AN ECOLOGICAL SURVEY

of

LAND AT COMMON MEAD LANE, GILLINGHAM

[GILL03]

for

Dorset Council

November 2021

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Dorset Environmental Records Centre



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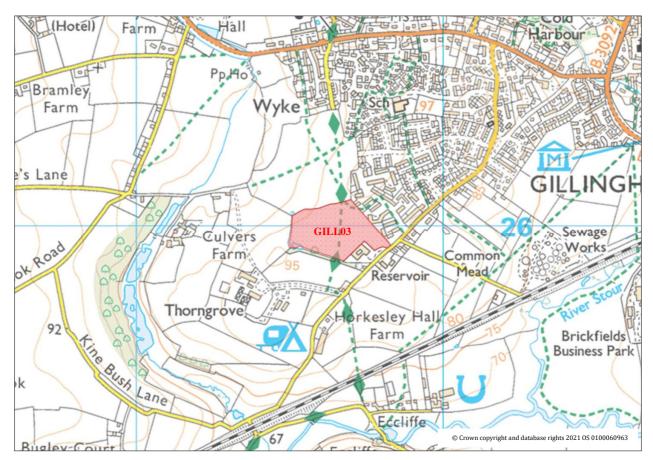
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SUMMARY

- 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 eastern third of the field, amounting to 0.92 hectares, is herb-rich grassland with 5 Dorset Notable plant species including frequent Common Knapweed and Pepper Saxifrage and is apparently unimproved and the plant species present are typical of Lowland Meadows Priority Habitat and Section 41 Habitat of Principal Conservation Importance.
- The remaining grassland appears to be semi-improved with only a few herb species present and is currently of low ecological value.
- A total of 290 metres of hedgerow along the northern and western boundaries qualify as Hedgerows Priority Habitat and Section 41 habitat of Principal Conservation Importance in supporting one or more native woody species over at least 80% of their length. Within the hedges there are several notable Ash and Oak trees some of which have features of veterans.
- The large pond in the southwest corner is an important feature and in a previous (2020) survey has been identified as supporting Great Crested Newt through eDNA sampling. In supporting Great Crested Newt it would qualify as **Ponds Priority Habitat** and **Section 41 habitat of Principal Conservation 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 11th November 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 100m radius
Dormouse	S41; EPS; WCA	-
Otter	EPS; WCA	Within 1-km radius
Water Vole	\$41; WCA	Within 1-km radius
Brown Hare	S41	-
Hedgehog	S41	-
Great Crested Newt	EPS; S41	Within 1-km radius
Reptiles	S41; WCA	-

4.2 **PROTECTED HABITATS**

None adjacent to the site.

Lowland Meadows - Section 41; UK Priority Habitat365 metres to the northLowland Calcareous Grassland - Section 41; UK Priority Habitat495 metres to the northwest

4.3 **PROTECTED SITES**

None adjacent to the site.

Breach Fields Site of Special Scientific Interest

6.1-km to the southeast

5.0 RESULTS

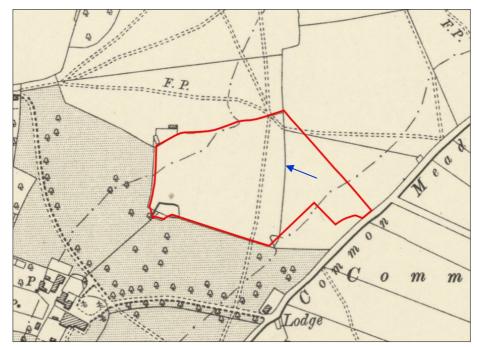
5.1 SITE DESCRIPTION

The field lies on the southwest edge of Gillingham on the north side of Common Mead Lane behind the Mellowes Nursing Home, and is on a slight ridge which slopes gently to the south. The area overlies the Kimmeridge Clay producing a seasonally damp clayey soil. At the time of the survey the field had been cut for hay / silage and had regrown a little due to the damp weather with several herbs still in flower. The field is bordered on three sides by hedgerows, with houses to the east and Mellowes Nursing Home to the south, a footpath runs roughly north – south across the site.

