

AN ECOLOGICAL SURVEY
of
**LAND NORTH OF AZALEA ROUNDABOUT,
WEST MOORS**
[WM01]

for
Dorset Council
November 2021

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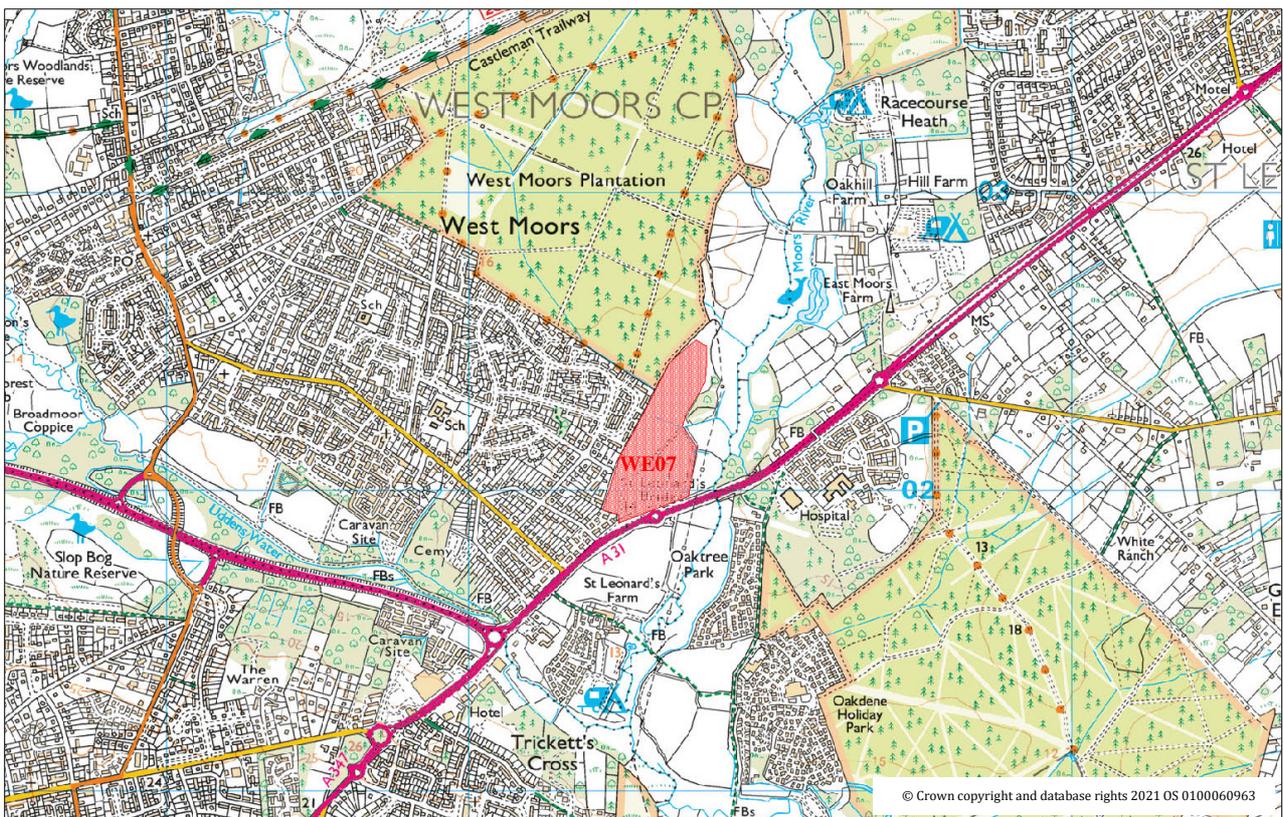
SUMMARY

- 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 grasslands are all improved and semi-improved, species-poor and are currently of **Low Ecological Importance**.
- The **462.9 metres** of hedgerow does not have a diverse range of woody trees and shrubs, partly due to acid sandy soils, but do qualify as **Hedgerows Priority Habitat** and **Section 41 habitat of Principal Importance**.
- The hedgerows have many mature Oak trees and there are a number of veterans which support four Dorset Notable lichens and have holes and hollows which are suitable for bats.

