## A PRELIMINARY ECOLOGICAL ASSESSMENT OF SELECTED SITES AT MOTCOMBE

# Bryan Edwards, Dorset Environmental Records Centre 28th March 2018 Amended 9th July 2018

#### **BACKGROUND**

An ecological survey was undertaken of six areas that have been put forward for development within the Motcombe Parish Plan. Four sites were surveyed on the 28<sup>th</sup> March 2018 and two on the 6<sup>th</sup> July 2018. 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

### **SUMMARY**

- The grasslands at Sites 2, 4, 18, 19 and 20/21 are improved or semi-improved species-poor, and currently of little ecological interest with no Dorset Notable Plant species present.
- The hedgerows at Sites 4, 18 and 20/21 are the most important ecological features. They qualify as Hedgerows Priority Habitat under the UK Biodiversity Action Plan, and may qualify as Important Hedgerows under the Hedgerow Regulations Act (1997).
- No Protected or Red Listed species were recorded from the four sites surveyed, although time of the year was not ideal for some species.
- Habitat for some Protected Species such as Hedgehog and Reptiles is present on several of the sites (see page 10).
- There are no records of Protected Species on the DERC database that are directly on any of the four sites surveyed, but there are records of Bats, Great Crested Newt and Water Vole close to several of the sites.

#### Site 4; Field adjacent to Motcombe Road, ST8545 2492

The northern part of a large agricultural field adjacent to Motcombe Road at the southern edge of the village. The field is typical improved agricultural grassland with Perennial Rye-grass *Lolium perenne*, Creeping Bent *Agrostis stolonifera*, Meadow Foxtail *Alopecurus pratensis* and Yorkshire Fog *Holcus lanatus*. There are very few herbs apart from occasional Creeping Buttercup *Ranunculus repens* and a few scattered plants of Broad-leaved Dock *Rumex obtusifolius* and Creeping Thistle *Cirsium arvense*.

Bordering the road is a long hedge which is on a bank with a shallow ditch on the field side. The hedge is managed by flailing and is 2-3 metres wide in places. Six woody tree and shrub species are present with Blackthorn *Prunus spinosa* most abundant plus Grey Willow *Salix cinerea* and Field Maple *Acer campestre*, and smaller quantities of Ash *Fraxinus excelsior*, Dog Rose *Rosa canina*, Hawthorn *Crataegus monogyna* and Holly *Ilex aquifolium*, The ground layer includes frequent to abundant Bramble *Rubus fruticosus* agg., Ivy *Hedera helix*, Stinging Nettle *Urtica dioica* and Cleavers *Galium aparine*, plus Hart'stongue Fern *Asplenium scolopendrium*, Soft Shield-fern *Polystichum setiferum*, Gorund Ivy *Glechoma hederacea*, Cuckoo Pint *Arum maculatum*, Lesser Celandine *Ficaria verna*, Garlic Mustard *Alliaria petiolata*, Dog's Mercury *Mercurialis perennis* and Cow Parsley *Anthriscus sylvestris*..

The hedge may qualify as an Important Hedgerow under the Hedgerow Regulations Act (1997) and will need to be assessed as such if it is to be affected by the proposed development.

Either end of the site, and possibly just outside of the proposed development area, are two mature to veteran Oak *Quercus pedunculatus* trees which are important features of the landscape and should be retained.

MAP 2. Habitat map, Site 4



#### Site 18; ST8475 2662, Elm Hill

This site comprises the northern part of two agricultural fields which slope gently south from Knapp Hill. The western field is improved agricultural grassland dominated by Perennial Rye-grass *Lolium perenne* and Timothy *Phleum pratense*, with locally abundant Creeping Bent *Agrostis stolonifera*, plus smaller quantities of Yorkshire Fog *Holcus lanatus*, Meadow Foxtail *Alopecurus pratensis*, Sweet Vernal Grass *Anthoxanthum odoratum* and Cock's-foot *Dactylis glomerata*. False Oat-grass *Arrhenatherum elatius* and Common Couch *Elytrigia repens* are found at the margins. There are very few herbs apart from patchy Creeping Buttercup *Ranunculus repens*, and stands of Broad-leaved and Curled Dock *Rumex obtusifolius* and *R. crispus*.

