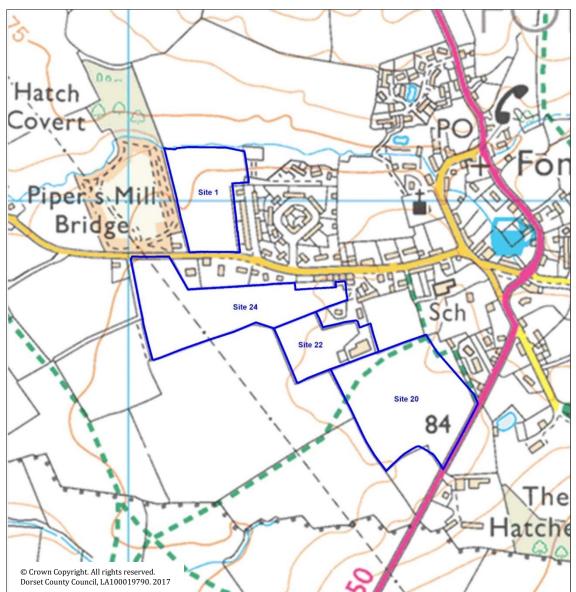
# AN ECOLOGICAL ASSESSMENT OF SELECTED SITES AT FONTMELL MAGNA Bryan Edwards, Dorset Environmental Records Centre June 2017

# BACKGROUND

An ecological survey was undertaken of four areas that have been put forward for development within the Fontmell Magna Parish Plan. The sites were visited on 19<sup>th</sup> June 2017. In addition a search was made for Protected Species and Biodiversity Priority (BAP) Species from the DERC database.

The following conclusions relate specifically to the brief supplied at the time of writing, if the proposals should change a re-appraisal or appraisal amendment may be required.



Map 1. Location of sites surveyed

#### Site 1 - ST8614 1700; 2.2 ha

An improved agricultural field between Brookland Wood and West View with Fontmell Brook along the northern boundary. It has recently been sown with an agricultural grass ley over the vast majority with any interest confined to the margins and hedgerows. Perennial Rye-grass *Lolium perenne* is the dominant grass with Timothy *Phleum pratense* and Yorkshire Fog *Holcus lanatus* both locally abundant. There are very few herbs apart from White Clover *Trifolium repens* which is scattered throughout. The margins, particularly in the north, support a little more diversity including Red Clover *Trifolium pratense*, Corky-fruited Water-dropwort *Oenanthe pimpinelloides*, Hogweed *Heracleum sphondylium* and Red Fescue *Festuca rubra*. Hedgerows along the west, east and south sides support a range of woody species including Hazel *Corylus avellana*, Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Field Maple *Acer campestre*, Ash *Fraxinus excelsior* and Dogwood *Cornus sanguinea*, with smaller quantities of Elder *Sambucus nigra*, Dog Rose *Rosa canina* and Spindle *Euonymus europaeus*. The northern boundary is fenced and does not support a proper hedge but the southern bank of the Fontmell Brook is lined by shrubs and trees, including Alder *Alnus glutinosa*, and effectively acts as a hedge.

#### Site 20 - ST8650 1664; 4.0 ha

An arable field with a crop of wheat with six-metres grass margins around the edge, plus a wider area in the southwest corner; most interest in confined to the margins. The grass margins are dominated by Creeping Bent *Agrostis stolonifera*, Yorkshire Fog *Holcus lanatus*, False Oat-grass *Arrhenatherum elatius* and Common Couch *Elytrigia repens*. Interest is confined to the hedgerows, particularly along the eastern and northern boundaries. Hawthorn *Crataegus monogyna*, Hazel *Corylus avellana*, Blackthorn *Prunus spinosa*, Grey Willow *Salix cinerea*, Field Maple *Acer campestre*, Ash *Fraxinus excelsior* and English Elm *Ulmus procera* are all present, and there are several mature Pedunculate Oak *Quercus robur* trees. The western hedge is of recent origin and largely dominated by Hawthorn.

