* agg. is abundant with Black Bryony *Tamus communis* also noted. Beneath the trees and shrubs Ivy *Hedera helix* dominates with other species reduced to scattered Hart's-tongue Fern *Asplenium scolopendrium*, Soft Shield-fern *Polystichum setiferum*, Red Campion *Silene dioica*, Wood Dock *Rumex sanguineus*, Wood Avens *Geum urbanum*, Ground Ivy *Glechoma hederacea* and False Brome

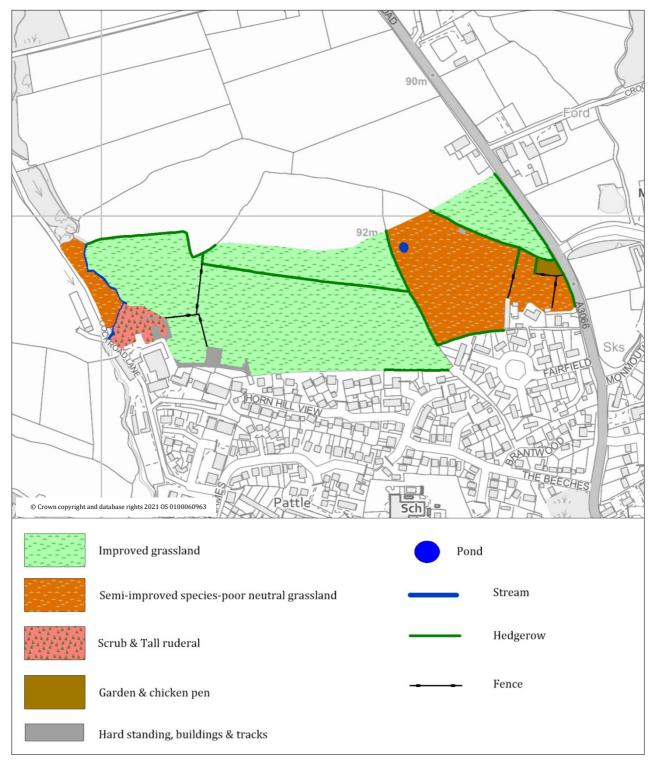
*Brachypodium sylvaticum*. The margins of the hedges contain species characteristic of enriched soils such as Cleavers *Galium aparine*, Stinging Nettle, Hogweed *Heracleum sphondylium*, Cow Parsley *Anthriscus sylvestris* and Cock's-foot *Dactylis glomerata*.

# Other habitats

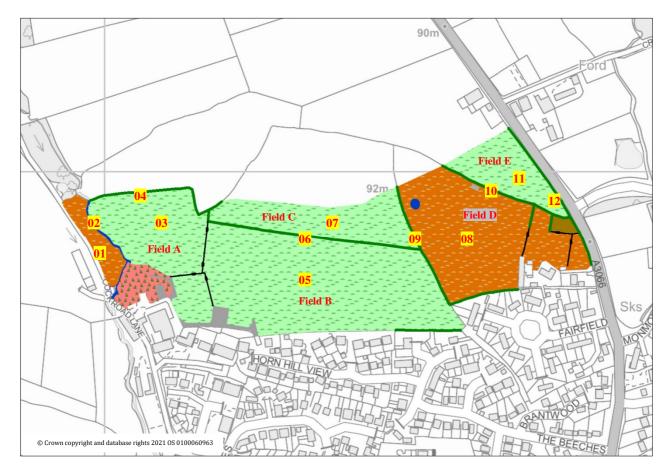
There is a small section of sunken stream in the west of the site which is lined by trees and shrubs including Ash, Sycamore *Acer pseudoplatanus*, Pedunculate Oak *Quercus robur*, Field Maple, Hazel and Hawthorn. The ground flora includes and number of hedgebank / woodland plants including Hart's-tongue Fern, Soft Shield-fern, Broad Buckler-fern *Dryopteris dilatata*, Wood Avens, Herb Robert *Geranium robertianum*, Dog's Mercury *Mercurialis perennis*, Ground Ivy, Pendulous Sedge *Carex pendula* and Wood Sedge *Carex sylvatica*.

A pond has been dug in Field D which is rather steep-sided and shaded by Ash and Grey Willow. Any open water is dominated by Duckweed *Lemna* species, with Water Plantain *Alisma plantago-aquatica* present at the margins.