The eastern field is also improved agricultural grassland dominated by Rye-grass with frequent to abundant Creeping Bent and Yorkshire Fog. White Clover *Trifolium repens* is abundant with occasional patches of Creeping Buttercup plus scattered stands of Creeping Thistle *Cirsium arvense* and Dock *Rumex* spp.

Between the two fields is a thick mature hedge of abundant Blackthorn *Prunus spinosa*, plus Elm *Ulmus procera*, Hawthorn *Crataegus monogyna*, Ash *Fraxinus excelsior* and Grey Willow *Salix cinerea*. The understorey is very shaded and dominated by Ivy *Hedera helix* with Cuckoo Pint *Arum maculatum*. At the field edge Bramble *Rubus fruticosus* agg. is abundant with Stinging Nettle *Urtica dioica* and Cleavers *Galium aparine*.

The band of scrub between the fields and the road is dominated by Blackthorn with several small trees of Ash and Pedunculate Oak *Quercus robur*. Other species present include Hawthorn, Elm, Field Maple *Acer campestre*, Goat Willow *Salix caprea* and Dog Rose *Rosa canina*. The shaded understorey is dominated by Ivy with Cleavers, Cuckoo Pint, Stinging Nettle and a few clumps of Soft Shield-fern *Polystichum setiferum*.

The scrub and mature hedgerow provide good habitat for breeding birds and foraging habitat for bats.

MAP 3. Habitat map, Site 18



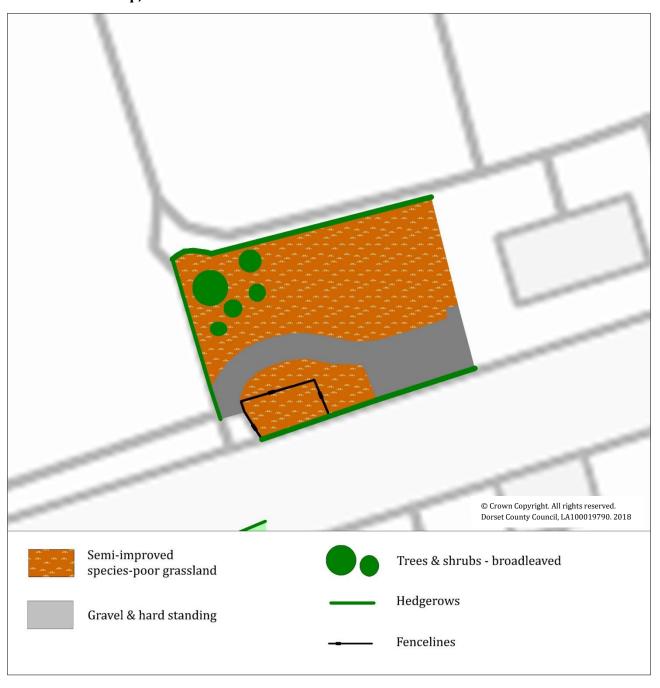
#### Site 19; ST8449 2661, Sunset Ridge

This site comprises a small paddock which is effectively managed as a garden, the grassland being regularly mown and several ornamental and fruit trees have been planted. The 2<sup>nd</sup> Edition OS map shows a pond in the northwest corner which is now a dry shallow depression.

The grassland semi-improved and species-poor, dominated by Perennial Rye-grass *Lolium perenne* and Creeping Bent *Agrostis stolonifera*, with smaller quantities of Yorkshire Fog *Holcus lanatus*, False Oatgrass *Arrhenatherum elatius*, Red Fescue *Festuca rubra* and Cock's-foot *Dactylis glomerata*. There are very few herbs apart from patchy White Clover *Trifolium repens* and Creeping Buttercup *Ranunculus repens*, and scattered plants of Dandelion *Taraxacum officinale* agg. and Selfheal *Prunella vulgaris*.