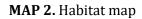
#### Site 22 - ST8634 1673; 1.4 ha

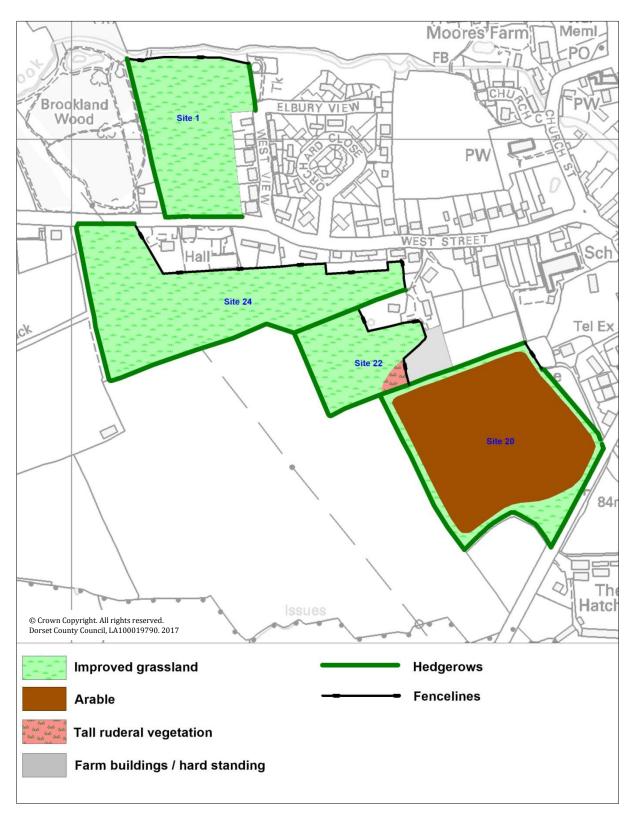
An agricultural field with improved grassland grazed by several beef cattle at the time of the survey. Perennial Rye-grass *Lolium perenne* dominates the sward with Creeping Bent *Agrostis stolonifera*, Yorkshire Fog *Holcus lanatus* and Soft Brome *Bromus hordeaceus* all locally prominent. Herbs are largely restricted White Clover *Trifolium repens* and Creeping Buttercup *Ranunculus repens*, with scattered Creeping Thistle *Cirsium arvense* and Broad-leaved Dock *Rumex obtusifolius*. The hedgerows along the west and southwest are cut, those in the southeast and along the northern boundary are overgrown with some mature trees. The south-east of the site comprises modern farm buildings and associated hard standing.

#### Site 24 - ST8620 1680; 3.5 ha

An agricultural field of improved grassland the western half of which had been cut for silage at the time of the survey. Interest is confined to the hedgerows. The grass sward comprises abundant Perennial Rye-grass *Lolium perenne* with Rough Meadow-grass *Poa trivialis* and Yorkshire Fog *Holcus lanatus* scattered throughout and locally abundant. There are small quantities of Cock'-foot *Dactylis glomerata*, Creeping Bent *Agrostis stolonifera*, False Oat-grass *Arrhenatherum elatius* and Timothy *Phleum pratense*. Herbs are largely restricted to abundant White Clover *Trifolium repens*, with Creeping Buttercup *Ranunculus repens* and Dandelion *Taraxacum officinale* agg. both locally abundant. Along the northwest edge of the field there is a finer sward with frequent Red Fescue *Festuca rubra*, plus herbs associated with less improved grassland including Oxeye Daisy *Leucanthemum vulgare*, Meadow Vetch *Lathyrus pratensis*, Common Sorrel *Rumex acetosa* and Yarrow *Achillea millefolium*.

Most of the hedgerows are flailed but are quite diverse with a good range of woody species. Hazel *Corylus avellana* and Hawthorn *Crataegus monogyna* are most prominent, with Field Maple *Acer campestre*, English Elm *Ulmus procera*, Grey Willow *Salix cinerea*, Dog Rose *Rosa canina*, Blackthorn *Prunus spinosa* and Ash *Fraxinus excelsior* also present.





## **Protected species**

No protected species were recorded from the sites during the survey, but a Yellowhammer *Emberiza citrinella* (S41, Red List) was heard singing from a hedgerow just to the west of Site 22.

The DERC Database has records from 2009 for Otter *Lutra lutra* from the Fontmell Brook at Brooklands Wood adjacent to Site 1 and it is highly likely therefore that they would be utilising the Brook along the northern edge of the proposed site.

There are records from 2012 of four species of bat within 100 metres of Site 20 and 150 metres of Site 22. While the modern farm buildings in the southeast corner of Site 22 look unsuitable for bats, the hedgelines, particularly those with mature trees, provide good foraging habitat and act as flight corridors.

### Assessment

The four fields have all been improved for agricultural purposes and are of very limited ecological value, the grasslands being species-poor with a low diversity of herbs. Two Dorset Notable plants were found, Corky-fruited Water-dropwort in Site 1 and Oxeye Daisy in Site 24, but both are rare and confined to the field margins by the hedge.

