

# Clwydian Ecology

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**ECOLOGICAL ASSESSMENT FOR  
LAND ADJACENT TO ST DEINIOLS ASH FARM  
MANCOT  
FLINTSHIRE, NORTH WALES**

**The Hawarden Estate**

**20<sup>th</sup> August 2018**

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## Summary

- A Preliminary Ecological Appraisal was carried out on an area of land at Mancot, Flintshire in August 2018.
- The survey was required to assess the site in respect of a proposed planning application for a residential development.
- The main areas of habitat within the site boundary are sheep/cattle grazed improved grassland of a relatively low botanical interest.
- Some of the hedgerow trees support features which bats may use and the hedgerows will be used by bats for commuting around the area.
- A single badger outlier hole was found within a hedgerow and further activity may be present at the upper part of the site in dense scrub.
- Mitigation and compensation measures will be required for this development to replace loss of nest sites for birds.
- There do not appear to be any other protected species issues based upon the existing level of information.
- Further survey works will be required in respect of badgers and possibly bats depending on the extent and layout of the proposed development.
- Spring bird survey work would be advisable to see if the site supports ground nesting species such as skylark.
- Measures will need to be taken to try and reduce any potential impacts to hedgehogs.
- An Ecological Construction Method Statement will be required prior to the start of any site works.

## **1. Introduction**

### Background

An ecological survey was undertaken in August 2018 in respect of an area of land located adjacent to St Deiniols Ash Farm, Mancot, Flintshire, North Wales. The brief was to carry out a walkover survey and assess the ecological value of the site. The current proposals for the land are for a proposed residential development with the associated access and infra structure. Recommendations for mitigation, ecological enhancement and further surveys will be made as required.

### Ecological context

The site is located within an established residential area with residential housing to the north, east and west boundaries. The site consists of one very large field with smaller fields to the sides. The majority of the land is grazed by sheep and cattle or a mix of both. Two small parallel fields at the northern end are under a different ownership/tenant and at the time of the survey were unmanaged. There are no buildings or structures within the proposed development boundary. The pond shown adjacent to the farm no longer appears to exist and there do not appear to be any other ponds within at least 250 metres of the site.

### Personnel

The survey was carried out by David Bennett who has over 20 years experience of conservation work, ecological surveys and species licensing.

## **2. Methods**

### Background data search

A background data search was undertaken for designated sites and species records within 1 Km of the site (COFNOD North Wales Environmental Information Service).

### Preliminary Ecological Appraisal

A Phase 1 habitat survey was carried out following standard methodology. This involved walking over the site classifying areas of land into a habitat type. Target notes were made (where required) in respect of any habitats or features of interest and any sightings of protected or rare species.

The suitability of the habitat for protected species (or other species of ecological interest) were also assessed at the same time. Those additional species (site dependent) can include bats, badgers, great crested newt, otters and water voles.

This is generally undertaken by looking for field signs such as footprints, droppings, feeding remains, latrines, worn paths, vegetation structure, shelter availability, foraging resources etc.

### Constraints

There were no constraints at this site, full access was provided, and the open nature of the land enables most sections to be viewed. The two small parallel fields at the northern end are unmanaged with thick hedgerows/scrub areas and it was not possible to access the dense scrub.

## **5. Results**

### General

The exact site size is unknown. The site is predominately improved grassland grazed by sheep and cattle. The two small parallel fields at the northern end are not grazed and are under a separate ownership or management. The central hedgerow between these two fields has grown quite wide with dense areas of scrub. Trimmed hedgerows separate the remainder of the field boundaries with a scattering of mature trees.

### Background data search

Data was obtained from COFNOD. There are no known statutory sites within a 1 Km radius from the centre of the site.

Relevant protected and notable species records are shown in the attached document provided by COFNOD.

The records do not show anything specific for the proposed development area although there are a number of records for hedgehog for the surrounding area.

### Habitats

#### Improved grassland

The majority of the fields can be described as tightly grazed, improved, agricultural type grassland. Typical species include perennial rye grass *Lolium perenne*, annual meadow grass *Poa annua*, common bent *Agrostis capillaris*, Yorkshire fog *Holcus lanatus*, white clover *Trifolium repens*, broad leaved dock *Rumex obtusifolius*, common chickweed *Stellaria media*, daisy *Bellis perennis*, dandelion *Taraxacum officinale* and spear thistle *Cirsium vulgare*.