The hedge along the northern boundary has abundant Blackthorn *Prunus spinosa*, plus Hawthorn *Crataegus monogyna*, Elm *Ulmus procera*, Ash *Fraxinus excelsior* and Grey Willow *Salix cinerea*. The margins and understorey have frequent to abundant Ivy *Hedera helix* and Bramble *Rubus fruticosus* agg., plus Stinging Nettle *Urtica dioica*, Cleavers *Galium aparine* and Hedge Bindweed *Calystegia sepium*, plus rare Red Campion *Silene dioica* and Upright Hedge-parsley *Torilis japonica*. The shorter stretch by the road Hazel Corylus avellana *Corylus avellana*, Hawthorn, Elm, Dogwood *Cornus sanguinea*, and Dog Rose. Bramble is abundant along the southern margin with Stinging Nettle, Cleavers, Cow Parsley *Anthriscus sylvestris*, Great Willowherb *Epilobium hirsutum*, Hedge Bindweed and a few clumps of Hart's-tongue Fern *Asplenium scolopendrium*.

MAP 4. Habitat map, Site 19



#### Site 20 & 21; Elm Hill West, ST8448 2652

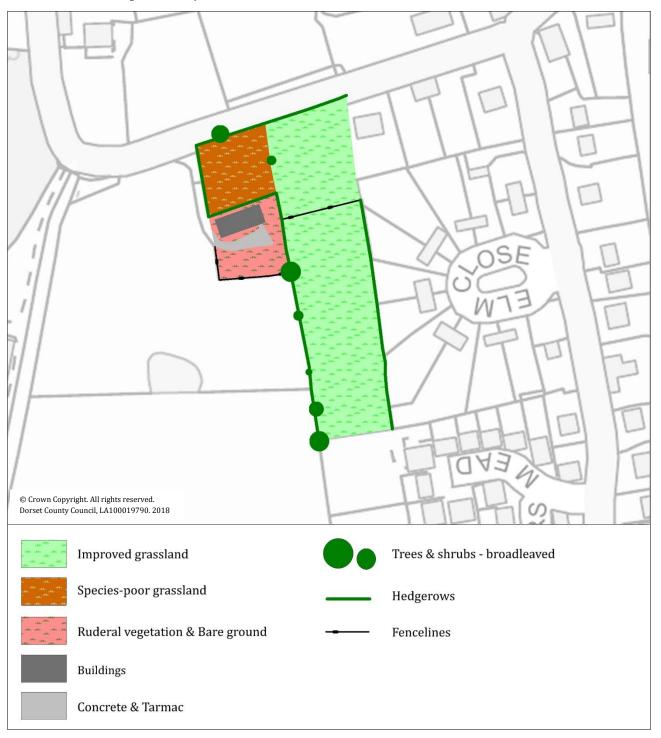
Three small field plus and barn and associated ground in the northwest of the village, the field slope gently to the south. The eastern field in long and has been split into two by a fence line. The grassland is improved and dominated by a few grasses including Perennial Rye-grass *Lolium perenne*, Creeping Bent *Agrostis stolonifera*, Meadow Foxtail *Alopecurus pratensis* and Yorkshire Fog *Holcus lanatus*. There are few herbs apart from scattered Creeping Buttercup *Ranunculus repens*, Broad-leaved Dock *Rumex obtusifolius* and Daisy *Bellis perennis*. The small field in the northwest is slightly less improved with a few more herbs including frequent Meadow Buttercup *Ranunculus acris* and occasional Common Sorrel *Rumex acetosa*.

There are several hedgerows including two recent ones, with older ones along the roadside and either side of the longer field. The longer hedge on the west side of the field has abundant Blackthorn *Prunus spinosa* with Field Maple *Acer campestre*, Ash *Fraxonus excelsior*, Hawthorn *Crataegus monogyna* and Dog Rose *Rosa canina*, plus several mature Pedunculate Oak *Quercus robur* trees. The understorey has frequent to abundant Ivy *Hedera helix*, Bramble *Rubus fruticosus* agg., Stinging Nettle *Urtica dioica* and Cleavers *Galium aparine*. Other species noted include Bluebell *Hyacinthoides non-scripta*, Cuckoo Pint *Arum maculatum*, Lesser Celandine *Ficaria verna*, Red Campion *Silene dioica* and Foxglove *Digitalis purpurea*. The eastern hedge, which borders domestic gardens, is more dominated by Blackthorn.

