

AN ECOLOGICAL SURVEY
of
LAND NORTH OF BRADFORD ROAD,
SHERBORNE [SHER05]

for
Dorset Council

September 2021

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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.

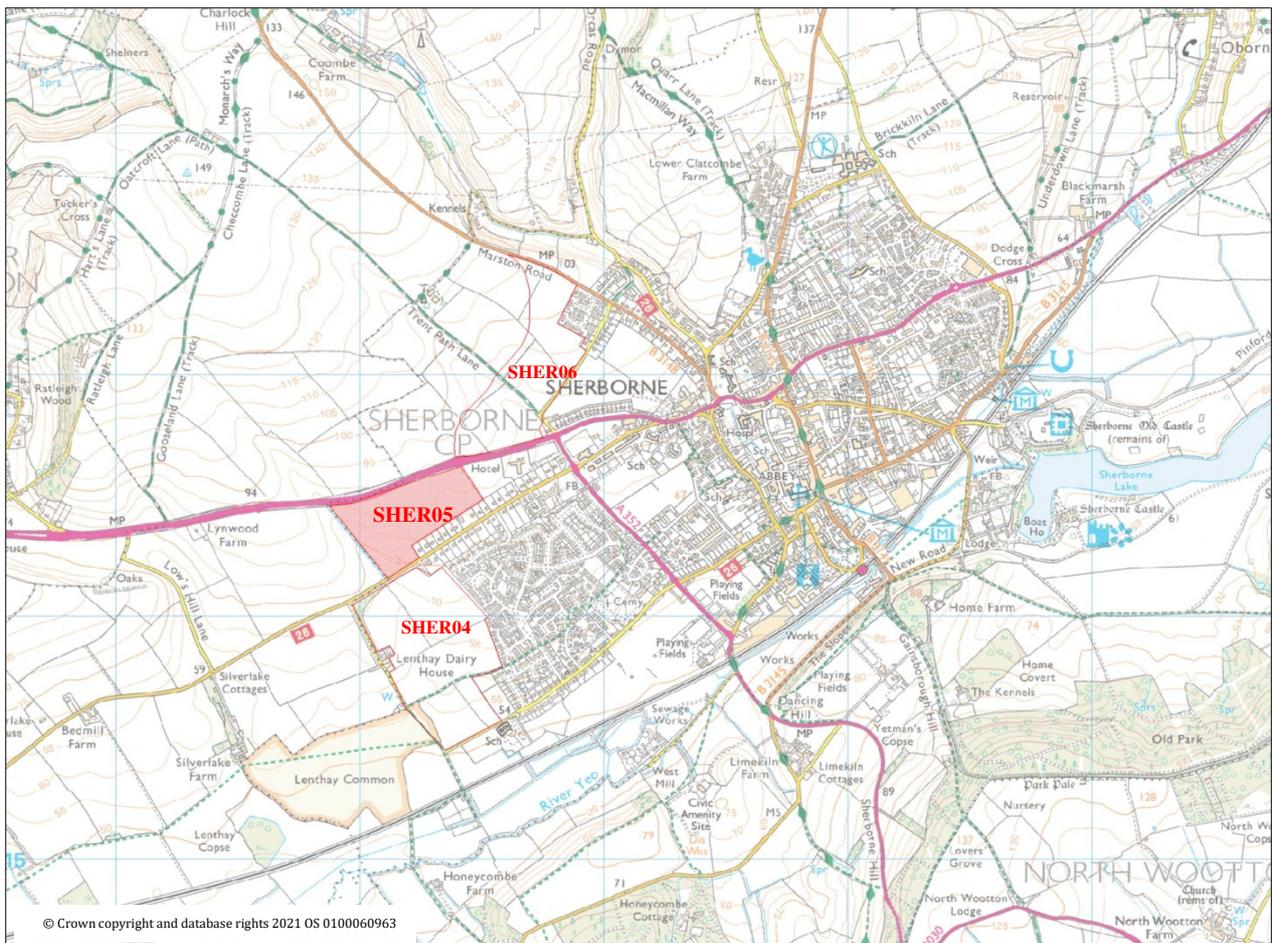
- The main field is cultivated and was a cereal crop in 2021 and therefore currently of **low ecological interest**, the edges of the cultivated area have a number of arable plants, most notably the Red Listed¹ (Vulnerable) Dwarf Spurge which is locally frequent along the northern edge. Several plants of the Near Threatened Field Scabious are present in the grass margin in the northeast corner of the field.