The hedgerows are the most ecologically important features of the site and several have a diverse selection of trees and shrubs. These may qualify as Important Hedgerows under the Hedgerow Regulations Act (1997) and would a need a further survey to establish this. Hedgerows and their margins can also act as important corridors for invertebrates, bats and birds within an otherwise agricultural landscapes.

# Plant species recorded 19th June 2017

		Site 1	Site 20	Site 22	Site 24
Acer campestre	Field Maple	(H) <sup>1</sup>	(H)	(H)	(H)
Achillea millefolium	Yarrow				R
Agrostis stolonifera	Creeping Bent	0-LF		R-0	O-LF
Alopecurus pratensis	Meadow Foxtail				R
Anthoxanthum odoratum	Sweet Vernal Grass				R-LF
Arctium minus	Lesser Burdock				R
Arrhenatherum elatius	False Oat-grass	(M)	(M)	(M)	0
Ballota nigra	Black Horehound		(M)		
Bellis perennis	Daisy			R	R-0
Bromus hordeaceus	Soft Brome	R		F	R
Cerastium fontanum	Common Mouse-ear			R	
Chaerophyllum temulentum	Rough Chervil	(M)	(M)	(M)	(M)
Cirsium arvense	Creeping Thistle			O-LF	R
Convolvulus arvensis	Field Bindweed			0	
Cornus sanguinea	Dogwood	(H)	(H)		
Corylus avellana	Hazel	(H)	(H)	(H)	(H)
Crataegus monogyna	Hawthorn	(H)	(H)	(H)	(H)
Cynosurus cristatus	Crested Dog's-tail			0	
Dactylis glomerata	Cock's-foot		0	R	0
Elytrigia repens	Common Couch		LA		
Epilobium hirsutum	Great Willowherb		(M)		
Euonymus europaeus	Spindle	(H)			
Fagus sylvatica	Beech	(H)			
Festuca rubra	Red Fescue	R			R-LF
Filipendula ulmaria	Meadowsweet				(M)
Fraxinus excelsior	Ash	(H)		(H)	(H)
Galium aparine	Cleavers	(H)		(M)	(H)
Geranium robertianum	Herb Robert				(M)
Geum urbanum	Wood Avens				(M)
Hedera helix	Ivy	(H)	(H)	(H)	(H)
Heracleum sphondylium	Hogweed	0	(M)	(M)	(M)
Holcus lanatus	Yorkshire-fog	0-LA	LA	F-LA	0-LA
Humulus lupulus	Нор				(H)
Lamium album	White Dead-nettle				(M)
Lathyrus pratensis	Meadow Vetchling				R
Leucanthemum vulgare	Oxeye Daisy				R
Lolium perenne	Perennial Rye-grass	A-LD	LF	А	А
Lonicera periclymenum	Honeysuckle	(H)			
Oenanthe crocata	Hemlock Water-dropwort		(M)		
Oenanthe pimpinelloides	Corky-fruited Water-dropwort	R			
Phleum pratense	Timothy	O-LA			0
Plantago lanceolata	Ribwort Plantain				R-0
Plantago major	Greater Plantain			R	
Poa trivialis	Rough Meadow-grass			F	O-LF
Prunus spinosa	Blackthorn	(H)	(H)	(H)	(H)
Quercus robur	Pedunculate Oak	(H)	(H)	(H)	

		Site 1	Site 20	Site 22	Site 24
Ranunculus acris	Meadow Buttercup				0
Ranunculus repens	Creeping Buttercup			O-LF	R-0
Rosa arvensis	Field Rose	(H)			
Rosa canina	Dog Rose	(H)	(H)	(H)	(H)
Rubus fruticosus agg.	Bramble			(H)	(H)
Rumex acetosa	Common Sorrel				R
Rumex obtusifolius	Broad-leaved Dock	0		O-LF	0
Salix cinerea	Grey Willow		(H)		(H)
Salix fragilis	Crack Willow		(H)	(H)	
Sambucus nigra	Elder	(H)	(H)	(H)	(H)
Scrophularia auriculata	Water Figwort		(M)		
Silene dioica	Red Campion		(M)		(M)
Tamus communis	Black Bryony	(H)	(H)		(H)
Taraxacum officinale agg.	Dandelion				0-LF
Trifolium pratense	Red Clover	R			0
Trifolium repens	White Clover	А	O-LF	А	А
Ulmus procera	English Elm		(H)		(H)
Urtica dioica	Stining Nettle	(M)	(M)	R	(M)

 $^{1}$  D = dominant

A = abundant

F = frequent

0 = occasional

R = rare

L = locally (e.g. LA = locally abundant)

(M) = margins

(H) = hedgerows