

AN ECOLOGICAL SURVEY
of
LAND AT BARTON FARM,
SHERBORNE
[SHER04]

for
Dorset Council

November 2021

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Version control			
1	Report prepared by:	Bryan Edwards	26/11/21
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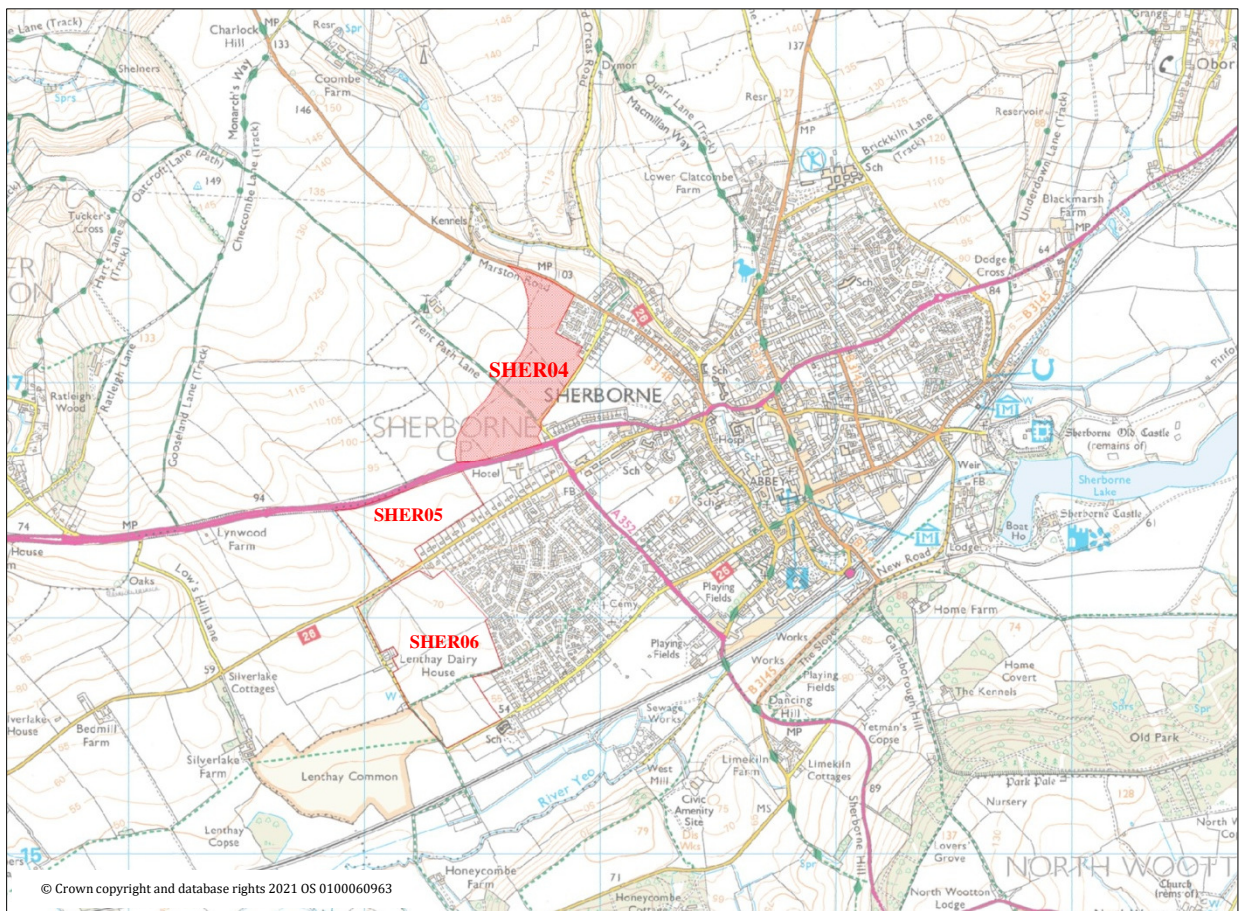
SUMMARY

- 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 fields are used for arable crops and are considered to be of **Low Ecological Importance** at the current time.
- The hedgerows have a diverse range of woody species including Field Maple, Hazel, Spindle and Buckthorn which are more typical of older pre-Inclosure Act hedges. **1978 metres** of hedgerow qualify as **Priority Habitat** and **Section 41 Habitat of Principal Importance** in supporting one or more native woody species over at least 80% of their length.
- The double-hedged Trent Path Track is of **Moderate Ecological Interest** and provides an important ecological corridor through an otherwise intensively farmed arable landscape.