5.2 HABITAT DESCRIPTION

Grassland

The field essentially has two grassland types. Looking at the 1947 photographs and 2nd Ordnance Survey map on Dorset Explorer they show a north – south hedgerow through the eastern third of the site that had been lost by the 1972 aerial photo. The western two-thirds of the site appears to be semi-improved and with lower herb diversity. Here the sward comprises abundant Common Bent *Agrostis capillaris* and Yorkshire Fog *Holcus lanatus*, with smaller quantities of Red Fescue *Festuca rubra*, Tall Fescue *Schedonorus arundinaceus*, Cock's-foot Dactylis glomerata and Perennial Rye-grass *Lolium perenne*.



MAP 2. 2nd Edition Ordnance Survey map showing the old hedgerow dividing the site

Dorset Environmental Records Centre Ecological Survey Local Plan Site: Common Mead Lane [GILL03] November 2021

The most frequent herbs are White Clover *Trifolium repens*, Creeping Buttercup *Ranunculus repens*, Meadow Buttercup *Ranunculus acris* and Dandelion *Taraxacum officinale* agg., with smaller quantities of Red Clover *Trifolium pratense*, Common Sorrel *Rumex acetosa*, Hogweed *Heracleum sphondylium* and Yarrow *Achillea millefolium*.

The eastern third appears to be unimproved with finer grassland such as Common Bent and Red Fescue more abundant in the sward. The herbs component includes frequent to abundant Meadow Buttercup, White Clover, Red Clover, Common Sorrel and Yarrow. Species characteristic of older and ancient grasslands are spread across this part of the field particularly Meadow Vetchling *Lathyrus pratensis*, Pepper Saxifrage *Silaum silaus*^{*1} and Common Knapweed *Centaurea nigra*^{*}, with smaller quantities of Meadowsweet *Filipendula ulmaria*^{*}, Trailing Tormentil *Potentilla anglica*^{*} and Betony *Betonica officinalis*^{*}.

Hedgerows

The hedgerows on the northern and western sides appears to be old appearing on the 2nd Edition Ordnance Survey map and are on distinct banks. Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna* are the most frequent shrubs with scattered Dog Rose *Rosa canina* and some suckering Elm *Ulmus* sp. Trees include Field Maple *Acer campestre*, Ash *Fraxinus excelsior* and Pedunculate Oak *Quercus robur*. There are a number of mature Ash and Oak trees, and at least two in the western hedge have features of veteran trees.

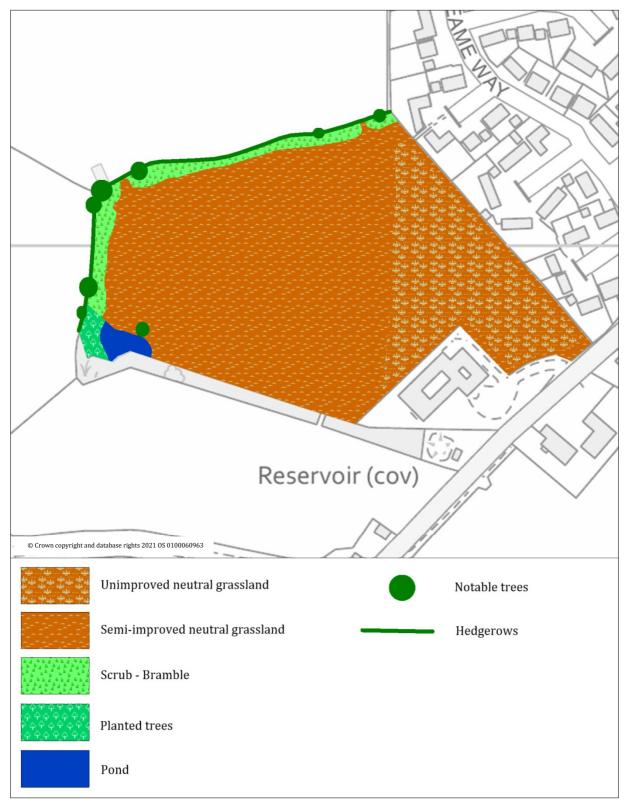
Ivy *Hedera helix* dominates the shaded ground layer with locally frequent Ground Ivy *Glechoma hederacea*, plus Greater Stitchwort *Stellaria holostea*, Red Campion *Silene dioica*, Wood Dock *Rumex sanguineus*, Bluebell *Hyacinthoides non-scripta* and False Brome *Brachypodium sylvaticum*. Locally species of more enriched soils are present including Cow Parsley *Anthriscus sylvestris*, Cleavers *Galium aparine* and Stinging Nettle *Urtica dioica*.