The road hedge has Blackthorn, Hawthorn, Elm *Ulmus procera*, Dog Rose and Holly, plus a mature Pedunculatre Oak tree. The ground layer has Ivy, Cleavers, Bramble, Cuckoo Pint, plus along the margins Lesser Celandine, Cow Parsley *Anthriscus sylvestris*, White Dead-nettle *Lamium album*, Garlic Mustard *Alliaria petiolata* and Wood Avens *Geum urbanum*.

The older hedges may qualify as Important Hedgerows under the Hedgerow Regulations (1997) and need to be assessed as such, the Regulations do not apply to the recently planted hedges or the eastern hedge that borders domestic gardens.

MAP 5. Habitat map, Site 20 / 21



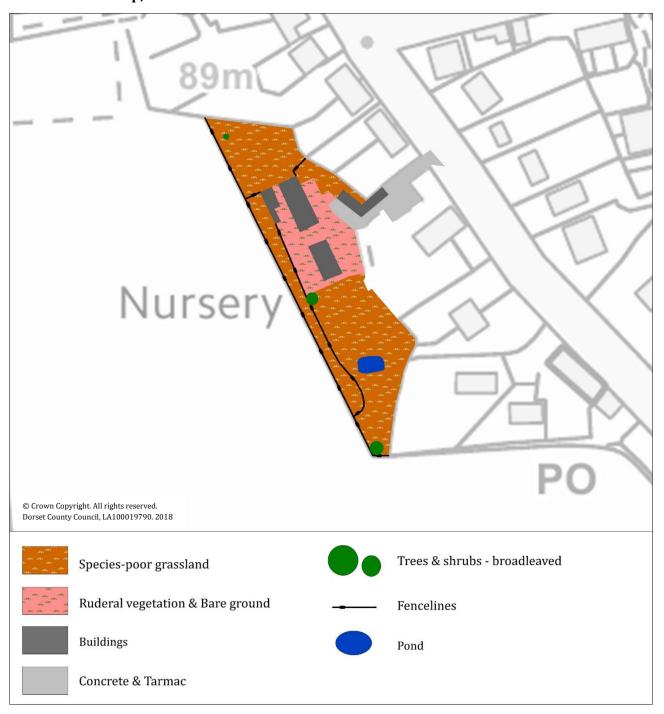
#### Site 25; The Nursery, ST8470 2575

This site lies on the western edge of the village and comprises part of an agricultural field which is fenced and has been used as a nursery. The northern and southern parts of the site are grassland which is either mown or grazed by sheep. The central section comprises wooden sheds and poly-tunnels plus associated paths and hard standing.

The grassland areas are semi-improved and species-poor reflecting the past agricultural use. The sward comprises Perennial Rye-grass *Lolium perenne*, Creeping Bent *Agrostis stolonifera* and Yorkshire Fog *Holcus lanatus*, with smaller quantities of Crested Dog's-tail *Cynosurus cristatus*, Cock's-foot *Dactylis glomerata* and Meadow Foxtail *Alopecurus pratensis*. There are few herbs apart from scattered Ribwort Plantain *Plantago lanceolata*, Creeping Buttercup *Ranunculus repens*, White Clover *Trifolium repens* and Daisy *Bellis perennis*. At the northern end Common Mouse-ear *Cerastium fontanum*, Selfheal *Prunella vulgaris* and Red Clover *Trifolium pratense* were additionally noted. Several trees have been planted around the site. There is very little other semi-natural vegetation on the site.

There is a small artificial pond within the grassland in the south of the area. As this is a Great Crested Newt area the pond ought to be checked for amphibians if it is to be affected by the proposed development.