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 2nd September 2021 in fine weather. The area was walked and a plant species list compiled with frequencies assigned to each species using the DAFOR scale¹. 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).

¹ 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 metres
Bats	EPS; WCA	Within 100 metres
Dormouse	S41; EPS; WCA	-
Otter	EPS; WCA	-
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 205 metres to the northwest

Lowland Mixed Deciduous Woodland – Section 41; UK Priority Habitat 1,920 metres to the south

Lowland Calcareous Grassland – Section 41; UK Priority Habitat 1,450 metres to the southeast

4.3 PROTECTED SITES

None adjacent to the site.

Sandford Lane Quarry Site of Special Scientific Interest (Geological) 270 metres to the north

5.0 RESULTS

5.1 SITE DESCRIPTION

The site lies on the northwest edge of Sherborne between the A30 and the B3148 Marston Road and overlies the Inferior Oolite which produces a slightly calcareous clay soil. The fields are all agriculturally improved and used for arable crops. The fields have grass margins as part of a Middle Tier Countryside Stewardship Scheme. The fields are split by trimmed hedgerows, with part of the double-hedged bridleway Trent Path Lane running through the site.

5.2 HABITAT DESCRIPTION

Fields

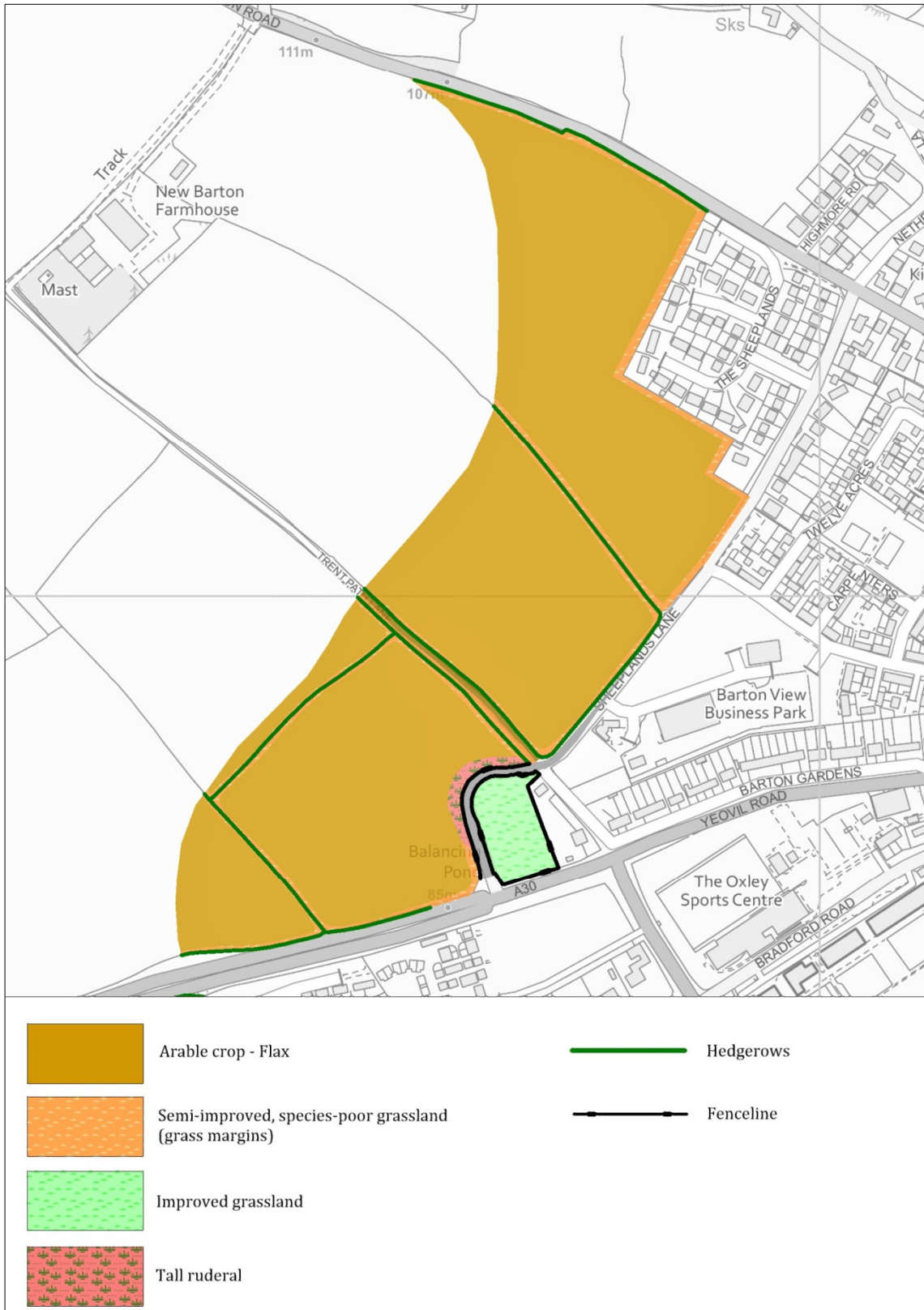
The fields were all arable and had been harvested at the time of the survey. They were all flax stubble except for the western most field which was ploughed. There were very few other plants present in the stubble apart from Groundsel *Senecio vulgaris*. All the fields had grass margins that had been topped, these were dominated by Creeping Bent *Agrostis stolonifera*, False Oat-grass *Arrhenatherum elatius* and Cock's-foot *Dactylis glomerata* with smaller quantities of Red Fescue *Festuca rubra* and Soft Brome *Bromus hordeaceus*. Herbs are generally sparse with White Clover *Trifolium repens*, Hogweed *Heracleum sphondylium*, Cut-leaved Crane's-bill *Geranium dissectum*, Dove's-foot Crane's-bill *Geranium molle*, Stinging Nettle *Urtica dioica* and Dandelion *Taraxacum officinale* agg.

