Preliminary Ecological Appraisal

Land adjacent to Daubneys Farm
The Street
Sheering
Bishop's Stortford

January 2018

For and on behalf of:
Mrs B Uncle
Daubneys Farm
The Street
Sheering
Essex
CM22 7LU

ELMAW Consulting
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Declaration

This report has been produced following the guidelines published by

The Chartered Institute of Ecology and Environmental Management

Quality Assurance

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Special Note

Whilst every effort has been taken to ensure this report accurately identifies potential ecological constraints to development or the likely presence or absence of species and the spatial and temporal use of the site by such species, it must only be viewed as a snap shot in time and reflects the ecological status of the site at the time of survey.

No liability can be assumed for ecological changes that may or may not occur on the surveyed site after the production of this report. The author of this report must be consulted as to the current applicability of the report if there are any seasonal delays in the use of this report.

This report can only be used for the purposes for which it was instructed and agreed at the time of commission.

Executive Summary

The purpose of this report is to detail the findings of a Preliminary Ecological Appraisal (PEA) of two small horse paddocks at Daubneys Farm, Sheering, near Bishops Stortford, in Essex. The intention is to use this report to support an application to develop the horse paddocks and demonstrate that the development of the application site will have no significant impacts on important species or habitats.

The PEA has been completed by ELMAW Consulting by means of an Extended Phase One Habitat Survey, extended to include an assessment for important and protected species and habitats.

Whilst acknowledging the seasonal constraints, the PEA has found the application site to be dominated by species-poor improved grassland, grazed very short by horses. The horse paddocks are not considered important, rare or threatened habitat types.

The application site does also support a very short section of species-poor hedgerow and, whilst generally hedgerows with an 80% mix of broad-leaved species are considered priority habitats for conservation, the hedgerow within the site is deemed to be of very low value. It does however have some value to nesting birds, constrained however by its low height and short length. Other minor habitats such as scrub are also found within the site together with arable land, trees and a tree belt adjacent but outside the application site. The application site is considered unlikely to support protected or important species but does have potential to support nesting birds and the adjacent tree belt may provide some minor bat foraging opportunities.

In conclusion, the application site is considered to have very low biodiversity value with no significant development constraints identified. Whilst the development is likely to demonstrate a no net loss

of biodiversity, biodiversity enhancement can be gained through the installation of artificial bat roosting features within the new residential properties.

1.0 Introduction

1.1 Background

1.1.1 It is proposed to submit representations supporting the allocation of an area of land adjacent to Daubneys Farm, Sheering for inclusion in the emerging Epping Forest Local Plan for residential development.

1.1.2 The purpose of this report is to detail the results of an initial ecological assessment of the application site with regard to identifying biodiversity constraints that may affect the development of the site in the future and should be used to inform the design of any development. Specifically, these biodiversity constraints involve protected species and habitats, as well as notably important species and habitats, wildlife legislation and UK and local planning policies that protect important biodiversity.

1.1.3 This ecological study has been commissioned by Sworders of The Gatehouse, Hadham Hall, Little Hadham, Ware, Hertfordshire on behalf of the owner Mrs Uncle.

Plate 1 – Aerial photo with indicative application site boundary
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1.1.4 The site comprises two horse pasture fields joined at a very narrow point and lies to the immediate west and south of Daubneys Farm buildings on The Street, in the village of Sheering, in western Essex, close to the border with Hertfordshire.

1.2 Terms of Reference

1.2.1 The report's author is Mr Keith Seaman who holds a Bachelor of Science degree in Environmental Studies; Agri-Ecosystem Management, a Diploma of Higher Education in Ecology and a Certificate of Higher Education in Ecology and Conservation. His professional qualifications include membership of the Royal Society of Biology (RSB) registered as a Chartered Biologist and full membership of The Chartered Institute of Ecology and Environmental Management (CIEEM). Keith Seaman also holds Natural England Survey, Research and Development licenses for all species of bat, badger (*Meles meles*), great crested newt *(Triturus cristatus)*, otter *(Lutra lutra),* barn owl *(Tyto alba)* and dormouse *(Muscardinus avellanarius)*.

