

Ecological Appraisal and Impact Assessment  
for Land Adjacent to The Paddocks  
at Old Wrexham Road,  
Gresford, Wrexham  
LL12 8UF  
Grid Ref SJ 34967 54485  
on 11<sup>th</sup> July 2018

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## **1. Summary**

The purpose of the report is to assess the potential ecological impacts of the proposed development adjacent to The Paddocks at Old Wrexham Road, Gresford and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme entails the relocation of approximately 60 m of hedgerow and the loss or disturbance of 0.2 ha land to enable the construction of two new dwellings with associated gardens and parking areas.

The site, boundaries and adjacent land were examined to establish the presence of any protected species or habitats, and for evidence of use by protected species of animals. The variety of plant species was mapped according to the convention of Phase 1 habitat surveys as described by the JNCC (2010).

Impacts during construction should be low provided that no nests are constructed or occupied while work is taking place. No trimming or removal of hedges or felling of trees should take place between the beginning of March and the end of August. Alternatively netting may be placed over the hedges and trees within this time to prevent access by birds during the breeding season.

No rare or threatened species of plants or animals were found on site or near the site. There is not considered to be any significant impact on any protected species or habitat as long as the recommended mitigation and compensation measures are followed.

## **2. Introduction and Description of the Proposed Development**

Susan Worsfold BSc (Hons) Grad CIEEM is an experienced wildlife surveyor, licensed bat worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2 ) (Natural England) and 72725:OTH:CSAB:2016 (Natural Resources Wales);  
Licensed great crested newt worker, registration number 2015-8194-CLS-CLS (NE)  
and 72936-OTH-SA:2016 (NRW)

This report was commissioned by Blueprint Architectural Services, Office 3K4, Redwither Business Tower, Wrexham LL13 9XT

The project entails the relocation of approximately 60 m of hedgerow and the loss or disturbance of 0.2 ha land to enable the construction of two new dwellings with associated gardens and parking areas.

The purpose of the report is to identify and describe any significant ecological effects which are likely to occur as a result of the proposed development. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed.

The site, at Old Wrexham Road, Gresford LL12 8UF; Grid Ref SJ 34967 54485, covers approximately 0.2 ha of a 0.6 ha area of un-managed land which is currently not in use for grazing, crops or utilities. It is bounded on two sides by hedges and a fence on the third. See Appendix 13.2.

## **3. Methodology**

### **3.1. Scope of the Assessment**

The report incorporates an extended phase 1 habitat survey searching for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:

The Conservation of Habitats and Species Regulations 2017 and listed in:

Schedule 2. European protected species of animals;

Schedule 5. European protected species of plants;

The protection of Badgers Act 1992.

A preliminary ecological appraisal (PEA) was carried out to determine whether further surveys might be required. Nearby designated sites were considered and a data search for protected species within a 1 km radius of the perimeter was commissioned in order to assess any potential ecological impacts.

### 3.2. Desk Study

A data search was carried out by Cofnod on 14<sup>th</sup> September 2018 for priority species of plants and animals within 1 km of the site perimeter.

The nearest record of a priority species is of willow warbler (*Phylloscopus trochilus*), 97 m south of the site. The nearest UK Biodiversity Action Plan (BAP) Priority Species were herring gull (*Larus argentatus*), dunnoek (*Prunella modularis*), starling (*Sturnus vulgaris*) and song thrush (*Turdus philomelos*), at 448 m . The nearest European Protected Species (EPS) are Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Lesser Horseshoe (*Rhinolophus hipposideros*) bats at 137 m south west.

The nearest great crested newt (*Triturus cristatus*) record is 357 m south west.

The nearest badger record is 407 m away.

### 3.3. Field Survey

The 0.2 ha site and boundaries were examined to establish the presence of any protected species or habitats, and for evidence of use by protected species of animals. Hedgerows and trees were assessed for suitability for use by dormice. Trees were assessed for suitability for use by bats. The site and surrounding habitat was examined for signs of use by badgers. Maps of the site and surrounding environment were examined to identify any nearby waterbodies within an influencing distance of the site. The variety of plant species was mapped according to the convention of Phase 1 habitat surveys as described by the JNCC (2010).