Hedgerows & Trent Path Lane

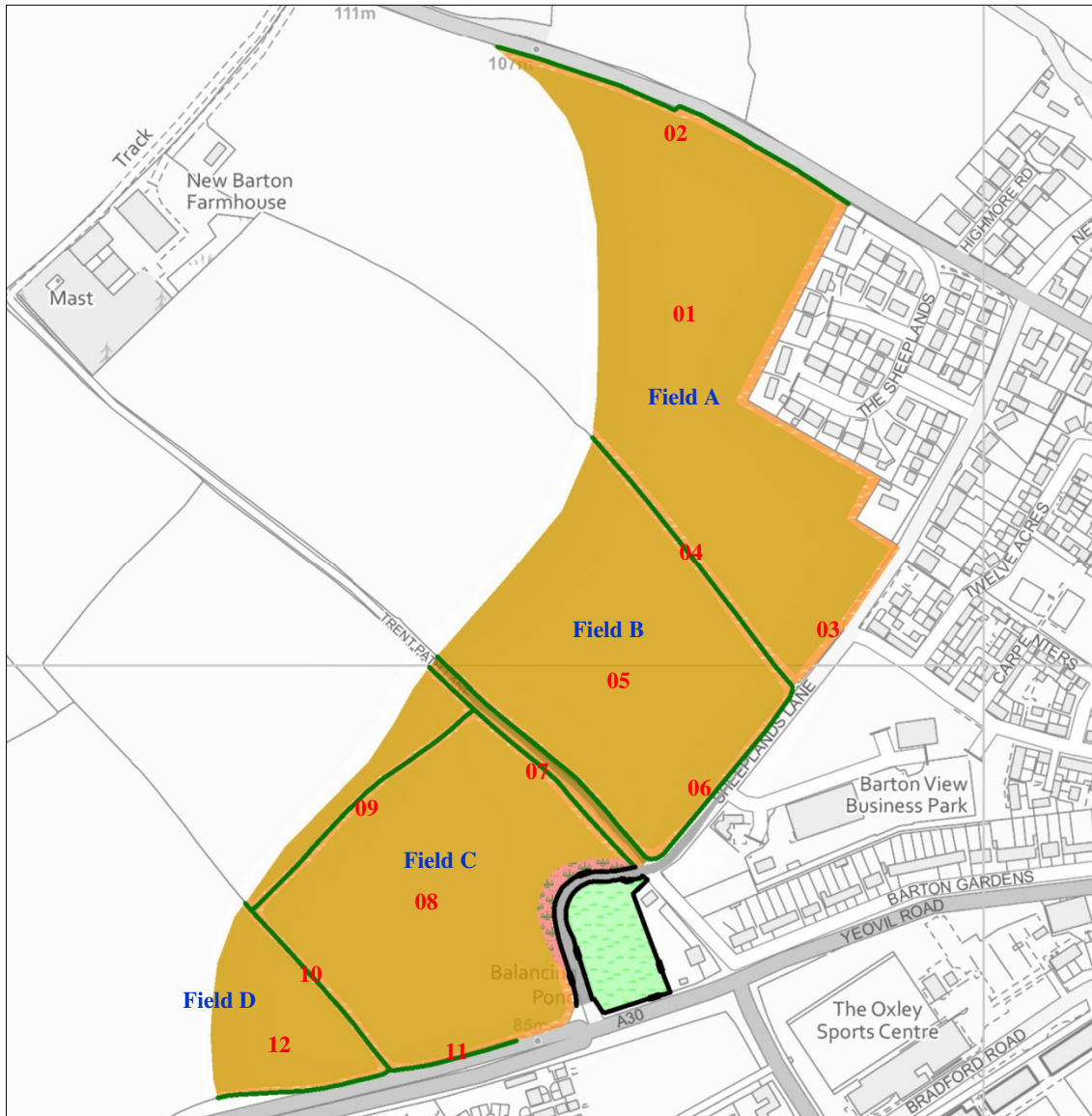
All the hedgerows are trimmed and quite species-rich with a good range of woody shrubs. Blackthorn *Prunus spinosa* is the most abundant shrub with Dogwood *Cornus sanguinea* and Elm *Ulmus* species locally abundant and Dog Rose *Rosa canina* agg. frequent. Other species present include Ash *Fraxinus excelsior*, Wild Privet *Ligustrum vulgare*, Spindle *Euonymus europaeus*, Wayfaring Tree *Viburnum lantana*, Common Buckthorn *Rhamnus cathartica*, Hazel *Corylus avellana* and Field Maple *Acer campestre*. Climbers include frequent Bramble *Rubus fruticosus* and Dewberry *Rubus caesius*, Traveller's Joy *Clematis vitalba* and Black Bryony *Tamus communis*. Beneath the hedges there is a dense layer of Ivy *Hedera helix* with few other species present apart from scattered Cuckoo Pint *Arum maculatum*. The margins of the hedge are typical of agricultural land with species characteristic of nutrient enrichment such as Stinging Nettle *Urtica dioica*, Cleavers *Galium aparine*, Hogweed *Heracleum sphondylium*, Cow Parsley *Anthriscus sylvestris*, False Oat-grass *Arrhenatherum elatius* and Cock's-foot *Dactylis glomerata*.