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 16th October 2021 in overcast 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 1-km 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	-
Reptiles	S41; WCA	-

4.2 PROTECTED HABITATS

Lowland Heathland – Section 41; UK Priority Habitat	280 metres to the east
Lowland Dry Acid Grassland – Section 41; UK Priority Habitat	476 metres to the east
Wet Woodland – Section 41; UK Priority Habitat	492 metres to the east

4.3 PROTECTED SITES

Dorset Heaths Special Area of Conservation (SAC)	715 metres to the south
Dorset Heathlands Special Protection Area (SPA)	715 metres to the south
Dorset Heathlands RAMSAR	715 metres to the south
Moors Rivers System Site of Special Scientific Interest (SSSI)	Adjacent - to the west

5.0 RESULTS

5.1 SITE DESCRIPTION

The site lies on the south-eastern edge of West Moors, north of the A35, and on the western side of the Moors River. It overlies the Branksome Sands of the Poole Formation with superficial soils of River Terrace Gravels which produce sandy free draining soils, although the eastern side is influenced by alluvial deposits in the Moors River corridor and is slightly damper. The fields are split by hedgerows and / or ditches and are bordered on the west side by houses and in the north by West Moors plantation.

5.2 HABITAT DESCRIPTION

Grassland

Four of the fields are improved grassland and are Perennial Rye-grass *Lolium perenne* ley with small quantities of Cock's-foot *Dactylis glomerata*, Yorkshire Fog *Holcus lanatus*, Common Bent *Agrostis capillaris* and Creeping Bent *Agrostis stolonifera*. Scattered clumps of Soft Rush *Juncus effusus* are present in damper areas. Herbs are few and generally restricted to scattered patches or plants of Creeping Buttercup *Ranunculus repens*, White Clover *Trifolium repens* and Dandelion *Taraxacum officinale* agg., with species found on more nutrient-rich or disturbed soils such as Chickweed *Stellaria media*, Shepherd's Purse *Capsella bursa-pastoris*, Broad-leaved Dock *Rumex obtusifolius* and Creeping Thistle *Cirsium arvense*. In a few places there are plants of acid sandy ground including Sheep's Sorrel *Rumex acetosella*, Common Stork's-bill *Erodium cicutarium* and Common Cat's-ear *Hypochaeris radicata*.

Hedgerows

The hedgerows are not particularly diverse in terms of the number woody species but are of interest. They have mature or veteran Pedunculate Oak *Quercus robur* over a dense understorey of mature Holly *Ilex aquifolium*. Other species include Hawthorn *Crataegus monogyna*, Rowan *Sorbus aucuparia* and Downy Birch *Betula pubescens*. The dense Holly understorey shaded the ground layer which is sparsely vegetated, with any lighter gaps having Bracken *Pteridium aquilinum*, Bramble *Rubus fruticosus* agg., Honeysuckle *Lonicera periclymenum*, plus Common Bent *Agrostis capillaris*, Yorkshire Fog *Holcus lanatus*, Creeping Soft-grass *Holcus mollis*, Wavy Hair-grass *Deschampsia flexuosa*, Greater Stitchwort *Stellaria holostea*, Foxglove *Digitalis purpurea* and Wood Sage *Teucrium scorodonia*. Within the hedges there are a number of veteran oak trees which have features such as hollow trucks, holes, splits and dead wood, providing habitat for bats, breeding birds and invertebrates.