- The hedgerows on the eastern and western sides, totalling 687.5 metres, are diverse with a good range of woody species and qualify as hedgerows **Priority Habitat** and **Section 41 (NERC Act 2006) habitat of Principal 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 at the on 2nd September 2021 in fine but overcast 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 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:

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	Date/s of record/s
Badger	WCA	-	
Bats	EPS; WCA	Within 1-km radius	Post-2010
Dormouse	S41; EPS; WCA	Within 1-km radius	1999
Otter	EPS; WCA	Within 1-km radius	Post-2010
Water Vole	S41; WCA	-	
Brown Hare	S41	-	
Hedgehog	S41	-	
Great Crested Newt	EPS; S41	-	
Reptiles	S41; WCA	-	

4.2 PROTECTED HABITATS

None adjacent to the site.

Lowland Meadows – Section 41; UK Priority Habitat 1,100 metres to the north

Lowland Mixed Deciduous Woodland – Section 41; UK Priority Habitat 1,450 metres to the south

Lowland Calcareous Grassland – Section 41; UK Priority Habitat 1,500 metres to the southwest

4.3 PROTECTED SITES

None adjacent to the site.

Low's Hill Quarry Site of Special Scientific Interest (Geological) 880 metres to the west

5.0 RESULTS

5.1 SITE DESCRIPTION

A large agricultural field on the western edge of Sherborne situated between the A30 and Bradford Road sloping gently to the southwest. It overlies the Inferior Oolite producing a slightly calcareous clay soil with lumps of limestone near or on the surface. It was used for arable at the time of the survey and bordered on three sides by neatly trimmed hedgerows.

5.2 HABITAT DESCRIPTION

The main field

This field was a cereal crop which had been harvested at the time of the survey. There are grass margins around the edges of the fields. The edge of the crop has several arable plants including, most notably Dwarf Spurge *Euphorbia exigua* which is listed as Vulnerable on the England Red List (Stroh *et al*, 2014), this species is locally frequent particularly along the northern margin.

The grass margins comprise Perennial Rye-grass *Lolium perenne*, Creeping Bent *Agrostis stolonifera*, Cock's-foot *Dactylis glomerata*, with smaller quantities of False Oat-grass *Arrhenatherum elatius* and Red Fescue *Festuca rubra*. Herbs include a mixture of grassland and ruderal species including White Clover *Trifolium repens*, Creeping Buttercup *Ranunculus repens*, Cut-leaved Crane's-bill *Geranium dissectum*, Field Bindweed *Convolvulus arvensis*, Ribwort Plantain *Plantago lanceolata*, Creeping Thistle *Cirsium arvense*, Perennial Sow-thistle *Sonchus arvensis*, Ragwort *Jacobaea vulgare* and Autumn Hawkbit *Scorzoneroides autumnalis*. In the northeast corner a few plants of the Near Threatened Field Scabious *Knautia arvensis* were noted along the hedge margin, with Greater Knapweed *Centaurea scabiosa* and Hedge Bedstraw *Galium album* along the eastern hedge margin.