The survey (PEA) was carried out in accordance with CIEEM guidelines (CIEEM 2017) on 11th July 2018 by Susan Worsfold BSc (Hons) Grad CIEEM. The weather was hot and sunny.

Parts of the site were not directly accessible due to impenetrable vegetation. However it was all visible due to the small area under investigation.

## 4. Baseline Ecological Conditions/Results

### 4.1 Designated Sites

The nearest designated sites are Midland Meres and Mosses Phase 2, (Ramsar Site: Wales and England) and Vicarage Moss (SSSI Wales) 740 m south east

### 4.2 Habitats

Site: The site is situated in a semi rural location on a village perimeter. The ground was very uneven and covered with large amounts of hardcore and piles of branches. It has been unmanaged for a significant time. The only UK BAP Priority Habitat on site or adjacent was the boundary hedgerows which were at least 80% native woody species. However, none qualified as 'important' hedges according to the Hedgerows Regulations 1997. Common nettle (*Urtica dioica*) and spear thistle (*Cirsium vulgare*) dominated. The NVC broad habitat type was scrub. Hedges had been trimmed regularly. See Appendix 9.1 for survey diagram.

Adjacent land: There is no significant woodland within 500 m. There are four ponds within 500 m, the nearest being 230 m to the south west. The nearest river is the River Alyn 1 km north west. There is a good network of mixed agricultural and domestic hedgerows surrounding the site, with some trees. See Appendix 13.1.

### 4.3 Species and Species Groups

#### *i. Plants*

The west boundary hedge comprised hazel (*Corylus avellana*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*), oak (*Quercus* sp.), elder (*Sambucus nigra*), sloe (*Prunus spinosa*), bramble (*Rubus fruticosus* agg.). The south boundary hedge was less diverse; sycamore (*Acer pseudoplatanus*), holly, hawthorn and rose (*Rosa* sp.)

Plant diversity on site was poor. Common nettle (*Urtica dioica*), dominated with spear thistle (*Cirsium vulgare*), rose, cow parsley (*Anthriscus sylvestris*), bramble and great willowherb (*Epilobium hirsutum*) also present. Vegetation was very dense and almost impenetrable.

#### *ii. Invertebrates*

None seen during the survey. The site and vegetation is favourable for use by many invertebrate species.

#### *iii. Amphibians and Reptiles*

None seen during the survey. There were no ponds within 100 m of the site. There was adequate shelter but limited foraging potential for reptiles.

#### *iv. Birds*

Dunnock (*Prunella modularis*) and blackbird (*Turdus merula*) were seen on the site during the survey. There are trees on site suitable for use by nesting birds. The ground and hedge flora provide food and shelter for birds.

#### *vi. Bats*

There were no mature trees either in the hedges or on site which were suitable for use by bats. No buildings were present on site. The site is suitable for use by foraging and commuting bats.

*vii. Badgers*

There were no badger setts, tracks or latrines found on the site or within 30 m of the site. The vegetation and terrain was not favourable for foraging badgers or for the construction of setts.

*viii. Dormice*

No hazelnuts were found which indicated gnawing by dormice and the site was not favourable for use by them.

No species of conservation value or Schedule 9 species were seen on site.

## 5. Description of the Development

The proposed scheme entails the relocation of approximately 60 m of hedgerow and the loss or disturbance of 0.2 ha land to enable the construction of two new dwellings with associated drives, gardens and parking areas to the east and west (Appendix 13.5).

## 6. Assessment of Effects and Mitigation Measures

### Designated Sites:

It is not considered that the development will have any significant impact on either of the nearby designated sites due to the small scale of the development.

### Habitats:

No priority habitat is affected by the proposal. The loss of vegetation will have a low impact on some species, however the majority of the total area of the site will remain unaffected.

### Species:

#### *Birds*

The impacts which the proposed work might have on birds will be small, providing that no nests are occupied or being built at the time the work is done. No trimming or removal of hedges or felling of trees should take place between the beginning of March and the end of August. Alternatively netting may be placed over the hedges and trees within this time to prevent access by birds during the breeding season. If birds should gain access to the houses and begin building nests during the work, then the work in that area must stop until the young have left the nests.