The two small parallel fields at the northern end have more interest because they are relatively unmanaged and at the time of the survey uncut. Species include sheeps sorrel *Rumex acetosa*, birds foot trefoil *Lotus corniculatus* and creeping buttercup *Ranunculus repens* as well as various grass species.

### Hedgerows

The fields are separated by hedgerows, the majority of them have been trimmed on a regular basis. Species include hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, hazel *Coryllus avellana*, sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, dog rose *Rosa canina* and bramble *Rubus agg.*

The central hedgerow within the small parallel fields (north end) mentioned above has developed into a wide band of scrub, the northern and south section also have scrub edges.

### Mature trees

The site supports a number of mature trees, these are all situated within the lines of existing hedgerows. The majority of these trees are English oak *Quercus robur* and some of them support areas of deadwood/cavities/crevices, particularly those at the northern end by the small parallel fields.

### **Faunal species**

#### Badgers

A single outlier hole was found within a central hedgerow section towards the southern end of the site (as marked on the plan). No hairs were present around the entrance and no other evidence to suggest badger, but the hole was quite large and the way the spoil had been dug suggested badger. It was very dry and compressed so it may not be in use at the present time or it may be used by a fox although there was no evidence to suggest that.

The thick hedgerow with scrub edges within the central area of the small parallel fields at the northern end have various runs entering into them. The run edges where they meet the scrub are quite large and look like they may be used by badger. The scrub was too dense to enable any detailed survey of the central scrub area in respect of badgers, no latrines were found although they could be hidden due to the rough vegetation.

### Bats

There are no buildings within the proposed development area which can support roosting bats. It is likely that bats will use the linear features of the area (hedgerows) for commuting and the wide-open habitats will provide suitable foraging. Some of the large oak trees do have areas of dead wood, cracks and splits and it is possible that there may be some bat potential.

### Great crested newts and amphibians

There are no ponds or areas of standing water within the site which could offer any potential for great crested newts. There are no known ponds within a radius of at least 500 metres from the site and any presence seems unlikely.

### Reptiles

There was no evidence of reptiles which could be seen during the walk-over survey. The habitat is generally unsuitable and it is unlikely that any common species will be present.

### Birds

Birds will use the trees, hedgerow and scrub areas for nesting, also for general shelter. The relatively open nature of the site with the central large field may prove attractive for skylark although this depends to some degree on the level of grazing that the site supports.

### Hedgehog

Hedgehogs are a declining species and they are a UK BAP Priority Species. The COFNOD data provides a number of hedgehog records and this species is no doubt under-recorded in the area. Presence should be assumed in and around the development area.

## **6. Evaluation and Legislation**

All of the plants recorded during this survey are widespread at both national and county scales. The list of plant species is not definitive and only represents those recorded while walking around the site.

The presence of a species protected under European or UK legislation is a material consideration when a planning authority is considering a development proposal which, if carried out would be likely to result in disturbance or harm to the species or its habitat. Section 74 (2) of the CroW Act 2000 (now updated by Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 requires the publication of lists of habitats and species that are of principal importance for the

purpose of conserving biological diversity. The list is regularly changed and updated and many bat species appear on it. NERC consolidates the requirements of the CROW Act in placing duties upon government agencies, including local authorities, to ensure the conservation of Biodiversity.

### **Habitats**

The area of land proposed for the development is mainly improved, agricultural type grassland which is tightly grazed. This land has a low diversity of plant species and the overall ecological interest is low. The small parallel fields at the northern end have a higher interest but only because they are currently unmanaged.