On the southwest edge the 'hedge' looks to be an amenity planting associated with parkland and surrounds Thorngrove House. Mature trees of Ash *Fraxinus excelsior* and Pedunculate Oak *Quercus robur* are most frequent with planted non-native species including Common Lime *Tilia x vulgaris*, Norway Maple *Acer platanoides* and Horse Chestnut *Aesculus hippocastanum*. There is some suckering Elm *Ulmus* sp. in the southeast of the planting. Beneath the mature trees there is a very sparse understorey of Hazel *Corylus avellana*, Hawthorn *Crataegus monogyna* and Elder *Sambucus nigra*. The ground layer has frequent to abundant Bramble *Rubus fruticosus*, Ivy *Hedera helix*, Cow Parsley *Anthriscus sylvestris* and Ground Ivy *Glechoma hederacea*, plus Red Campion *Silene dioica*, Wood Dock *Rumex sanguineus*, Wood Avens *Geum* urbanum, Cleavers Galium aparine, Cock's-foot Dactylis glomerata and False Brome Brachypodium sylvaticum.

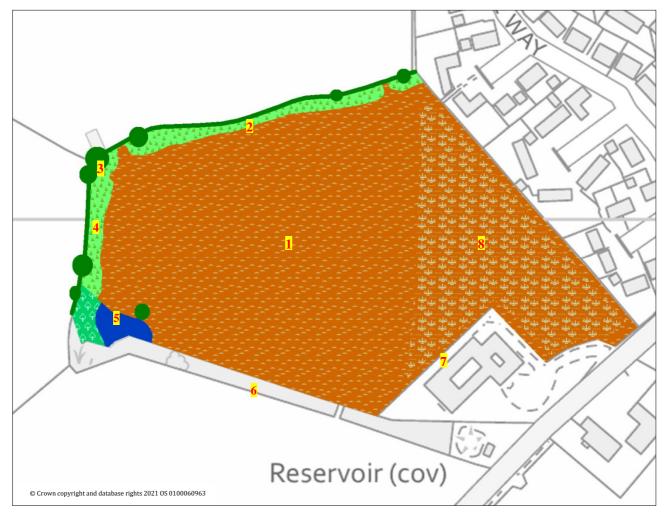
Ponds

There is a large pond in the southwest corner of the field which is partially surrounded by trees but is large enough to support unshaded open water with abundant Duckweed *Lemna* species and with mats of Floating Sweet-grass *Glyceria fluitans*. Species present towards and at the margins include Brooklime *Veronica beccabunga*, Great Willowherb *Epilobium hirsutum*, Water Mint *Mentha aquatica*, Branched Bur-reed *Sparganium erectum* and False Fox-sedge *Carex otrubae*. There is much smaller and heavily shaded pond in the northwest corner, just outside of the survey area.

¹ * = Dorset Notable species



5.2.2 Target notes



No.	Grid Ref	Target Note
01	ST7962 2598	Western two-thirds of field is neutral grassland, probably improved in the past and relatively species-poor. The sward comprises abundant Common Bent and Yorkshire Fog with Perennial Rye-grass, Cock's-foot, Red Fescue and Tall Fescue, with scattered clumps of Tufted Hair-grass. Herbs are largely restricted to frequent to abundant White Clover, Creeping Buttercup, Meadow Buttercup, with more scattered Red Clover, Common Sorrel, Hogweed, Yarrow and Dandelion.
02	ST7960 2606	Northern hedgerow frequent Blackthorn and Hawthorn with Ash, Dog Rose, Field Maple and Pedunculate Oak; there are several mature trees. Ivy dominates the ground layer with Greater Stitchwort, Wood Dock, Cow Parsley, Bluebell and False Brome. A band of dense Bramble scrub has developed along the hedge with scattered young growth of Blackthorn.