#### *Bats*

There is not considered to be any threat to the conservation status of bats or danger of harm to individuals as the site is not suitable for roosting bats.

If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.

## 7. Compensation Recommendations

One woodcrete nests suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into each new building, and one woodcrete nests suitable for swallows.

House Sparrow Terrace - Wooden (or woodcrete) nest box with 3 sub-divisions to support 3 nesting pairs. To be placed under the eaves of buildings or incorporated into walls. Entrance holes: 32mm diameter. Dimensions: H310 x W370 x D185mm. Also suitable for tits, redstarts and spotted flycatchers. Place at least 2 m from the ground.

Swallow nest - H110mm x W250mm x D140mm. The nest should be placed inside an enclosed outbuilding or shed, porch or garage leaving a distance of at least 6cm between the top of the nest and the ceiling. There must be access for the birds through an open window or sky-light. A car port or refuse bin shelter, or an outbuilding with a permanently open window or half door, or simply a space over the door, would suffice. Under the eaves of the buildings would be acceptable but less suitable.

Other designs of nest boxes may also be suitable.

## 8. Enhancement Recommendations

A bat box e.g. Schwegler 1FF to be fitted externally to each house. Further information is given in the bat box information pack available at <http://www.bats.org.uk/index.php>. Bat boxes should be placed in a south east to south west facing position if possible. A lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: [http://www.bats.org.uk/pages/bats\\_and\\_lighting.html](http://www.bats.org.uk/pages/bats_and_lighting.html)

Further hedgerows to be planted at the east and north boundaries of at least four native species, eg. hawthorn, hazel, blackthorn, elder, field maple (*Acer campestre*), holly, rose.

## 9. Ecological Constraints

None

## 10. Monitoring

None recommended

## 11. Conclusions

If the recommended mitigation, compensation and enhancement measures are taken the overall ecological impacts of the proposed development will be low due to its small scale and lack of evidence of any rare or threatened species or priority habitat. The habitat is not protected under current legislation. Most of the total area of similar habitat including the site is to remain unaffected.

## 12. Bibliography

Bat Conservation Trust available at: <http://www.bats.org.uk>

CIEEM (2017) *Guidelines on Ecological Report Writing*. Winchester: Chartered Institute of Ecology and Environmental Management

Cofnod available at: <https://www.cofnod.org.uk>

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: [jncc.defra.gov.uk](http://jncc.defra.gov.uk) and [ec.europa.eu/environment/nature/legislation/habitatsdirective](http://ec.europa.eu/environment/nature/legislation/habitatsdirective)

Gent A.H, Gibson S.D (eds) (1998) *Herpetofauna Workers' Manual*. Peterborough: Joint Nature Conservation Committee

Google Maps available at: <https://maps.google.com/maps>

Hedgerows Regulations 1997 available at: <http://www.legislation.gov.uk/ukxi/1997/1160/contents/made>

JNCC, (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*, ISBN 0 86139 636 7