### **Badgers**

Badgers are protected by the Protection of Badgers Act 1992. Under this Act it is illegal to destroy, damage or obstruct access to a sett or disturb a badger while it is using the sett. A sett is defined by the Act as any structure or place showing signs of current or recent occupation by a badger. Under the current interpretation of the Act a license is required for the following operations:

- a. Use of hand tools within 10 metres of a badger sett
- b. Use of light machinery within 20 metres of a badger sett
- c. Use of heavy machinery within 30 metres of a badger sett

**The single outlier hole may no longer be in use because there were no visible hairs in and around the entrance or on the adjacent vegetation. However, further survey work will be required to establish this. Further survey work will also be required in respect of the thick hedgerow at the northern end of the site, but this will need to be undertaken during winter when the vegetation will be more accessible, and leaves have fallen.**

### **Bats**

Bats and their roosts are protected by the Wildlife and Countryside Act (as amended) and the Conservation (Natural Habitats & c) Regulations 1994. The Habitats Directive has recently been superseded by The Conservation of Habitats and Species Regulations 2010 which came into force on the 1<sup>st</sup> April 2010. This makes it unlawful to harm, disturb, or destroy either bats or their roosts. Any work which may potentially disturb a roost (whether bats are present or not) may require a license.

To summarise it is illegal not only to intentionally kill, injure or take any bat but also too recklessly or intentionally damage, destroy or obstruct access to any place that a bat uses for shelter or protection, or to disturb a bat while it is occupying such a place. A roost is protected whether or not bats are present at the time. The reason

for this is that bats have a tendency to remain loyal to certain roost sites, often over a long period of time.

**Some of the large oak trees, particularly those at the northern end support features which could be used by bats. At this stage no information about the retention of trees is available and no tree survey has been seen. Further survey work on an individual basis will be required if any large trees are proposed for removal.**

**The fields provide a wide area of habitat within an otherwise developed residential location. The hedgerows will provide linear features for bats to follow and the open habitat will provide suitable foraging. Dependent upon the layout and proposals for the site further bat survey work may be required to establish any potential use of the site.**

### **Great crested newts**

The great crested newt *Triturus cristatus* is listed on Schedule 5 of the Wildlife and Countryside Act (as amended), and is afforded full protection under the terms of Section 9. This makes it an offence if any person:

9(1) “... *intentionally kills, injures or takes* [a great crested newt]”;

9(2) “... *has in his possession or control any live or dead* [great crested newt] *or any part of, or anything derived from such an animal*”;9(4) “... *intentionally or recklessly (a) damages or destroys, or obstructs access to, any structure or place which* [a great crested newt] *uses for shelter or protection; or (b) disturbs any such animal while it is occupying a structure or place which it uses for that purpose*”;

9(5) “... (a) sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead [great crested newt], or any part of, or anything derived from, such an animal; or (b) publishes or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things”.

Great crested newts are also afforded additional protection through inclusion on Schedule 2 (“European protected species”) of **The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)**, which transpose into British law the European Community’s **Habitats Directive (92/43/EEC)**. The Habitats Directive has recently been superseded by “**The Conservation of Habitats and Species Regulations 2010**”, this came into force on the 1<sup>st</sup> April 2010.

**Considering the information currently available there does not appear to be any issues in respect of great crested newts.**

## **Reptiles**

All species of British reptile are protected against intentional killing, injury or sale under the Wildlife and Countryside Act 1981 (as amended). The Sand Lizard and the Smooth Snake are afforded a higher degree of protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 making it an offence to:

- Intentionally kill, take or injure these species of reptile.
- Damage, destroy or obstruct a place a these species use for breeding, resting, shelter or protection or to disturb these species in such a place.
- Possess or control these species alive or dead, or any part of them, or anything derived from them.
- Sell, offer for sale, advertise for sale or offer to these species, or a part of them or anything derived from them.
- Deliberately disturb or deliberately take or destroy the eggs of these species.

The distribution of Smooth Snakes and Sand Lizards is limited to heathland habitats in Surrey, Dorset, Hampshire and Sussex. The Sand Lizard is also known to occur on sand dune habitats in Merseyside and has recently been introduced to some areas of North Wales.

Licenses can be issued in order to allow activities that would constitute an offence under the legislation. Licenses can be issued for specific purposes including scientific study, photography, conservation management and development.

In England and Wales a development license must be obtained from Natural England or the Welsh Government before undertaking any works that will affect Sand Lizards or Smooth Snakes or their habitat. A license is not required to carry out surveys or mitigation for other reptile species.