No.	Grid Ref	Target Note
03	ST7951 2603	Notable mature Oak and Ash in hedgerow, plus a small pond which is just outside the field, but receives run-off from it.
04	ST7950 2598	Western hedgerow with Blackthorn, Hawthorn, Dog Rose and suckering Elm. There are 3 mature Ash trees and 1 mature Oak in this hedge. A band of dense Bramble scrub between 5 and 7 metres wide has developed along the hedge margin.
05	ST7952 2593	Large pond in southwest corner of field. It is partly shaded by trees with Crack and Grey Willow, plus planted Field Maple on the north side. The open water areas have abundant Duckweed, with mats of Floating Sweet- grass. Other species present include Brooklime, Great Willowherb, Branched Bur-reed and False Fox-sedge.
06	ST7960 2590	South-western boundary a 6-8 metre wide planting of mature broadleaved trees probably originally part of the landscape plantings associated with Thorngrove House. Ash and Pedunculate Oak are most abundant with Elm, Lime, Horse Chestnut. There is a sparse understorey of Hawthorn, Elder and Hazel. The ground layer is dominated by Ivy with frequent Bramble, plus Cow Parsley, Ground Ivy, Red Campion, Wood Avens, Cleavers, Cock's-foot and False Brome.
07	ST7972 2593	Planted hedges by boundary with Mellowes Nursing Home with a range of native trees and shrubs.
08	ST7975 2597	Eastern third of field (0.92 hectares), formerly spilt by a hedge, appears unimproved. The finer sward has abundant Creeping Bent, Red Fescue and Yorkshire Fog, with Cock's-foot becoming frequent at the edges. Herbs, including a number of species characteristic of old grasslands are present with Meadow Vetchling and Pepper Saxifrage* found throughout and frequent, with many large patches of Common Knapweed* and smaller quantities of Meadowsweet* and Trailing Tormentil*. Betony* was noted in one area. The two waxcap fungi <i>Cuphophyllus virgineus</i> and <i>Gliophorus psittacinus</i> were also noted. * = Dorset Notable plant species

6.0 ASSESSMENT

A difficult site to assess as it varies in ecological interest. 2.65 hectares of the field has semi-improved grassland with low herb diversity and is currently of Low Ecological Interest. In the east there is **0.92** hectares of apparently unimproved neutral grassland which, given the species present, including five Dorset Notable plants, qualifies as Lowland Meadows Priority Habitat and Section 41 habitat of Principal Conservation Importance. The northern and western hedgerows totalling 290 metres qualify as Hedgerows Priority Habitat and also support several notable trees with features of veterans. The large pond (0.04-ha) in the southwest corner probably qualifies as Ponds Priority Habitats given the recent record for Great Crested Newt.

Species	Status	Habitat Potential	Future surveys
Badger	WCA	No setts or latrines were observed. There were several 'mammal' tracks through the hedgerows which may be Fox or Deer	
Bats	EPS; WCA		Survey required
Dormouse	S41; EPS; WCA		Survey required
Otter	EPS; WCA	No suitable habitat present	
Water Vole	S41; WCA	No suitable habitat present	
Brown Hare	S41		
Hedgehog	S41	Suitable habitat is present around the margins of the field.	
Great Crested Newt	EPS; S41	This part of North Dorset is stronghold for Great Crested Newt and certainly the larger pond looked suitable for this species.	Note: a 2020 survey confirmed the presence of GCN in this pond by eDNA sampling.
Reptiles	S41; WCA	There is suitable habitat for Slow Worm on the site and the pond area looked suitable for Grass Snake.	