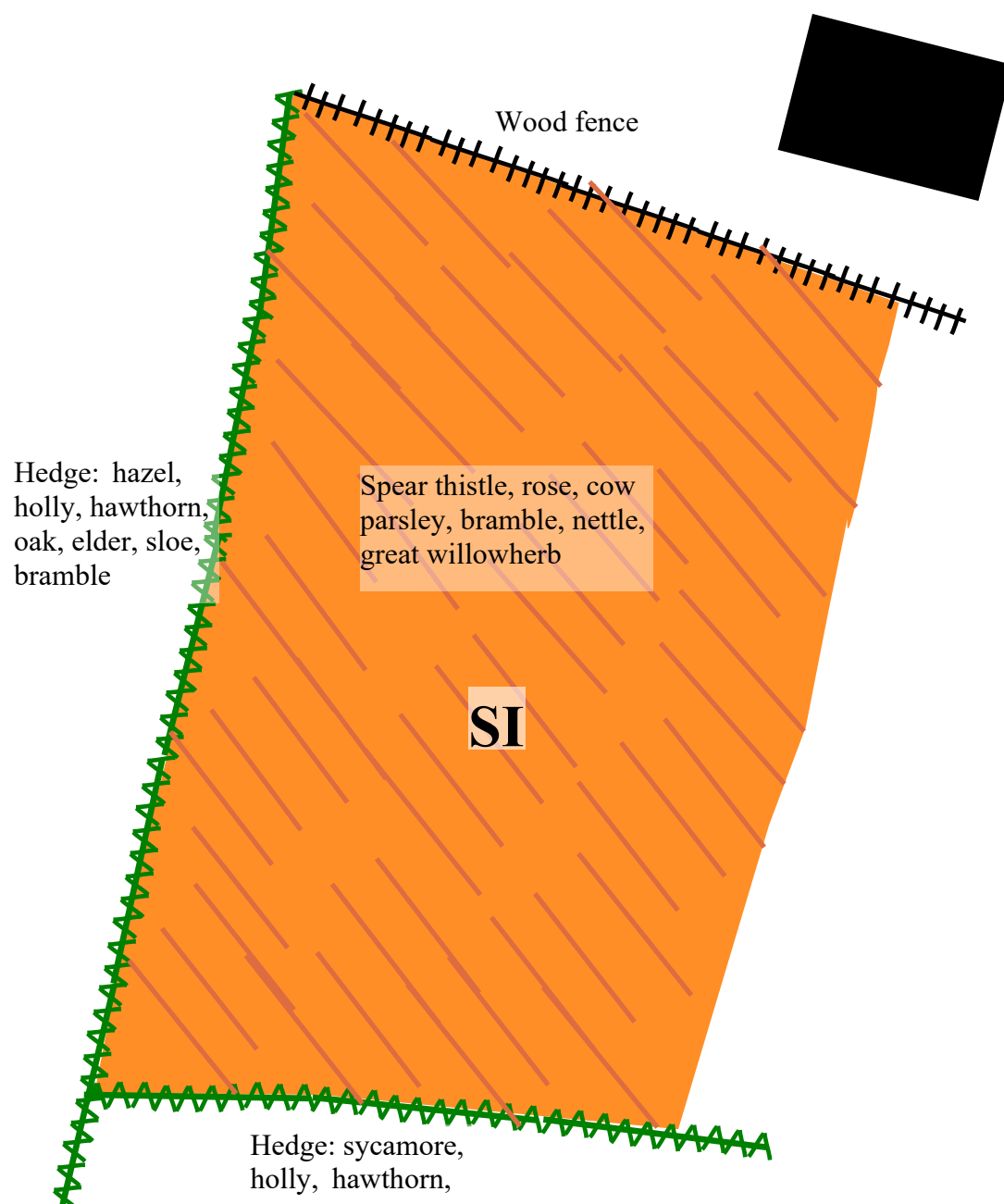
Magic Maps available at: <http://magic.defra.gov.uk>

The National Vegetation Classification available at: [jncc.defra.gov.uk](http://jncc.defra.gov.uk)

Natural Resources Wales available at: <https://naturalresources.wales/?lang=en>

UK BAP Priority Habitats available at: [jncc.defra.gov.uk](http://jncc.defra.gov.uk)