Other habitats

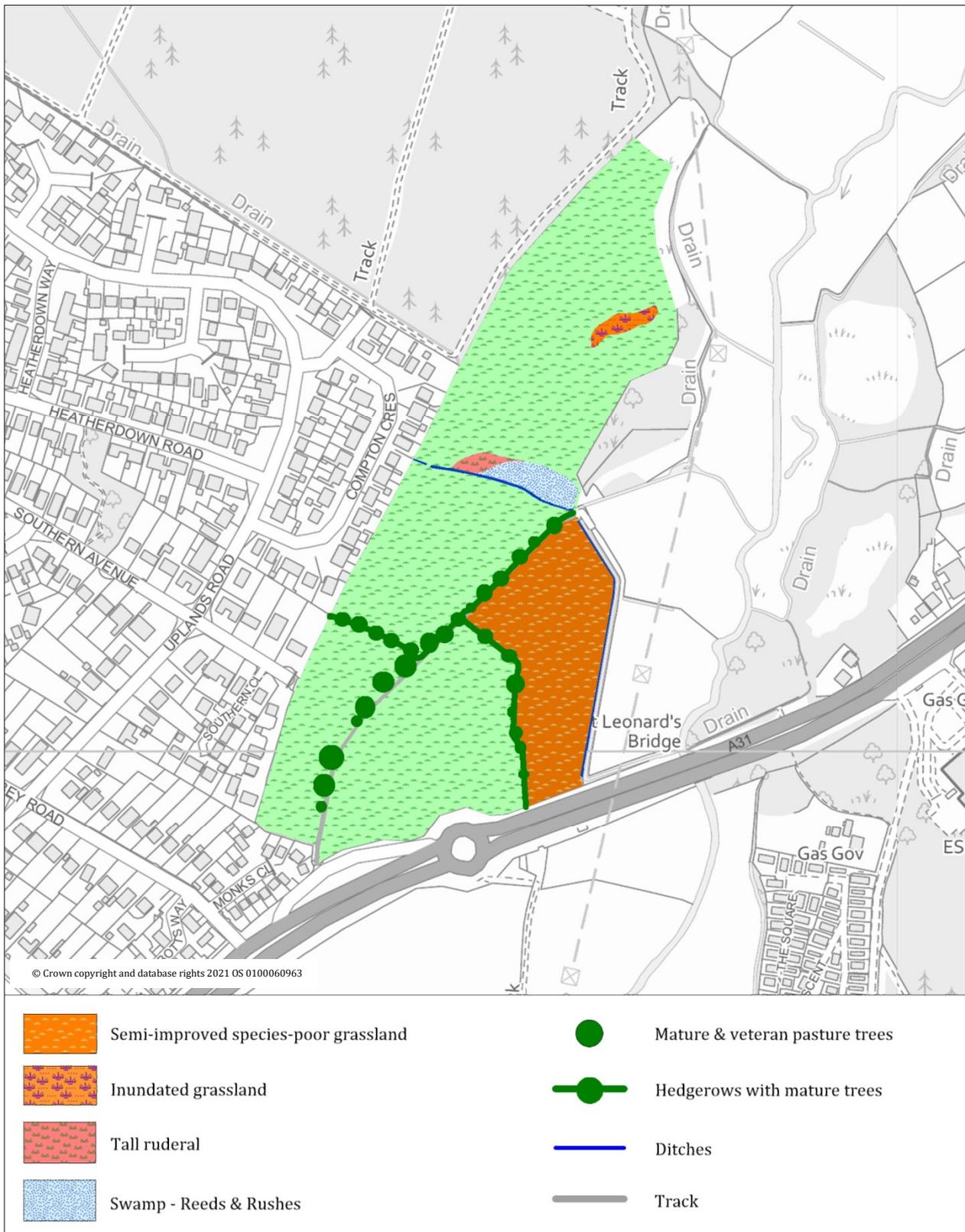
Wet area – Field E

At the southern end of the field is a wet area which has abundant Soft Rush *Juncus effusus* and in the wettest areas stands of Common Reed *Phragmites australis*. There are several Grey Willow *Salix cinerea* here and along the ditch, which also has Downy Birch *Betula pubescens*, Holly *Ilex aquifolium* and Common Gorse *Ulex europaeus*.