6.1 **PROTECTED SPECIES ASSESSMENT**

REFERENCES

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

Rodwell, J.S. (ed.) 1992 British plant communities. Vol. 3. Grasslands and montane communities. Cambridge University Press, Cambridge.

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

APPENDIX I: Plant species recorded 11th November 2021

Species	Common Name	Status	Frequency ¹
Acer campestre	Field Maple		Pl ² ; R
Acer platanoides	Norway Maple		Pl; R
Acer pseudoplatanus	Sycamore		Pl; R
Achillea millefolium	Yarrow		O-LF
Aesculus hippocastum	Horse Chestnut		Pl; R
Agrostis capillaris	Common Bent		А
Agrostis stolonifera	Creeping Bent		0
Anthriscus sylvestris	Cow Parsley		O-LA
Arrhenatherum elatius	False Oat-grass		R
Betonica officinalis	Betony	DN	R
Brachypodium sylvaticum	False Brome		0
Carex otrubae	False Fox-sedge		R
Carex pseudocyperus	Cyperus Sedge		R
Centaurea nigra	Common Knapweed	DN	O-LF
Cirsium arvense	Creeping Thistle		0
Corylus avellana	Hazel		R
Crataegus monogyna	Hawthorn		O-LF
Dactylis glomerata	Cock's-foot		O-LF
Deschampsia cespitosa	Tufted Hair-grass		0
Dryopteris filix-mas	Male Fern		R
Epilobium hirsutum	Greater Willowherb		R
Festuca rubra	Red Fescue		F-LA
Filipendula ulmaria	Meadowsweet	DN	0
Fraxinus excelsior	Ash		0
Galium aparine	Cleavers		O-LF
Geum urbanum	Wood Avens		R
Glechoma hederacea	Ground Ivy		O-LA
Glyceria fluitans	Floating Sweet-grass		R
Hedera helix	Ivy		O-LA
Heracleum sphondylium	Hogweed		0
Holcus lanatus	Yorkshire-fog		А
Juncus effusus	Soft Rush		R
Lathyrus pratensis	Meadow Vetchling		LF
Lemna minuscula			R-LA
Lolium perenne	Perennial Rye-grass		O-LF
Mentha aquatica	Water Mint		R
Plantago lanceolata	Ribwort Plantain		0
Potentilla anglica	Trailing Tormentil	DN	R-O
Prunus spinosa	Blackthorn		F-LA
Quercus robur	Pedunculate Oak		R
Ranunculus acris	Meadow Buttercup		F-LA

Species	Common Name	Status	Frequency ¹
Ranunculus repens	Creeping Buttercup		F
Rosa canina	Dog Rose		R
Rubus fruticosus agg.	Bramble		LA
Rumex obtusifolius	Broad-leaved Dock		R
Rumex sanguineus	Wood Dock		0
Salix cinerea	Grey Willow		R
Salix fragilis	Crack Willow		Pl; R
Sambucus nigra	Elder		R-O
Schedonurus arundinaceus	Tall Fescue		LF
Silaum silaus	Pepper Saxifrage	DN	LF
Silene dioica	Red Campion		0
Sparganium erectum	Branched Bur-reed		R
Taraxacum officinale agg.	Dandelion		O-LF
Tilia x vulgaris	Common Lime		Pl
Trifolium pratense	Red Clover		O-LF
Trifolium repens	White Clover		F-LA
Urtica dioca	Stinging Nettle		O-LF
Veronica beccabunga	Brooklime		R

APPENDIX II: Photographs



FIG 1. The western two-thirds of the field which is semi-improved with a poor diversity of herbs



FIG 2. The eastern part of the field, which was a separate field in the past, appears to be unimproved and supports five Dorset Notable plant species, including the local Pepper Saxifrage.

Dorset Environmental Records Centre Ecological Survey Local Plan Site: Common Mead Lane [GILL03] November 2021



FIG 3. The western edge of the field showing a band of Bramble scrub between the field edge and the hedgerow.



FIG 4. The large pond in the southwest corner of the field.