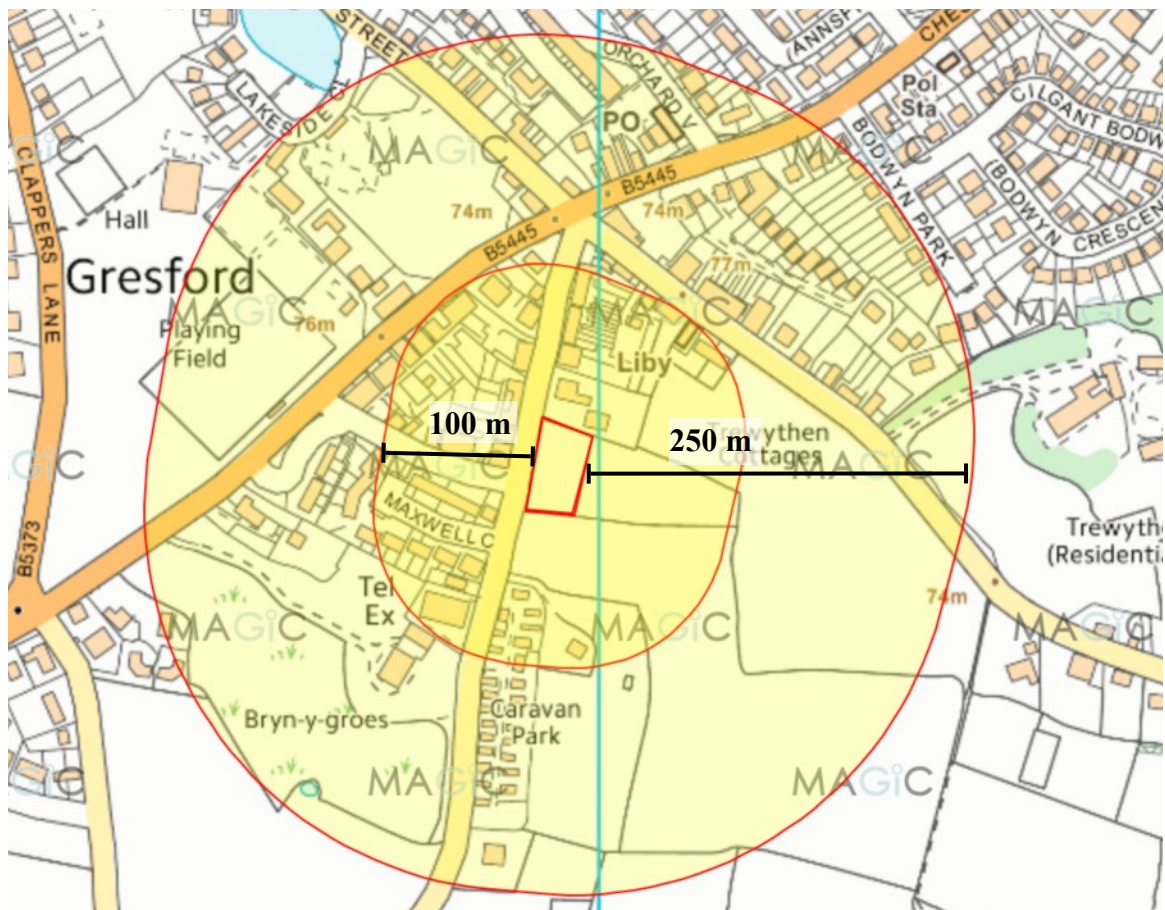
## Appendix 13.1 Survey Diagram



## Appendix 13.2: OS Location Map



## Appendix 9.3: Zones of Influence for GCN



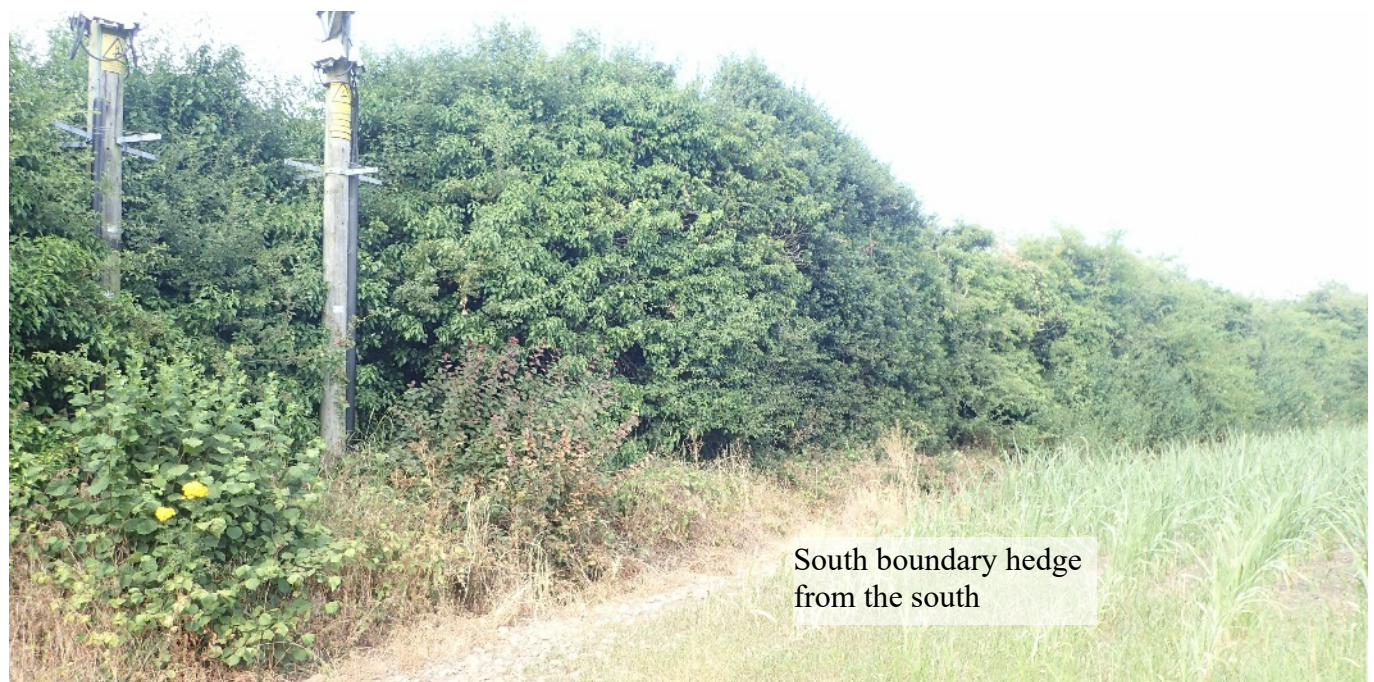