2.0 Planning Policy and Legislation

2.1 Relevant National and Local Planning Policies

National Planning Policy Framework

2.1.1 The National Planning Policy Framework (NPPF) superseded Planning Policy Statement 9 (PPS9) in March 2012. The NPPF states that the planning system should 'contribute to and enhance' the natural and local environment by, in part;

- *Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.*

Other key principles of the NPPF which relate to biodiversity are;

- *The conservation of international and national statutorily designated sites*
- *Protection of ancient woodland and veteran trees*
- *The creation, protection, enhancement and management of networks of biodiversity and green infrastructure*
- *The preservation, restoration and recreation of priority habitats and ecological networks and*
- *The recovery of priority species populations*

2.2 Country Biodiversity Action Plan

2.2.1 Notably important habitats and species are considered under the country's Biodiversity Action Plans under Section 41 of the Natural Environment & Rural Communities (NERC) Act 2006.

2.2.2 Actions that need to be undertaken in order to maintain and/or enhance the nature conservation status of these habitats and species are implemented at a local level in the County Local Biodiversity Action Plan (LBAP).

2.2.3 The Country Biodiversity Action Plan (UKBAP) 1995 produced a list of national priority species and habitats with all listed species/habitats having specific Action Plans defining the measures required to ensure their conservation.

2.3 Local Plan Policies

2.3.1 The Epping Forest District Council - Combined Local Plan (1998) & Local Plan Alterations (2006) is the current local level policy guidance covering the site. The following policies from the document may be relevant to this study;

Policy NC4- Protection of Established Habitat

Development proposals will be expected to make adequate provision for the protection, enhancement and suitable management of established habitats of local significance for wildlife. Such provision may be more stringent when there are known to be protected species either on the site or likely to be affected by the development.

Policy NC5- Promotion of Nature Conservation Schemes

The Council will encourage owners and occupiers of land to participate in schemes which promote the aims of nature conservation by:

(i) adopting less intensive forms of land management;

(ii) re-introducing traditional management techniques for existing wildlife habitats; and

(iii) creating new habitats.

2.4 Legislation

The Conservation of Habitats and Species Regulations

2.4.1 The Conservation of Habitats and Species Regulations 2010 (formerly the Conservation [Natural Habitats &c] Regulations 1994 as amended) implement the EC Habitats Directive in the UK. These regulations mainly deal with the protection of sites that are important for nature conservation in a European context (eg Special Areas of Protection [SACs] and Special Protection Areas [SPAs]). The legislation also gives protection to certain species of flora and fauna.

2.4.2 The Conservation of Habitats and Species Regulations 2010 make it an offence to deliberately capture, kill or disturb wild animals under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

Wildlife & Countryside Act (WCA)

2.4.3 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and

Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive).

Natural Environment & Rural Communities Act (NERC)

2.4.4 The NERC Act of 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.

3.0 Methodology

3.1 Field Survey

3.1.1 This report has been produced following the *Guidelines for Preliminary Ecological Appraisal* 2015 (Ref. 1). Habitats have been described, based in part, on the methodology published within the *Handbook for Phase 1 Habitat Survey* revised re-print 2010 (JNCC) – Ref 2. In some circumstances habitat descriptions and mapping may have been adapted to suit non-standard, site-specific conditions.

3.1.2 It has been extended to include an assessment of the application site's habitats as to their likely importance for protected or notably important species and habitats, as identified under the following legislation; The Conservation of Habitats & Species Regulations 2010, the Wildlife & Countryside Act (as amended) 1981, the Protection of Badgers Act 1992, Hedgerow Regulations 1997, IUCN BoCC Red and Amber Lists and the Natural Environment & Rural Communities (NERC) Act 2006.

3.1.3 It should be noted that any habitats bounding the application site or important species recorded outside the site boundary may have been included within this appraisal as their presence may materially affect the application site's ecological condition and potential value.

3.1.4 This ecological study has been completed by the report's author Mr Keith Seaman. The site appraisal was carried out on the 8th and 15th January 2018, in suitable weather conditions with no constraints over access to the entire site.