# 5.2.1 Habitat map



# 5.2.2 Target notes



No.	Grid Ref	Target Note
01	ST4699 0194	Small grassland field west of stream, semi-improved and used for horse grazing with a sward of Perennial Rye-grass, Creeping Bent and Yorkshire Fog. Herbs are not very diverse with Creeping Buttercup most prominent, plus White Clover, Broad-leaved Dock, Ribwort Plantain, Greater Plantain and Creeping Thistle.
02	ST4701 0191	A short length of a sunken stream running south. It is lined by a variety of trees and shrubs including Ash, Sycamore, Pedunculate Oak, Field Maple, Hazel and Hawthorn. The ground flora includes a number of hedgebank / woodland plants including Hart's-tongue Fern, Soft Shield-fern, Broad Buckler-fern, Wood Avens, Herb Robert, Dog's Mercury, Ground Ivy, Pendulous Sedge and Wood Sedge. There are small outcrops of limestone in the stream.
03	ST4706 0192	<b>Field A</b> , an improved grassland dominated by Perennial Rye-grass with abundant Yorkshire Fog and Creeping Bent. The few herbs include abundant White Clover and occasional Creeping Buttercup, with scattered weed species such as Broad-leaved Dock, Creeping Thistle and Spear Thistle. Where there is bare ground or some poaching Daisy, Greater

No.	Grid Ref	Target Note	
		Plantain and Shepherd's Purse are present.	
04	ST4704 0197	<b>Field A</b> , northern hedge has a wide variety of woody species including Blackthorn, Hawthorn, Dogwood, Holly, Grey Willow, Ash and Sycamore. The ground flora has abundant Ivy with Hart's-tongue Fern, Soft Shield-fern and Ground Ivy. Along the margins wetland species such as Common Fleabane and Square Stalked St John's-wort.	
05	ST4726 0185	<b>Field B</b> , improved grassland with abundant Perennial Rye-grass plus Yorkshire Fog and Creeping Bent. White Clover and Creeping Buttercup are the most prominent herbs with small quantities of Stinging Nettle, Broad-leaved Dock, Creeping Thistle, Spear Thistle and Daisy.	
06	ST4726 0191	Hedge between Fields B & C. A tall hedgerow with Grey Willow, Blackthorn, Hawthorn, Ash, Field Maple, Hazel and Pedunculate Oak. It is un-fenced grazed, under and the ground layer is sparse with Red Campion, Wood Dock, Garlic Mustard, Cow Parsley, Rough Meadow- grass and False Brome.	
07	ST4727 0194	<b>Field C</b> , improved grassland dominated by Perennial Rye-grass with varying quantities of Yorkshire Fog, Creeping Bent and Cock's-foot. Creeping Buttercup and White Clover are the most prominent herbs with small quantities of Creeping Thistle, Spear Thistle, Daisy and Dandelion.	
08	ST4745 0192	<b>Field D</b> , a semi-improved species-poor field with a sward of Yorkshire Fog, Common Bent and Creeping Bent, with Perennial Rye-grass and Cock's-foot. Herbs include frequent to abundant Creeping Buttercup, Meadow Buttercup and White Clover, with smaller quantities of Ribwort Plantain, Greater Plantain and Dandelion. The eastern part of the field is fenced off and part of it is a large chicken run and a garden, the remaining grassland has a similar flora to the main field.	
09	ST4738 0193	<b>Field D</b> , the western hedgerow is a tall wide hedge with a variety of trees and shrubs including Hawthorn, Hazel, Field Maple, Ash, Elm and Dog Rose. The ground flora has abundant Ivy with Dog's Mercury, Stinging Nettle, Cleavers, Sweet Violet, Wood Avens and Cow Parsley.	
10	ST4740 0197	Hedge between Fields D & E. This hedgerow includes area that are flailed and other that are tall with only the margins cut. Trees and shrubs include frequent Hawthorn, plus Hazel, Ash, Pedunculate Oak, Holly and Elm. Ivy is abundant in the ground flora with Wood Dock, Wood Avens, Nipplewort, Red Campion, Ground Ivy and Cow Parsley.	
11	ST4751 0199	<b>Field E</b> , a semi-improved species-poor field with a sward of Yorkshire Fog, Perennial Rye-grass and Creeping Bent. Herbs include frequent to abundant Creeping Buttercup, Meadow Buttercup and White Clover, with smaller quantities of Common Sorrel and Dandelion.	

No.	Grid Ref	Target Note
12	ST4755 0199	<b>Field E</b> , hedge along Tunnel Road is tightly trimmed but has a very good range of trees and shrubs including Elm, Hawthorn, Blackthorn, Ash, Dog Rose, Wild Privet, Dogwood and Wayfaring Tree. The ground layer has abundant Ivy with Hart's-tongue Fern, Stinging Nettle, Wood Dock, Wood Avens, Cow Parsley and Hedge Woundwort.

#### 6.0 ASSESSMENT

The grasslands are all improved or semi-improved with a low diversity of herbs and are currently of **low** ecological interest. There are 1,202 metres of older hedgerow which qualify as Hedgerows Priority Habitat and Section 41 Habitat of Principal Importance in having at least one native woody species over more 80% of their length. The 135 metre length of sunken stream in the west of the site is in a natural condition with wooded margins and acts as an important ecological corridor and is therefore considered to be a feature of High Ecological Importance.