## Appendix 13.4: Aerial Photograph



Appendix 9.5: Site Plan as Proposed



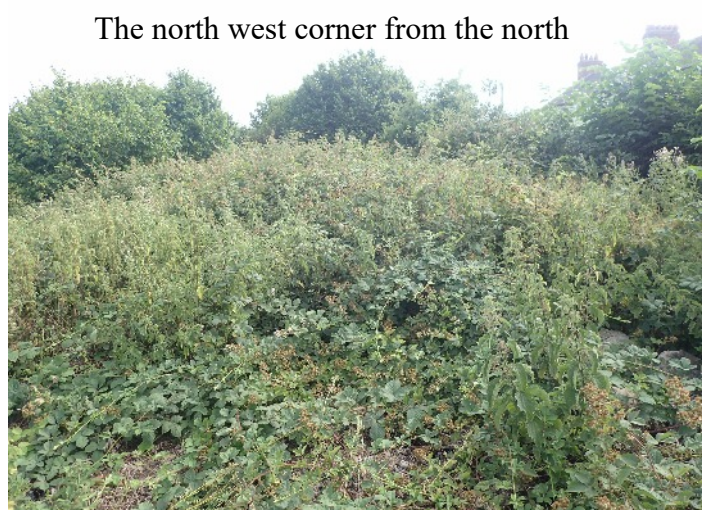
## Appendix 9.6: Photographs of the Site