**There do not appear to be any issues in respect of reptiles and no further work is required in this respect.**

## **Nesting birds**

All breeding birds are protected under Section 1(1) and 1(2) of the Wildlife and Countryside Act 1981, as amended. This makes it an offence to damage, disturb, or obstruct access to nests during the bird breeding season (generally March to August).

**Birds will use the boundary features, scrub/trees etc so any planned removal for access or otherwise will have to be undertaken between October and February inclusive (to avoid the nesting season).**

**Preliminary bird survey work should be undertaken to find out if any rare or uncommon species (such as skylark) are using the site. This should include a spring and early summer visit.**

### **Hedgehogs**

Although hedgehogs only have limited statutory protection, they are an uncommon and declining species. For this reason, they have been included as a UK BAP Priority Species.

**Action will need to be taken to ensure that hedgehogs are not injured, disturbed or killed during any proposed development of the site. Suitable measures will need to be taken to ensure that the working methodology covers hedgehogs and how to avoid any potential impacts.**

## **7. Recommendations**

### **Habitats**

At this stage no plans have been seen for the proposed layout of the site. However, tree, hedgerow and shrub planting in and around the general area of the site is encouraged to replace any which may be lost as a result of the development. Native species should be used where possible, these can include ash, English oak, hawthorn, holly, hazel, field maple and blackthorn.

### **Protected species**

There do not appear to be any significant issues in respect of protected species although further work is required in respect of bats, badgers and birds.

### **Ecological enhancement**

Current planning policy requires that development projects minimise ecological damage, they should also include ecological enhancement. Until the final plans and layout of the site are available it is not possible to comment further in this respect.

### **Biodiversity offsetting**

In some cases biodiversity offsetting may be required as part of the consenting process. This is a last resort option that should only be used if there are impacts which cannot be avoided, mitigated or compensated for. In this case it may be possible to include suitable mitigation within the design layout.

## **Construction Method Statement**

Once the additional survey works for the site have been undertaken an Ecological Construction Method Statement should be compiled. This will detail suitable measures to be undertaken both before, during and after works have been completed to try and reduce any impacts upon wildlife.

### **8. Relevant literature**

Institute for Ecology & Environmental Management (2012) *Guidelines for Ecological Appraisal* IEEM Winchester

Rose, F. (1989) *Grasses, Sedges and Ferns* Viking Press

Schofield, H.W & Mitchell Jones, A.J (2004) *The Bats of Britain & Ireland* The Vincent Wildlife Trust, Ledbury, England