The Trent Path Track is a double-hedged lane and bridleway which runs northwest through the site. The hedgerows are trimmed and support the same range of woody shrubs as described above. The margins of the track have coarse grassland with abundant False Oat-grass *Arrhenatherum elatius* and Cock's-foot *Dactylis glomerata*, with smaller quantities of Red Fescue *Festuca rubra*, Tall Fescue *Schedonorus arundinacea* and Rough Meadow-grass *Poa trivialis*. Herbs include those species typical of nutrient rich ground such as Hogweed *Heracleum sphondylium*, Cow Parsley *Anthriscus sylvestris* and Mugwort *Artemisia vulgaris*, plus those found on hedgebanks and field margins including Hedge Bedstraw *Galium album*, White Dead-nettle *Lamium album*, Hedge Woundwort *Stachys sylvatica* and Black Horehound *Ballota nigra*. In one area there was a number of grassland species with Meadow Vetchling *Lathyrus pratensis*, Agrimony *Agrimonia eupatoria*, Wild Basil *Clinopodium vulgare* and Greater Knapweed *Centaurea scabiosa*.

5.2.1 Habitat map



5.2.2 Target notes



No.	Grid Ref	Target Note
01	ST6275 1727	Field A. Harvested field of flax stubble with very few plants present apart from Groundsel. The grass margins are dominated by species-poor grassland with Creeping Bent, Cock's-foot, False Oat-grass and Perennial Rye-grass.
02	ST6278 1742	Field A, Road hedgerow trimmed with abundant Blackthorn and locally abundant Dogwood, plus Hawthorn, Elder, Ash, Dog Rose, Elder and planted Sycamore. The hedge margin has frequent Cow Parsley, Hogweed and Field Bindweed, plus Cleavers, Stinging Nettle and Cock's-foot.