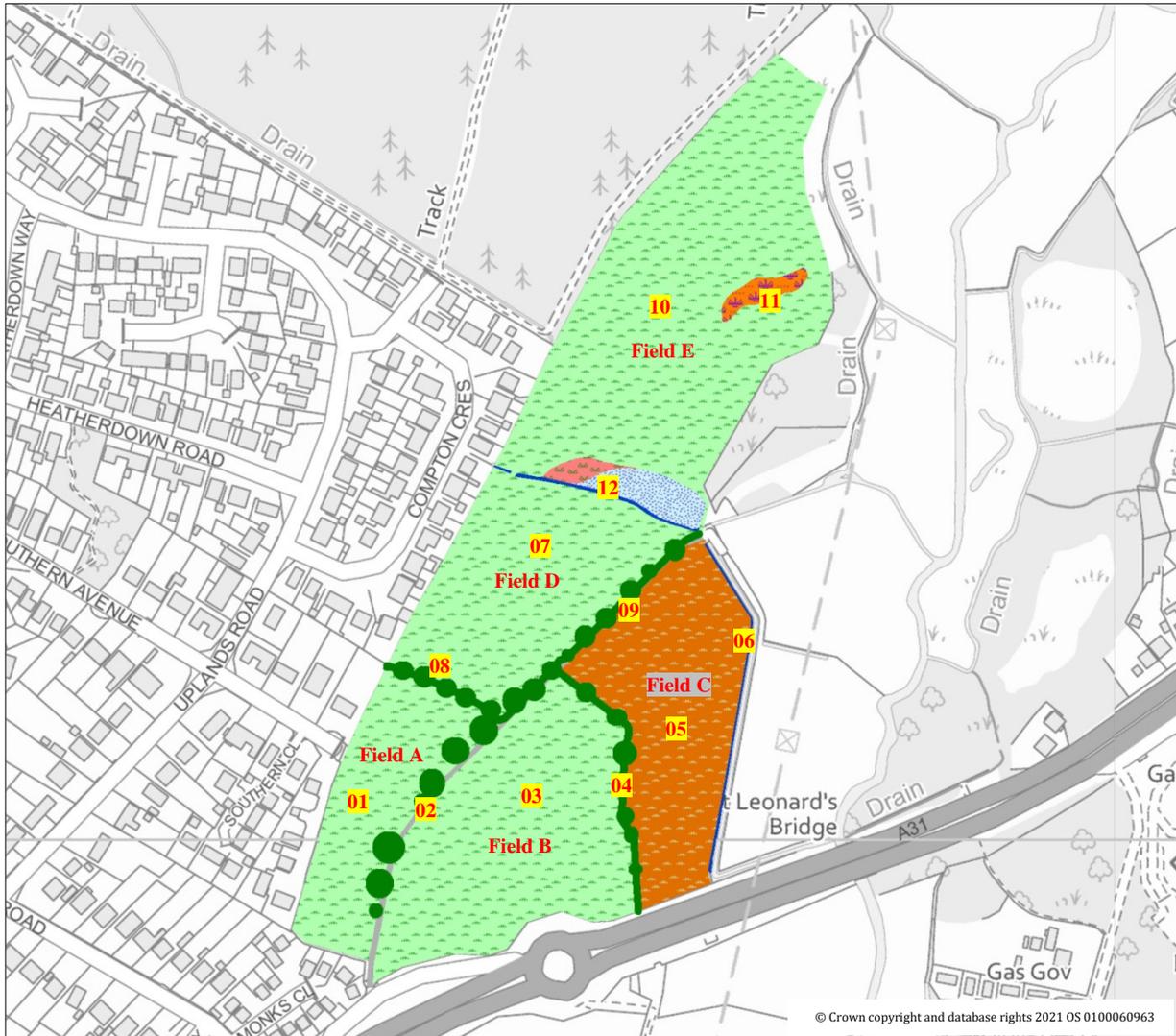
Line of trees

Between Fields A and B is a track with a line of Pedunculate Oak trees on the west side. Presumably these are remnants from a hedgeline where the understorey has been removed. At least two of the trees are veterans and because the trunks are open to light they have a good coverage of epiphytic lichens. Most of the species are widespread but a number of local species are present, including on the sunlit side *Pertusaria coccodes* and *Rinodina roboris*. The drier eastern and northern sides have species characteristic of dry bark on veteran Oaks including *Pachnolepia pruinata* and *Dendrographa decolorans*, plus notably *Cresponea premnea* and *Inoderma subabietinum*.

5.2.1 Habitat map



5.2.2 Target notes



No.	Grid Ref	Target Note
01	SU0949 0202	Field A. A small field with an improved grassland ley dominated by Perennial Ryegrass with few other species present apart from White Clover. On the bare sandy patches there is Common Chickweed, Common Cat's-ear and Annual Meadow-grass.
02	SU0953 0203	Line of trees between fields A & B, probably part of former hedgerow, where the shrubs have been cleared. The Oaks are mature with at least two veterans that have trunk hollowing, holes and dead wood. Several have a good coverage of epiphytic lichens including four Dorset Notables, three of which <i>Cresponia premea</i> , <i>Inoderma subabietinum</i> , and <i>Rinodina roboris</i> , are classed as International Responsibility, and are associated with veteran trees.