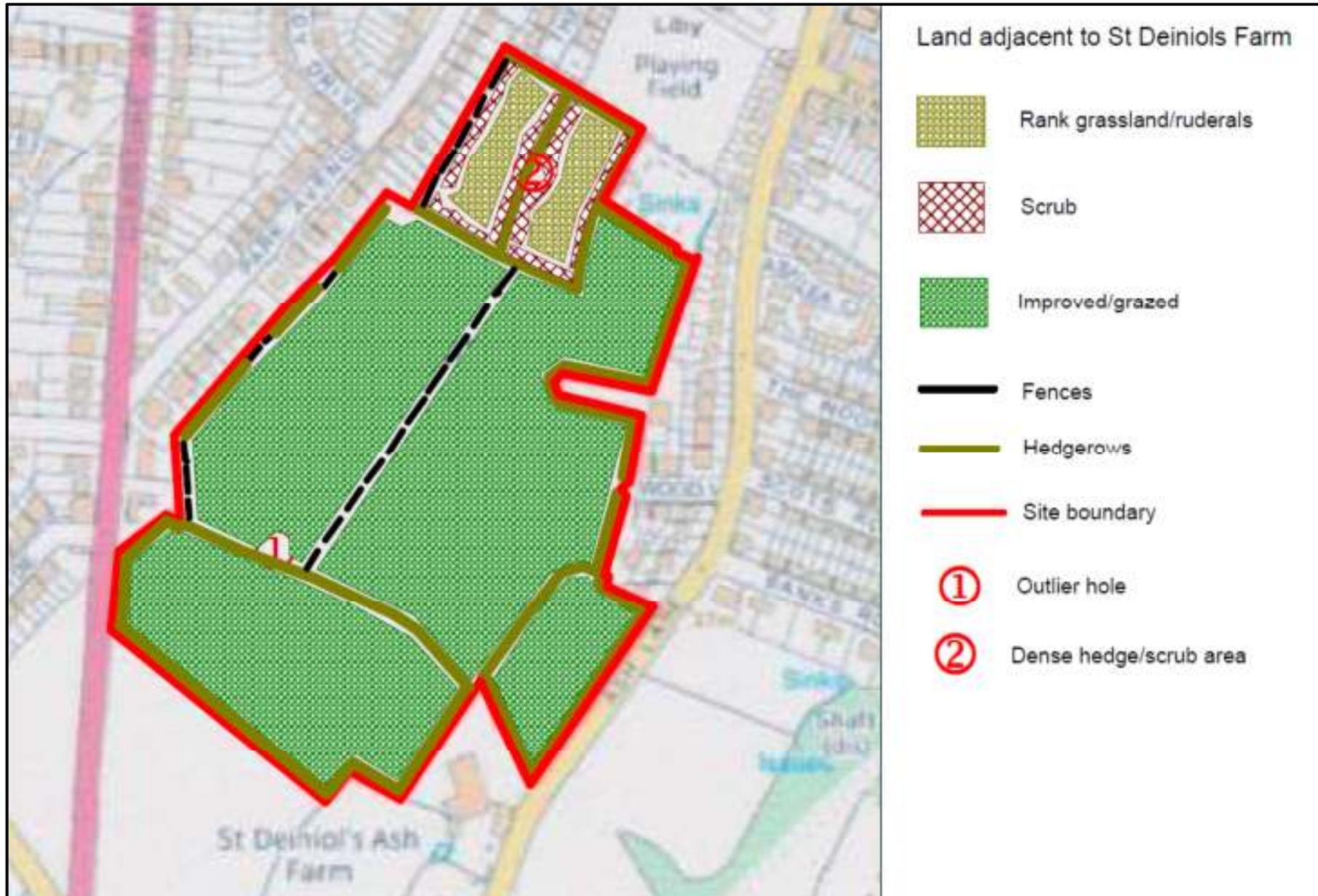
Stace, C. (2005) *New Flora of the British Isles* Cambridge University Press, Cambridge.

## Appendix 1 – Species list

<b>Trees and shrubs</b>	
Ash	<i>Fraxinus excelsior</i>
Blackthorn	<i>Prunus spinosa</i>
Bramble	<i>Rubus agg.</i>
Dog Rose	<i>Rosa Canina</i>
Elder	<i>Sambucus nigra</i>
English oak	<i>Quercus robur</i>
Hazel	<i>Coryllus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Sycamore	<i>Acer pseudoplatanus</i>
Willow	<i>Salix sp</i>

<b>Herbs</b>	
Annual meadow grass	<i>Poa annua</i>
Birds foot trefoil	<i>Lotus corniculatus</i>
Broad leaved dock	<i>Rumex obtusifolius</i>
Broad leaved plantain	<i>Plantago major</i>
Chickweed	<i>Stellaria media</i>
Cleavers	<i>Galium aparine</i>
Cocksfoot	<i>Dactylus glomerata</i>
Common bent	<i>Agrostis capillaris</i>
Common chickweed	<i>Stellaria media</i>
Common mouse-ear	<i>Cerastium fontanum</i>
Common nettle	<i>Urtica dioica</i>
Common sorrel	<i>Rumex acetosa</i>
Creeping buttercup	<i>Ranunculus repens</i>
Creeping thistle	<i>Cirsium arvense</i>
Curled dock	<i>Rumex crispus</i>
Daisy	<i>Bellis perennis</i>
Dandelion	<i>Taraxacum officinale</i>
Hogweed	<i>Heracleum sphondylium</i>
Ivy	<i>Hedera helix</i>
Hairy bittercress	<i>Cardamine hirsuta</i>
Perennial rye grass	<i>Lolium perenne</i>
Ragwort	<i>Senecio jacobea</i>
Rough meadow grass	<i>Poa trivialis</i>
Spear thistle	<i>Cirsium vulgare</i>
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
White clover	<i>Trifolium repens</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire fog	<i>Holcus lanatus</i>

## Appendix 2 – Site plan



# E-mapper COFNOD plan