3.2 Limitations

3.2.1 It must be acknowledged that this site assessment has been completed at a sub-optimal time of year, particularly for the recording of flora. The description of the site's floristic composition must not be considered definitive but only a representation of what was observable at the time of the survey.

3.2.2 As to the reliability of the assessment for protected species, it must be further acknowledged that this Preliminary Ecological Appraisal is based on the presence of suitable habitat to support such species and not on qualitative species-specific surveys. Where the potential for important species has been identified, further species-specific surveys are necessary to be confident of either a positive or negative conclusion as to the presence of protected species on site.

3.2.3 The study specifically addresses the issues of potential development constraints affecting important and protected species and habitats. Recommendations for mitigation and compensation of impacts on ecology may need to be re-addressed and/or re-assessed once detailed site development plans are available.

3.3 Desk Study

3.3.1 Biological records of protected and important species and habitats within a radius of two kilometres around the site have been sourced from The Essex Field Club in March 2017. In addition, all officially designated sites of nature conservation interest and importance (both statutory and non-statutory) have been identified within a 2km radius of the application site by the Essex Wildlife Trust. Due to the closeness of the Hertfordshire border, sites were requested from the Hertfordshire Biological Records Centre too.

3.3.2 Google earth aerial photographs and DEFRA's Magic Map Application images have been examined of the application site and surrounding landscape as have the relevant Ordnance Survey Explorer Maps at a 1:25,000 scale.

4.0 Baseline Ecological Conditions

4.1 Designated Sites

4.1.1 The application site is not designated as a site of nature conservation importance; neither are any important or protected species recorded from within the site itself.

4.1.2 There are no statutorily designated sites of nature conservation interest within the 2km radius data search area around the site.

4.1.3 There are nine Essex Local Wildlife Sites (LWSs) within the 2km radius around the site. The closest of these is Heathen Wood (ref. EP139), which lies approximately 1km to the south of the site. This LWS is a mix of woodland and sense scrub on either side of the Pincey Brook. Neither this site nor the others further afield are deemed material to this study due to their distance from the application site.

4.2 Habitats

4.2.1 The site is comprised essentially of two horse-grazed paddocks of what appears to be species-poor improved grassland. The majority of the grassland is short-grazed and poached in places, although some semi-rough grassland is found in parts of the paddocks. Species of grassland and ruderal vegetation recordable included cock's-foot (*Dactylis glomerata*) and meadow grass (*Poa sp.*) with cow parsley (*Anthriscus sylvestris*), nettle (*Urtica dioica*), creeping thistle (*Cirsium arvense*), white dead-nettle (*Lamium album*), spear thistle (*Cirsium vulgare*), ragwort (*Senecio jacobaea*), daisy (*Bellis perennis*), creeping buttercup (*Ranunculus repens*), common mouse-ear (*Cerastium fontanum)* and broad-leaved dock (*Rumex obtusifolius*).

4.2.2 Species-poor improved grassland is a very common and widespread habitat throughout the UK including Essex, often associated with open spaces, commons, road verges and horse pastures. Whilst species-rich unimproved grassland is considered to be a priority habitat for

conservation listed under Sect 41. Of the NERC Act, species-poor improved grassland does not qualify for such conservation priority. As such, whilst acknowledging the seasonal limitation in the grassland's assessment, it is considered likely that the horse paddocks are botanically of very low biodiversity value at this time and geographically of negligible value.

4.2.3 *Plates 2 & 3: Two views of the horse paddocks which dominate the application site*

4.2.4 The horse paddocks are surrounded by arable fields, further horse paddocks and residential properties. Vegetative habitats including broad-leaved tree belts, species-poor grasslands, species-poor hedgerows as well as amenity grassland (lawns) abut the horse paddocks and provide some habitat connectivity.

4.2.5 At the application site entrance, a linear strip of amenity lawn is found adjacent to a paddock separated by a species-poor hedgerow. The hedgerow is dominated by hawthorn (*Crataegus monogyna*) with some ash (*Fraxinus excelsior*), elm (*Ulmus sp.*) and ivy (*Hedera helix*) which leads onto a small area of bramble (*Rubus fruticosa agg.*) scrub beside the entrance drive. The remains of a dry ditch is also found associated with this small area of scrub.