MAP 6. Habitat map, Site 25

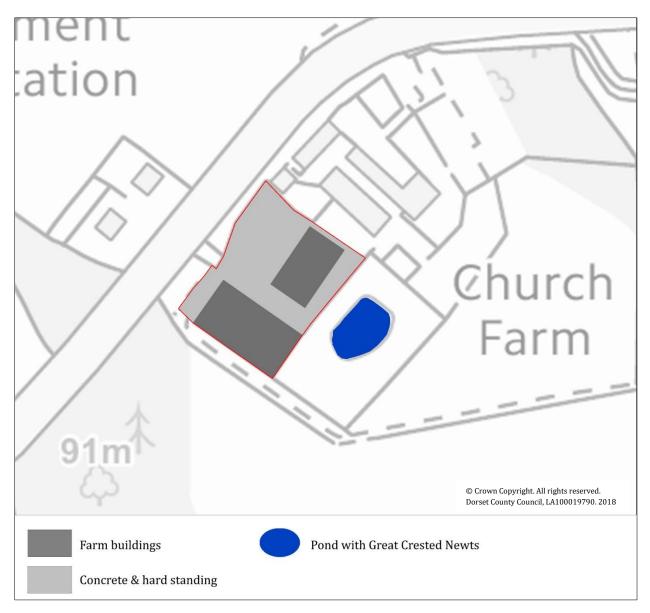


### Site 2; Church Farm farmyard, ST8418 2510

This site entirely consists of concrete and farm buildings that are currently used for storage or housing cattle in the winter. There is no semi-natural vegetation present. The barns are modern and not suitable for bats. An owl box has been put up in one barn but is unoccupied.

In the field adjacent to the site is a pond which is approximately 15 metres southeast of the proposed development site and has a population of Great Crested Newts which is regularly monitored by an ecologist.

MAP 7. Habitat map, Site 2



#### PROTECTED SPECIES

No signs of protected species were seen during the survey, however this does mean that they are not present as the time of the survey in late winter was not ideal for nesting birds, reptiles etc. A search for protected species was made on the Dorset Important Species layer on the Dorset Environmental Records Centre (DERC) GIS system.

A summary of the suitability of the sites for protected species is given below.

**Bats:** There are many bat records from around Motcombe village either as roost records or from roadside surveys carried out in the area. No records are directly on the six sites surveyed, but suitable foraging habitat is present along hedgerows and scrub, and around mature trees at Site 20/21, Site 18 and Site 4.

**Birds:** The survey was too early in the season for nesting birds. Suitable habitat does exist in some of the older hedgerows, and more especially in the tick band of scrub in the north of Site 18.

**Badger:** No Badger setts or latrines were found within the sites. Animal tracks through hedges at Sites 4 and 20/21 may have been Fox or Badger.

**Hedgehog:** There are no records on the DERC Important species layer of Hedgehogs from the immediate vicinity of the sites. Suitable habitat for hedgehogs is present on Sites 4, 18, 19, 20/21 and 25.

**Dormouse:** There are no records on the DERC Important species layer of Hedgehogs from the immediate vicinity of the sites. The nearest records are 1.6 km to the east and 2.5 km to the west. The hedges found in Sites 4 and 20/21 are thorn-dominated with little or no Hazel and are regularly flailed and therefore sub-optimal habitat for Dormouse.

**Otter:** No suitable habitat occurs within the sites surveyed. There are records of Otters from along the railway line to the northeast of the village, 1-km east of Site 20/21.

**Water Voles;** No suitable habitat occurs within the sites surveyed. There are records from within the village 170 metres north-west of Site 2.

**Reptiles:** No records in DERC but suitable habitat for Common Lizard and Slow Worn is present at Site 2 and 25

**Great Crested Newts:** The northern part of the Blackmore Vale around Gillingham and Shaftesbury is key area for Great Crested Newts in Dorset. A pond c.15 metres southeast of **Site 2** is known to support this species and the landowner says that they regularly monitored. There is a very small artificial garden pond in **Site 25** which could possibly support this species.