No.	Grid Ref	Target Note
03	ST6279 1712	Field A , Southern hedgerow dominated by Blackthorn with frequent Dogwood and occasional Hawthorn, Field Maple, Wild Privet and Dog Rose. Margins have species typical on enriched soils similar to the roadside hedge described above.
04	ST6289 1703	Hedgerow between Fields A & B . Abundant Blackthorn with frequent Dog Rose, and occasional Hazel, Dogwood, Wild Privet, and Elder; Wayfaring Tree and Spindle also noted. The margins have abundant Cow Parsley and locally abundant Stinging Nettle plus Cleavers, False Oat-grass and Field Bindweed.
05	ST6268 1703	Field B . Harvested field of flax stubble with very few plants present apart from Groundsel.
06	ST6279 1691	Field B . Southern hedgerow very diverse with 12 native woody species present. Blackthorn abundant with Dogwood and English Elm locally abundant, plus Elder, Dog Rose, Field Maple, Ash and Wild Privet. Buckthorn, Spindle and Wayfaring Tree all present in small quantity. The margins generally has species characteristic of enriched soils similar to those abundant but on the road side Hedge Bedstraw, Wild Basil, Yarrow and False Brome were noted.
07	ST6272 1684 – 6256 1700	Trent Path Track . The two hedges have a good range of woody species with abundant Blackthorn and frequent to locally frequent Dog Rose, Dogwood and Elder. Species characteristic of older hedges such as Hazel, Field Maple, Buckthorn, Spindle and Wayfaring Tree are present in small quantity. On the west side of the track there is a wide band of coarse vegetation which narrows as you go north. False Oat-grass, Cock's-foot, Cow Parsley, Hogweed and Stinging Nettle are all locally abundant with Field Bindweed and Hedge Bindweed also prominent. Species typical of hedgebanks such Hedge Woundwort, Black Horehound, White Dead-nettle and False Brome are present locally. In one area there is a more diverse grassland flora with Meadow Vetchling, Agrimony, Wild Basil and Greater Knapweed.
08	ST6255 1682	Field C . Harvested field of flax stubble with very few other plants present. The grass margins are dominated by Creeping Bent, False Oat-grass and Red Fescue, with scattered herbs including Cut-leaved Crane's-bill, Hogweed, Stinging Nettle and Dandelion. In the southeast the sloping margins by the new fence are dominated by Stinging Nettle.
09	ST6250 1689	Field C . Northern hedgerow has abundant Blackthorn and suckering English Elm with Hawthorn, Elder, Dog Rose, Hazel and Field Maple. The margin has abundant Cow Parsley, Stinging Nettle, Cleavers and Field Bindweed.

No.	Grid Ref	Target Note
10	ST6247 1674	Field C. Western hedgerow with abundant Blackthorn and frequent Elder, plus Hawthorn, Dog Rose, Hazel, Wild Privet, Ash and Field Maple. Stinging Nettle is abundant along the margin with Cleavers, Field Bindweed, Cow Parsley, Hogweed and False Oat-grass.
11	ST6256 1668	Field C. Roadside hedgerow with abundant Blackthorn plus Hawthorn, Dog Rose, Dogwood, Elder, Ash, Field Maple and Wayfaring Tree. An Apple tree is present in the west. The margins support species of nutrient-rich soils as described above.
12	ST6247 1669	Field D. This field had been ploughed at the time of the survey leaving narrow margins of species-poor grassland similar to those described above.

6.0 ASSESSMENT

The field are all regularly cultivated and had a flax crop this year, and are currently considered to be of **Low Ecological Interest**. The hedgerows all have a very good range of woody species and 1,978 metres qualify as **Hedgerows Priority Habitat** and **Section 41 Habitat of Principal Importance** under the NERC Act (2006). Additionally the double-hedged Trent Path Lane is an important ecological corridor with grassland species present between the track and the hedges and is of **Moderate Ecological Interest**.