No.	Grid Ref	Target Note
03	SU0958 0200	Field B. An improved grassland field with Perennial Ryegrass dominated ley with few other species apart from Creeping Buttercup, White Clover and Dandelion. In a few places on the bare sandy ground there are species found in acid grassland such as Common Stork's-bill, Dove's-foot Crane's-bill, Sheep's Sorrel and Common Cat's-ear.
04	SU0967 0204	Hedgerow between Fields B & C. Mature Oaks over dense Holly with rare Hawthorn and Common Gorse; several of the Oak have features of veterans. Bramble is frequent and there are patches of Bracken. The ground flora is restricted by the soils and the shade with scattered Garlic Mustard, Honeysuckle, Foxglove, Wood Sage, Common Bent and Creeping Soft-grass.
05	SU0970 0209	Field C. This field is slightly lower and damper than the rest and probably less improved, but the grassland is still species-poor. The sward has abundant Yorkshire Fog and Common Bent with patchy Perennial Rye-grass, and rare Red Fescue and Soft Rush. There are few herbs apart from Creeping Buttercup, and scattered plants of Cuckoo Flower in the damper areas.
06	SU0975 0211	Field C, ditch on east side of the field which is lined by Grey Willow, with rare Downy Birch, Pedunculate Oak, Common Gorse and Guelder Rose. The ditch has frequent Soft Rush and Floating Sweet-grass, plus Lesser Spearwort, Water-pepper, Gypsywort, Branched Bur-reed, Yellow Iris and the local Cyperus Sedge.
07	SU0959 0217	Field D. An improved grassland ley dominated by Perennial Rye-grass with occasional or patchy Cock's-foot and Yorkshire Fog. There are few herbs apart from Creeping Buttercup and White Clover with scattered Broad-leaved Dock in the southern part. There is a ditch which is mainly dry along the east side.
08	SU0953 0210	Field D. The southern hedgerow is now essentially a line of mature trees mostly Oak with rare Birch over an understorey of Holly. The ground flora is patchy but includes Ivy, Stinging Nettle, Cleavers, Bramble, Honeysuckle, Wood Avens, Foxglove and Common Bent.
09	SU0965 0215	Track and hedge east of Field E. The hedge has mature Oak with rare Birch and Rowan over a dense understorey of Holly with rare Gorse. The ground layer is very patchy due to the shade cast by the Holly with scattered Bracken, Greater Stitchwort, Garlic Mustard, Cleavers, Wood Sage, Yorkshire Fog, Wavy Hair-grass and Common Bent.
10	SU0969 0233	Field E, an improved grassland ley dominated by Perennial Rye-grass with Yorkshire Fog occasional to locally abundant. There are few herbs apart from Creeping Buttercup. On the bare sandy patches Chickweed, Shepherd's Purse, Sheep's Sorrel and Common Cat's-ear are present very locally.

No.	Grid Ref	Target Note
11	SU0976 0237	Field E , wet area with standing water at the time of the survey with abundant tussocks of Soft Rush plus Creeping Bent and Floating Sweet-grass, plus a few plants of Lesser Spearwort.
12	SU0966 0224	Field E , southern ditch and wet area with a stands of dense, tussocky Soft Rush and in the wettest areas Common Reed, plus smaller quantities of Reed Sweet-grass and Reed Canary-grass. The ditch is lined by Downy Birch, Grey Willow, Holly, Common Gorse with Soft Rush and Floating Sweet-grass in the ditch itself.

6.0 ASSESSMENT

The grasslands are all improved and semi-improved and species-poor and currently of low ecological importance. The **462.9 metres** of hedgerow does not have a diverse range of woody trees and shrubs, partly due to the acid sandy soils, but do qualify as **Hedgerows Priority Habitat** and **Section 41 habitat of Principal Importance** in having at least one native tree or shrub species over more than 80% of their length. The hedgerows have many mature Oaks including a number of veterans the latter supporting four Dorset Notable lichens three of which, *Cresponea premnea*, *Inoderma subabietinum* and *Rinodina roboris*, are classed as International Responsibility meaning the UK support a significant percentage of the global population.

6.1 PROTECTED SPECIES ASSESSMENT

Species	Status	Habitat Potential	Future surveys
Badger	WCA	A single large hole noted along the eastern edge of Field E was possibly of this species but could also be Fox	
Bats	EPS; WCA	The tall hedges with mature trees and the tree-lined ditches provide good foraging habitat and flight lines for bats. Several of the veteran Oaks have hollows, splits and holes which could support roosts	Required
Dormouse	S41; EPS; WCA	Habitat is sub-optimal for this species.	
Otter	EPS; WCA	The river corridor will be used by otters which may venture into adjoining ditches.	
Water Vole	S41; WCA	The ditches, particularly on the east side of Field C, may be used by this species.	
Brown Hare	S41		
Hedgehog	S41		
Great Crested Newt	EPS; S41	The ditches have still open water but the water may be too acid for this species.	
Reptiles	S41; WCA	The field edges support habitat for Slow Worm and Common Lizard and the wet area and ditch habitat for Grass Snake	Required
Other surveys			
Veteran trees		The hedgerows have many mature Oak trees including a number of veterans	Required