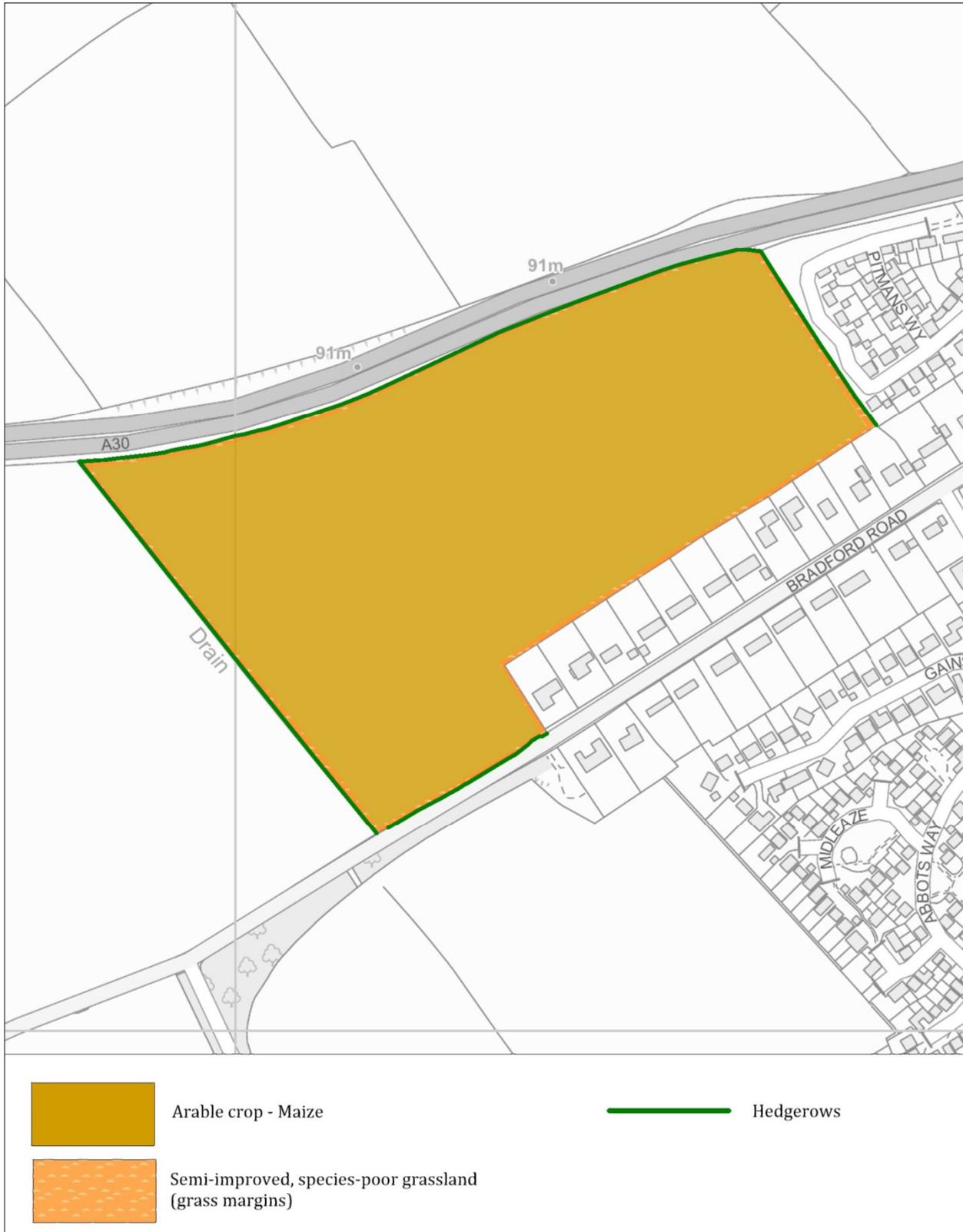
Hedgerows

The field is bordered on three sides by hedgerows. The northern hedgerow bordering the A30 is a more recent one originating from the time when the road was upgraded. It is dominated by Hawthorn *Crataegus monogyna* with only a few other species present in small quantity such as Elder *Sambucus nigra*,

The western and eastern hedgerows are older and much more varied with 12 and 11 woody species respectively including species such as Maple *Acer campestre*, Spindle *Euonymus europaeus* and Hazel *Corylus avellana* which are characteristic of older pre-enclosure hedgerows. The shaded ground layer of the hedges is dominated by Ivy *Hedera helix* with few other species present apart from scattered Cuckoo Pint

Arum maculatum. The margins have abundant Bramble *Rubus fruticosus* agg., plus species characteristic of enriched soils such as Stinging Nettle *Urtica dioica*, Cleavers *Galium aparine*, Hogweed *Heracleum sphondylium*, Cow Parsley *Anthriscus sylvestris*, Cock's-foot *Dactylis glomerata* and False Oat-grass *Arrhenatherum elatius*.