Species	Status	Habitat Potential	Future surveys
Badger	WCA	No setts or latrines noted, several animal tracks seen through the hedges, but may have been Fox or Deer	
Bats	EPS; WCA	The taller hedgerows with trees and the tree-lined sunken stream provide suitable flight-lines and foraging habitat	The owner informed me that a bat survey had been undertaken.
Dormouse	S41; EPS; WCA	The tall hedgerows with a variety of trees and shrubs are suitable habitat for Dormouse. The nearest record on the DERC database is 300 metres to the west.	Several Dormouse tubes were seen in the hedgerows.
Otter	EPS; WCA	A small section of stream is present in the west but is sub-optimal for this species.	
Water Vole	S41; WCA	A small section of stream is present in the west but is sub-optimal for this species.	
Brown Hare	S41		
Hedgehog	S41	The hedgerows and field margins support habitat for this species.	
Great Crested Newt	EPS; S41	There is one pond in Field D but is steep-sided and rather shaded and maybe sub-optimal for this species.	Note: GCN has been recorded within 100m of the site
Reptiles	S41; WCA	Slow Worm could be present around the margins of the fields and hedges.	

#### 6.1 **PROTECTED SPECIES ASSESSMENT**

#### 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 (4th Ed). C & M Floristics, Suffolk.

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

Species	Common Name	<b>Frequency</b> <sup>1</sup>
Acer campestre	Field Maple	R-O
Acer pseudoplatanus	Sycamore	R
Agrostis stolonifera	Creeping Bent	F-LA
Alisma plantago-aquatica	Water Plantain	R
Anthriscus sylvestris	Cow Parsley	O-LF
Apium nodiflorum	Fool's Water-cress	R
Asplenium scolopendrium	Hart's-tongue	R-O
Bellis perennis	Daisy	O-LF
Capsella bursa-pastoris	Shepherd's Purse	R
Carex pendula	Pendulous Sedge	R
Carex sylvatica	Wood Sedge	R
Circaea lutetiana	Enchanter's Nightshade	R
Cirsium arvense	Creeping Thistle	0
Cirsium vulgare	Spear Thistle	0
Cornus sanguinea	Dogwood	R
Corylus avellana	Hazel	0
Crataegus monogyna	Hawthorn	F
Dactylis glomerata	Cock's-foot	O-LF
Epilobium hirsutum	Greater Willowherb	R
Fraxinus excelsior	Ash	0
Geranium robertianum	Herb Robert	R
Geum urbanum	Wood Avens	R-O
Glechoma hederacea	Ground Ivy	O-LF
Hedera helix	Ivy	F
Heracleum sphondylium	Hogweed	0
Holcus lanatus	Yorkshire Fog	F-LA
Hypericum tetrapterum	Square-stalked St John's-wort	R
Ilex aquifolium	Holly	R
Juncus effusus	Soft Rush	R
Juncus inflexus	Hard Rush	R
Lapsana communis	Nipplewort	R
Ligustrum vulgare	Wild Privet	R
Lolium perenne	Perennial Rye-grass	А
Mercurialis perennis	Dog's Mercury	O-LF
Plantago lanceolata	Ribwort Plantain	R
Plantago major	Greater Plantain	0
Polystichum setiferum	Soft Shield-fern	R
Prunus spinosa	Blackthorn	O-LA
Pulicaria dysenterica	Common Fleabane	R
Quercus robur	Pedunculate Oak	0
Ranunculus acris	Meadow Buttercup	0

Species	Common Name	<b>Frequency</b> <sup>1</sup>
Ranunculus repens	Creeping Buttercup	F-LA
Rorippa nasturtium-aquaticum	Water-cress	R
Rosa canina	Dog Rose	0
Rubus fruticosus agg.	Bramble	F-LA
Rumex acetosa	Common Sorrel	0
Rumex obtusifolius	Broad-leaved Dock	0
Rumex sanguineus	Wood Dock	0
Salix cinerea	Grey Willow	0
Sambucus nigra	Elder	R
Silene dioica	Red Campion	R
Sparganium erectum	Branched Bur-reed	R
Stachys sylvatica	Hedge Woundwort	R
Tamus communis	Black Bryony	0
Taraxacum officinale agg.	Dandelion	O-LF
Trifolium repens	White Clover	F
Ulex europaeus	Common Gorse	R
Ulmus procera	English Elm	0
Urtica dioica	Stinging Nettle	O-LF
Viburnum lantana	Wayfaring-tree	R

<sup>1</sup> **D** = Dominant; **A** = Abundant; **F** = Frequent; **O** = Occasional; **R** = Rare; **L** = Local (e.g. LF = Locally Frequent)

# **APPENDIX II: Photographs**



**FIG 1.** The sunken, tree- and shrub-lined stream in the west of the site which acts an important ecological corridor.



FIG 2. View looking northwest from Field B across Field A.

Dorset Environmental Records Centre Ecological Survey Local Plan Site: West of Tunnel Road, Beaminster [BEAM03] November 2021



FIG 3. Looking east across Field B with the tall un-fenced hedgerow on the left-hand side.



FIG 4. Eastern edge of Field B, with the tall, thick hedgerow on the right-hand side which has several mature trees.



FIG 5. Looking northeast across Field D to the tall hedgerow which divides Fields D & E.