REFERENCES

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

DERC 2020 *Local Plan Greenbelt Sites: 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	Frequency¹
<i>Agrostis capillaris</i>	Common Bent	O-LA
<i>Agrostis stolonifera</i>	Creeping Bent	O-LF
<i>Alliaria petiolata</i>	Garlic Mustard	R
<i>Bellis perennis</i>	Daisy	R
<i>Betula pendula</i>	Silver Birch	O
<i>Betula pubescens</i>	Downy Birch	O
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	O
<i>Carex pseudocyperus</i>	Cyperus Sedge	R
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cirsium vulgare</i>	Spear Thistle	R
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Dactylis glomerata</i>	Cock's-foot	O-LF
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	R
<i>Digitalis purpurea</i>	Foxglove	O
<i>Erodium cicutarium</i>	Common Stork's-bill	R
<i>Festuca rubra</i>	Red Fescue	R-O
<i>Galium aparine</i>	Cleavers	O
<i>Geranium molle</i>	Dove's-foot Crane's-bill	R
<i>Geum urbanum</i>	Wood Avens	R
<i>Glyceria fluitans</i>	Floating Sweet-grass	O-LA
<i>Glyceria maxima</i>	Reed Sweet-grass	R
<i>Hedera helix</i>	Ivy	O-LA
<i>Holcus lanatus</i>	Yorkshire-fog	F-LA
<i>Holcus mollis</i>	Creeping Soft-grass	R
<i>Hypochaeris radicata</i>	Common Cat's-ear	O
<i>Ilex aquifolium</i>	Holly	O-LA
<i>Juncus effusus</i>	Soft Rush	O-LA
<i>Lapsana communis</i>	Nipplewort	R
<i>Lolium perenne</i>	Perennial Rye-grass	A
<i>Lonicera periclymenum</i>	Honeysuckle	O
<i>Lycopus europaeus</i>	Gypsywort	R
<i>Persicaria hydropiper</i>	Water Pepper	R
<i>Phalaris arundinacea</i>	Reed Canary-grass	R
<i>Phragmites australis</i>	Common Reed	R-LA
<i>Pteridium aquilinum</i>	Bracken	O-LF
<i>Quercus robur</i>	Pedunculate Oak	F
<i>Ranunculus flammula</i>	Lesser Spearwort	R
<i>Ranunculus repens</i>	Creeping Buttercup	F-LA
<i>Rubus fruticosus</i> agg.	Bramble	O-LF
<i>Rumex crispus</i>	Curled Dock	R

Species	Common Name	Frequency ¹
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O-LF
<i>Salix cinerea</i>	Grey Willow	O-LF
<i>Stellaria holostea</i>	Greater Stitchwort	R
<i>Stellaria media</i>	Common Chickweed	O
<i>Taraxacum officinale</i> agg.	Dandelion	O
<i>Teucrium scorodonia</i>	Wood Sage	O
<i>Trifolium repens</i>	White Clover	O-LF
<i>Ulex europaeus</i>	Common Gorse	O
<i>Urtica dioica</i>	Stinging Nettle	O

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

APPENDIX II: Lichen species recorded

Species		Status ¹
<i>Cliostomum griffithii</i>		
<i>Cresponea premnea</i>		DN; IR; SOWI
<i>Dendrographa decolorans</i>		
<i>Diploicia canescens</i>		
<i>Flavoparmelia caperata</i>		
<i>Inoderma subabietinum</i>		DN; IR; SOWI
<i>Lecanora chlarotera</i>		
<i>Lecanora expallens</i>		
<i>Melanelia subaurifera</i>		
<i>Pachnolepia pruinata</i>		
<i>Pertusaria hymenea</i>		
<i>Pertusaria coccodes</i>		DN
<i>Punctelia subrudecta</i>		
<i>Pyrrhospora querneae</i>		
<i>Rinodina roboris</i>		DN; IR
<i>Xanthoria parietina</i>		

DN = Dorset Notable

IR = International Responsibility

SOWI = Southern Oceanic Woodland Index (lichens associated with ancient woodland and parkland)

APPENDIX III: Photographs



FIG 1. Field E, grassland typical of most of the fields, an improved rye-grass ley.



FIG 2. Field C, a slightly damper field on the east side with species-poor semi-improved grassland.



FIG 3. Field E, southern edge with wetland area with stands of common reed and rushes.



FIG 4. Hedge and track between Fields C and D, the hedge has mature oaks with a holly understorey.



FIG 5. Line of trees, probably remnants of a former hedgerow between Fields A and B. The veteran oak in the foreground has the notable lichens *Cresponea premnea* and *Inoderma subabietinum*.



FIG 6. Another veteran oak in the same tree avenue.