4.2.6 A small block of bramble scrub is found separating the two horse paddocks.

Plates 4-7: Views of the adjacent vegetative habitats; arable fields, broad-leaved woodland, species-poor hedgerow, amenity lawn and scrub

4.2.7 With the exception of the hedgerow, none of the other habitats within the application site are considered important; these habitats (scrub and amenity lawn) are common and widespread and under no conservation threat. Conversely, hedgerows which contain a minimum of 80% native woody species are considered important habitats and are listed as a Sect. 41 NERC Habitat. However, the short section of hedgerow within the application site is species-poor and would not be regarded as important under the Hedgerow Regulations 1997. As a habitat, such species-poor hedgerows are a very common feature in the UK and Essex and, as such, the short section of hedgerow within the application site is considered to be of negligible value.

4.3 Species and Species Groups

4.3.1 The biological data search returned a number of records of protected species and species of importance from within the zone of influence.

Plants

4.3.2 Only one species of protected plant is recorded within the 2km radius data search area around the application site. There are a number of records of bluebell *(Hyacinthoides non-scripta),* within only four figure grid references provided. The bluebell however is a plant of woodland floors and the site is considered wholly unsuitable for this species.

Invertebrates

4.3.3 There are 24 species of important invertebrate recorded within the 2km radius data search area. Two species of butterfly are recorded – the small heath *(Coenonympha pamphilus)* and the small blue *(Cupido minimus)*. The small heath is a widespread butterfly of grassland areas and the small blue is also a butterfly of grassland but requires the presence of kidney vetch *(Anthyllis vulneraria),* which is its foodplant.

4.3.4 The remaining 22 species are all moths and, of these, only 11 species are deemed likely to be found within the habitats on site. The species recorded are; knot grass *(Acronicta rumicis)*, brown-spot pinion *(Agrochola litura)*, large nutmeg *(Apamea anceps)*, deep-brown dart *(Aporophyla lutulenta)*, mottled rustic (*Caradrina morheus*), small square-spot *(Diarsia rubi)*, garden dart *(Euxoa nigricans)*, ghost moth (*Hepialus humuli*), shaded broad-bar (*Scotopteryx chenopodiata*), feathered gothic (*Tholera decimalis*) and dark-barred twin-spot carpet *(Xanthorhoe ferrugata)*.

4.3.5 These species of moth are listed under NERC Sect.41. All listed are considered to be widespread and generalists and, as such, are not considered rare or scarce.

Amphibians

4.3.6 There is only one species of amphibian recorded within the data search area – the great crested newt, which is also an Essex BAP species. There are numerous records dating between 1996 and 2012 but with the majority in the 1990s. All but one record are from the Hatfield Heath area approximately 1 – 1.5km to the north-east of the site. One record is from the village of Sheering but is over 400m away from the site to the south-west and on the opposite side of the Harlow Road and dated 1997.

4.3.7 The application site supports no open water but is bounded by a short section of ditch. Whilst this ditch currently supports open water, the section of ditch is completely overshadowed by trees and scrub, suggesting it unsuitability to support great crested newts. As such, great crested newts are not considered a development constraint within the application site at this time.

Reptiles

4.3.8 There are no records of any species of reptile within the data search area. Some rough and rank grassland and scrub is found in close proximity to the application site. However, the application site is not considered to support suitable reptile habitat at this time and therefore reptiles are not deemed to be a development constraint.

Birds

4.3.9 There are eight species of important birds recorded within the 2km radius data search area, although of these, only two are considered likely to utilise the boundary habitats of the site - dunnock *(Prunella modularis),* song thrush *(Turdus philomelos)* – an Essex BAP species. The

majority of the application site is however comprised of very short grazed grassland and as such provides negligible value to birds either as foraging or nesting habitat. Some minor bird nesting habitat is found in the short section of hedgerow and within the tree belt which lies adjacent, but outside, the development footprint.