5.2.1 Habitat map



5.2.2 Target notes



No.	Grid Ref	Target Note
001	ST6222 1644	Main field. A large arable field that had a cereal crop in 2021 and had been harvested at the time of the survey. At the margins of the field there are a few typical arable plants such as Knotgrass, Scarlet Pimpernel, Sun Spurge, Common Poppy and Common Field Speedwell, locally particularly along the northern edge the more local Field Madder is locally frequent along with the Near Threatened Dwarf Spurge.
002	ST6200 1628	Western hedge, trimmed with eleven woody species noted. Blackthorn is abundant with occasional Hawthorn, Elder, Dog Rose and Wild Privet. Other species include Maple, Grey Willow, Dogwood, Hazel and English Elm. Ivy dominates the ground layer with Stinging Nettle, Cleavers, Hemlock, Hedge Bindweed, False Oat-grass at the margins with frequent Bramble.
003	ST6220 1654	Northern grass margin. Creeping Bent, Cock's-foot and False Oat-grass, with Red Fescue and Perennial Rye-grass. Herbs include locally frequent Autumn Hawkbit, plus Field Bindweed, Creeping Buttercups, Cut-leaved Crane's-bill, Ribwort

No.	Grid Ref	Target Note
		Plantain, Hogweed, Yarrow and Dandelion.
004	ST6213 1651	Northern hedge. This hedge appears to have been replanted when the A30 was widened. Hawthorn dominates with rare Maple, Elder, Privet and Sycamore. The ground layer is dominated by Ivy with few other species present except for scattered Ground Ivy and Cuckoo Pint. The margins have frequent Bramble and Dewberry, plus species of enriched soils such Cleavers, Cow Parsley, False Oat-grass and Cock's-foot. A few plants of Sweet Violet and Black Horehound were noted.
005	ST6240 1661	The hedge margin in the far northeast corner of the field has a few plants of the Near Threatened Field Scabious, plus Hedge Bedstraw and Stinking Iris.
006	ST6245 1655	The Eastern hedge is tall, mature and varied with a good number of woody species. Blackthorn is abundant and occasional Maple, Elder, Hazel, Hawthorn, Elder and Rose, plus rare Dogwood, Wayfaring Tree, Spindle, Ash and Common Buckthorn. The ground layer is dominated by Ivy with Cock's-foot, False Oat-grass and Field Bindweed at the margins. A few plants of Greater Knapweed are also present.
007	ST6218 1619	South-western hedge with abundant English Elm plus Elder, Ash, Hawthorn, Dog Rose, Wild Privet and planted Sycamore. The margins have abundant Stinging Nettle, Cock's-foot and False Oat-grass.

6.0 ASSESSMENT

The field is regularly cultivated and is currently of **low ecological interest** although the edges have a number of arable plants including the Red Listed (Vulnerable) Dwarf Spurge which is locally frequent. The three sections of older hedgerows covering 687.5 metres, are diverse with a very good range of woody species and qualify as **Priority Habitat** and Section 41 (NERC Act 2006) habitat of Principal Importance.

6.1 PROTECTED SPECIES ASSESSMENT

Species	Status	Habitat Potential	Future surveys
Badger	WCA	No setts or latrines noted. Several mammal tracks noted through the hedges.	
Bats	EPS; WCA	No mature trees present and the hedges are mostly trimmed, the habitat is currently sub-optimal for bats.	
Dormouse	S41; EPS; WCA	The species-rich hedges have potential to support Dormouse.	A survey appears to be in progress with several 'dormouse tubes' noted in the hedges.
Otter	EPS; WCA	No water present on the site.	
Water Vole	S41; WCA	No water present on the site.	
Brown Hare	S41	Suitable habitat present.	
Hedgehog	S41	Suitable habitat present, especially bordering the gardens in the south of the field and in the hedges.	
Great Crested Newt	EPS; S41	No water present on the site.	
Reptiles	S41; WCA	Suitable habitat for Slow Worm and possibly Common Lizard around the margins, particularly those with a southerly or easterly aspect.	

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.

Stroh, P.A., Leach, S.J., August, T.A., Walker, K.J., Pearman, D.A., Rumsey, F.J., Harrower, C.A., Fay, M.F., Martin, J.P., Pankhurst, T., Preston, C.D. & Taylor, I. 2014 *A Vascular Plant Red List for England*. Botanical Society of Britain and Ireland, Bristol.