6.1 PROTECTED SPECIES ASSESSMENT

Species	Status	Habitat Potential	Future surveys
Badger	WCA	No setts or latrines seen. Several mammal tracks noted through hedges which may be this species or Fox.	
Bats	EPS; WCA	The low trimmed hedges with no trees do not provide optimal forage habitat for bats. The double-hedged Trent Path Lane may be more suitable.	
Dormouse	S41; EPS; WCA	The diverse hedgerows, particularly along Trent Path Lane, provide suitable habitat for this species	Several Dormouse tubes were noticed in the hedges, presumably from an ongoing survey.
Otter	EPS; WCA	No water or suitable habitat present.	
Water Vole	S41; WCA	No water or suitable habitat present.	
Brown Hare	S41	Suitable habitat present.	
Hedgehog	S41	Suitable habitat present along Trent Path Lane.	
Great Crested Newt	EPS; S41	No water or suitable habitat present.	
Reptiles	S41; WCA		

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

Species	Common Name	Frequency ¹
<i>Acer campestre</i>	Field Maple	R-O
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Achillea millefolium</i>	Yarrow	R
<i>Agrimonia eupatoria</i>	Agrimony	R
<i>Agrostis stolonifera</i>	Creeping Bent	O-LF
<i>Anthriscus sylvestris</i>	Cow Parsley	O-LA
<i>Arctium sp.</i>	Burdock species	R
<i>Arrhenatherum elatius</i>	False Oat-grass	F-LA
<i>Arum maculatum</i>	Cuckoo Pint	O
<i>Ballota nigra</i>	Black Horehound	R
<i>Brachypodium sylvaticum</i>	False Brome	R
<i>Calystegia sepium</i>	Hedge Bindweed	O-LF
<i>Centaurea scabiosa</i>	Greater Knapweed	R
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cirsium vulgare</i>	Spear Thistle	O
<i>Clinopodium vulgare</i>	Wild Basil	R
<i>Conium maculatum</i>	Hemlock	R
<i>Convolvulus arvensis</i>	Field Bindweed	O-LF
<i>Cornus sanguinea</i>	Dogwood	O
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Dipsacus fullonum</i>	Teasel	R
<i>Elytrigia repens</i>	Common Couch	O
<i>Euonymus europaeus</i>	Spindle	O
<i>Festuca arundinacea</i>	Tall Fescue	R-LF
<i>Festuca rubra</i>	Red Fescue	R-O
<i>Fraxinus excelsior</i>	Ash	O
<i>Galium album</i>	Hedge Bedstraw	R
<i>Galium aparine</i>	Cleavers	F
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill	O
<i>Geranium molle</i>	Dove's-foot Crane's-bill	O
<i>Glechoma hederacea</i>	Ground Ivy	O
<i>Hedera helix</i>	Ivy	F-LA
<i>Heracleum sphondylium</i>	Hogweed	F
<i>Hypericum perforatum</i>	Perforate St John's-wort	R
<i>Jacobaea vulgare</i>	Ragwort	R
<i>Lamium album</i>	White Dead-nettle	R
<i>Lathyrus pratensis</i>	Meadow Vetchling	R
<i>Leontodon autumnalis</i>	Autumn Hawkbit	O
<i>Ligustrum vulgare</i>	Wild Privet	O
<i>Lolium perenne</i>	Perennial Rye-grass	O-LA

Species	Common Name	Frequency ¹
<i>Picris echioides</i>	Bristly Oxtongue	R
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Plantago major</i>	Greater Plantain	R
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Prunus spinosa</i>	Blackthorn	F-LA
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Rhamnus cathartica</i>	Common Buckthorn	R
<i>Rosa canina</i>	Dog Rose	O
<i>Rubus caesius</i>	Dewberry	O
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Sambucus nigra</i>	Elder	O
<i>Sonchus arvensis</i>	Perennial Sow-thistle	O
<i>Sonchus asper</i>	Prickly Sow-thistle	O
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Tamus communis</i>	Black Bryony	O
<i>Taraxacum officinale</i> agg.	Dandelion	O
<i>Trifolium repens</i>	White Clover	O-LF
<i>Ulmus procera</i>	English Elm	O-LA
<i>Urtica dioica</i>	Stinging Nettle	F-LA
<i>Veronica persica</i>	Common Field Speedwell	O-LF
<i>Viburnum lantana</i>	Wayfaring-tree	R-O

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

APPENDIX II: Photographs



FIG 01, ST6270 1717. Field A looking north across the site.



FIG 02, ST6270 1717. Field A looking southeast showing typical habitat for the site with flax stubble, grass margin and trimmed hedgerow.



FIG 03, ST6261 1695. Trent Path Lane, looking southeast down the track towards Sherborne.



FIG 04, ST6258 1698. Trent Path Lane, in the foreground on the left is an area of richer grassland