Bats

4.3.10 Four species of bat are recorded locally along with a number of records of unidentified pipistrelle bats; common pipistrelle *(Pipistrellus pipistrellus)* – an Essex BAP species, soprano pipistrelle *(Pipistrellus pygmaeus)*, Daubenton's *(Myotis daubentonii)* and brown long-eared *(Plecotus auritus)*.

4.3.11 A number of these records (common pipistrelle and brown long-eared) are from the village of Sheering, approximately 250m from the site to the west and south at their closest.

4.3.12 There are no trees suitable to support roosting bats within the application site and previously completed surveys of the adjacent farm buildings found evidence of a low status non-breeding brown long-eared bats roost. However, minor bat feeding and foraging habitat is found along the tree belt which bounds the northern edge of the application site. This potential short section of bat foraging habitat is however very short and lacks any material habitat connectivity and is therefore considered to be of potentially low value to the local bat population.

Other Mammals

4.3.13 Important species of mammal recorded within the zone of influence include; badger, hedgehog *(Erinaceus europaeus),* harvest mouse *(Micromys minutus),* otter and water vole *(Arvicola amphibius)*. With the exception of possibly hedgehog, none of these species are likely to be found within the site. Although there are records of badgers killed

on the road through Sheering village, no badger setts were found within or adjacent to the site and no obvious indicative evidence of badger foraging was detected.

4.3.14 The hedgehog is a Species of Principal Importance, it is a mammal of rural and rural urban fringe garden, woodland and hedgerow habitats which are present in the locality of the site. The closest record is from the village of Sheering, approximately 400m to the west of the site. Whilst no signs of this species were found on site, the presence of this species within the site at any time should not be precluded, but with care, should not be a development constraint.

5.0 Ecological Constraints and Opportunities

5.1.1 The application site is comprised of what appears to be species-poor improved grassland, grazed very short by horses and as such is considered to be of very low biodiversity value. Other habitats surround the application site including arable land, species-poor hedgerow, scrub and broad-leaved tree belts, all considered to be of very low biodiversity value and no significant biodiversity constraints have been identified.

5.1.2 The desk study revealed the application site is not designated as a site of nature conservation importance, neither is it a recorded site for supporting important or protected species or habitats, although a small bat roost is recorded in an adjacent building.

5.1.3 The National Planning Policy Framework requires local planning authorities, when determining planning applications, to require the preservation, restoration and recreation of priority habitats and ecological networks and the recovery of priority species populations.

5.1.4 This ordinarily can provide an opportunity to not only mitigate potential impacts on important species and habitats, but to carry out enhancements to provide a net biodiversity gain.

5.1.5 The Preliminary Ecological Appraisal of the application site has concluded that there is no necessity for mitigation measures should the application site be developed. However, in accordance with both NPPF and local plan policies, a biodiversity enhancement should be considered.

5.1.6 For such a small application site biodiversity enhancement opportunities are limited. However, it is considered appropriate given the close proximity of a bat roost that artificial bat roosting features be

built into the new residential properties, providing a biodiversity enhancement to the application site.

5.2 Further Surveys

5.2.1 At this time, no further surveys are considered necessary and this PEA has not identified the potential presence of important or protected species which would require further seasonally-appropriate species surveys to support an impact assessment of any future development of the site.

6.0 Conclusions

6.1.1 The application site was found to support low biodiversity habitats with no significant value with regard to important or protected species or habitats, with the exception of minor bird nesting habitat within the short section of hedgerow. The application site is considered highly unlikely to support protected species and none of the extant habitats within the site are deemed to be important.

6.1.2 In conclusion, it is considered that the development of the application with have no material or significant impact on important biodiversity and the development of the site can demonstrate a no net loss of biodiversity and a net gain by providing compensatory bat roosting features within the development site.

7.0 References

Ref. 1 Chartered Institute of Ecology and Environmental Management. 2015 *Guidelines for Preliminary Ecological Appraisal*

Ref. 2 Joint Nature Conservation Committee. 2010. *Handbook for Phase 1 Habitat Survey* Revised re-print

8.0 Appendix 1 – Habitat Map