APPENDIX I: Plant species recorded

Species	Common Name	Status	Frequency
<i>Acer campestre</i>	Field Maple	.	R
<i>Acer pseudoplatanus</i>	Sycamore		R
<i>Achillea millefolium</i>	Yarrow		R
<i>Agrimonia eupatoria</i>	Agrimony		R
<i>Agrostis stolonifera</i>	Creeping Bent		F-LA
<i>Anthriscus sylvestris</i>	Cow Parsley		O
<i>Arrhenatherum elatius</i>	False Oat-grass		O-LA
<i>Arum maculatum</i>	Cuckoo Pint		R
<i>Brachypodium sylvaticum</i>	False Brome		R
<i>Calystegia sepium</i>	Hedge Bindweed		O-LF
<i>Carduus acanthoides</i>	Wetted Thistle		R
<i>Centaurea scabiosa</i>	Greater Knapweed		R
<i>Chaerophyllum temulum</i>	Rough Chervil		R
<i>Cirsium arvense</i>	Creeping Thistle		O
<i>Cirsium vulgare</i>	Spear Thistle		O
<i>Convolvulus arvensis</i>	Field Bindweed		F-LA
<i>Cornus sanguinea</i>	Dogwood		R
<i>Crataegus monogyna</i>	Hawthorn	.	O-LA
<i>Dactylis glomerata</i>	Cock's-foot		O-LF
<i>Elytrigia repens</i>	Common Couch		O-LF
<i>Euonymus europaeus</i>	Spindle		R
<i>Euphorbia exigua</i>	Dwarf Spurge	VU; DN	O-LF
<i>Euphorbia helioscopia</i>	Sun Spurge		R
<i>Festuca rubra</i>	Red Fescue		O
<i>Fraxinus excelsior</i>	Ash		R
<i>Galium album</i>	Hedge Bedstraw		R
<i>Galium aparine</i>	Cleavers		LF
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill		O-LF
<i>Geranium molle</i>	Dove's-foot Crane's-bill		O-LF
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill		R-O
<i>Glechoma hederacea</i>	Ground Ivy		O
<i>Hedera helix</i>	Ivy		F-LA
<i>Heracleum sphondylium</i>	Hogweed		O
<i>Iris foetidissima</i>	Stinking Iris		R
<i>Jacobaea vulgare</i>	Ragwort		R
<i>Knautia arvensis</i>	Field Scabious	NT	R
<i>Lamium album</i>	White Dead-nettle		R
<i>Leontodon autumnalis</i>	Autumn Hawkbit		O-LF
<i>Ligustrum vulgare</i>	Wild Privet		R
<i>Lolium perenne</i>	Perennial Rye-grass		O-LF
<i>Plantago lanceolata</i>	Ribwort Plantain		O

Species	Common Name	Status	Frequency
<i>Plantago major</i>	Greater Plantain		O
<i>Poa trivialis</i>	Rough Meadow-grass		O
<i>Prunus spinosa</i>	Blackthorn		O
<i>Ranunculus repens</i>	Creeping Buttercup		O
<i>Rhamnus cathartica</i>	Common Buckthorn		R
<i>Rosa canina</i>	Dog Rose		O
<i>Rubus caesius</i>	Dewberry		O-LF
<i>Rubus fruticosus</i> agg.	Bramble		F
<i>Rumex obtusifolius</i>	Broad-leaved Dock		O
<i>Salix cinerea</i>	Grey Willow		R
<i>Sambucus nigra</i>	Elder		O
<i>Sherardia arvensis</i>	Field Madder		R-O
<i>Sonchus arvensis</i>	Perennial Sow-thistle		O
<i>Sonchus asper</i>	Prickly Sow-thistle		O
<i>Tamus communis</i>	Black Bryony		R
<i>Taraxacum officinale</i> agg.	Dandelion		O
<i>Trifolium repens</i>	White Clover		O
<i>Ulmus procera</i>	English Elm		O
<i>Urtica dioica</i>	Stinging Nettle		O-LF
<i>Veronica persica</i>	Common Field Speedwell		O-LF
<i>Viburnum lantana</i>	Wayfaring-tree		R

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

APPENDIX II: Photographs



FIG 1. ST6238 1661. General view across site from northeast corner looking west – southwest.



FIG 2. ST6210 1653. Northern margin of field with the Red Listed Dwarf Spurge frequent on the edge of the cultivated area indicated by the red arrows.



FIG 3. ST6239 1661. Northeast corner of field with several plants of the Red Listed Field Scabious in the hedge margin.