View to the south east



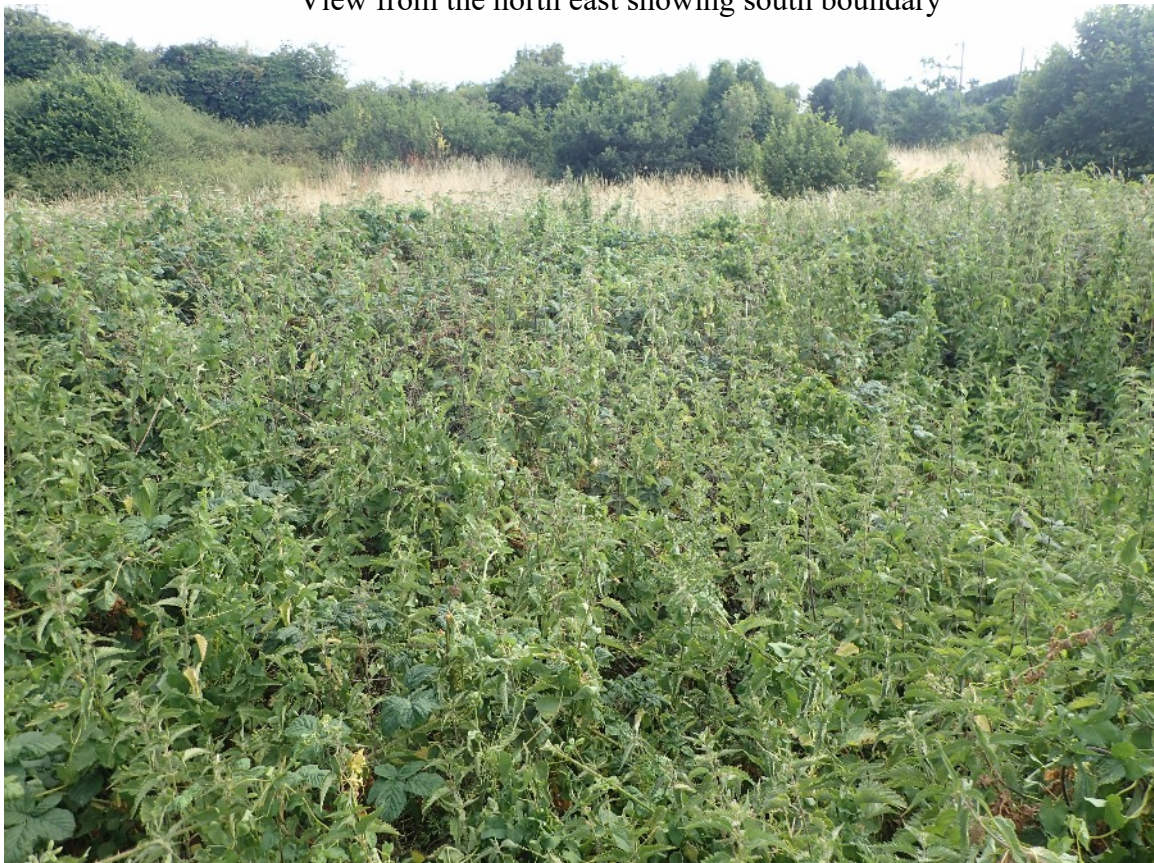
The north west corner from the north



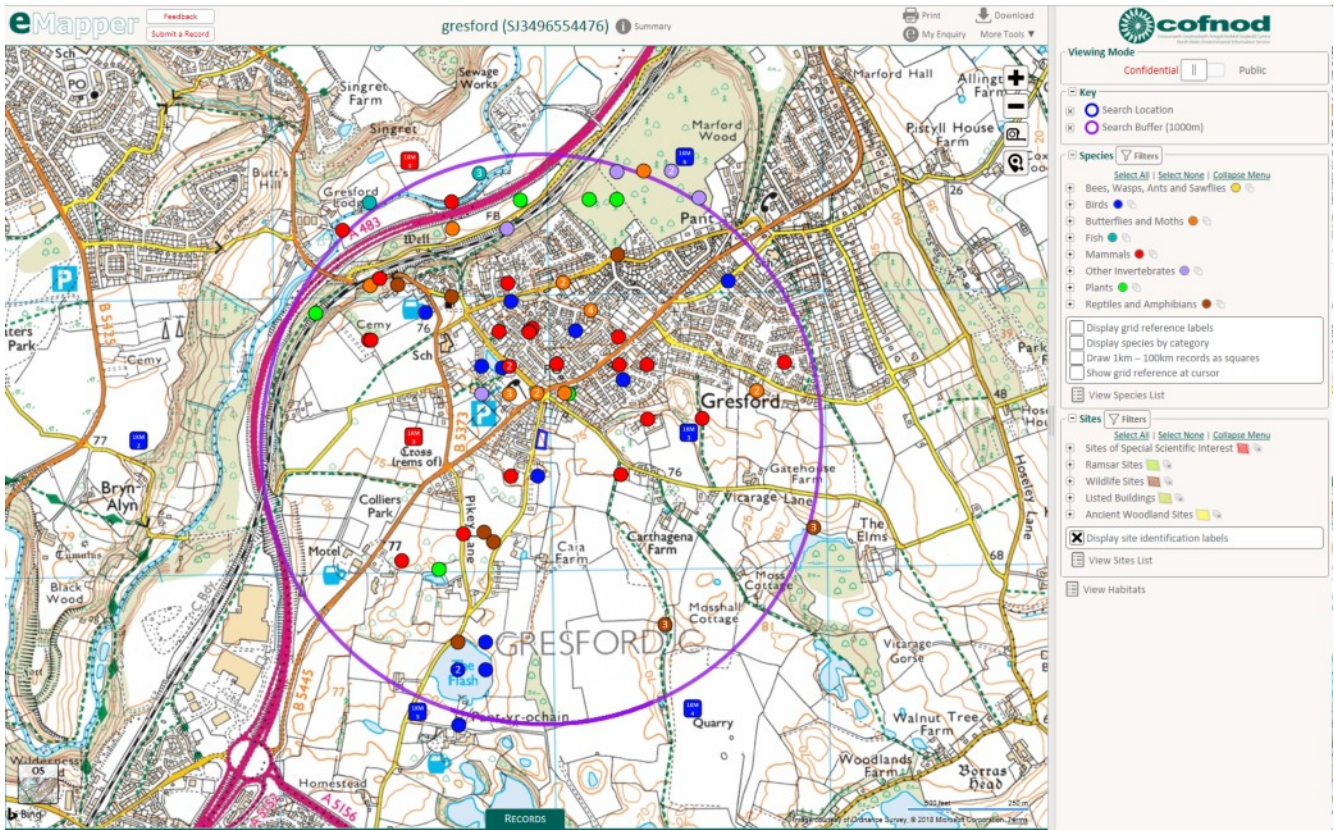
View from the north east showing west boundary



View from the north east showing south boundary



## Appendix 13.7: Data Search (Cofnod)



### Results Summary

| Location Name           | Total Records | EPS Records | Site Types               |
|-------------------------|---------------|-------------|--------------------------|
| gresford (SJ3496554476) | 2301          | 45          | AW, LB, Ramsar, SSSI, WS |

Numbers or Site Types in red (if any) indicate that one or more of this type of record is within 50 metres of the search location

## Appendix 13.8: Bats and the Law

Taken together, the Wildlife and Countryside Act 1981 (WCA) (as amended), the Countryside and Rights of Way Act 2000 (CRoW), and the The Conservation of Habitats and Species Regulations 2017 make it illegal to:

- intentionally or deliberately kill, injure or capture (or take) bats;
- deliberately disturb bats (whether in a roost or not);
- recklessly disturb roosting bats or obstruct access to their roosts
- damage or destroy bat roosts;
- possess or transport a bat or any part of a bat, unless acquired legally;
- sell (or offer for sale) or exchange bats, or parts of bats.

The word 'roost' is not used in the legislation, but is used here for simplicity.

The actual wording in the legislation is 'any structure or place which any wild animal ...uses for shelter or protection' (WCA) or 'breeding site or resting place' (Conservation of Habitats & Species Regulations).

Because bats tend to re-use the same roosts after periods of vacancy, legal opinion is that the roost is protected whether or not the bats are present at the time.

### Enforcement

The police are the main enforcement body for wildlife offences, and in some cases local authorities may also take action.

Section 24(4) of the 1981 Act gives Natural England (or, in Wales, NRW (Natural Resources Wales) the function of providing advice or assistance to the police in respect of alleged offences.

**Note:** Fines may be imposed in relation to each offence committed, so operations involving many animals or repeated offences can potentially accrue large fines.

In addition, items which may constitute evidence of the commission of an offence may be seized and detained.

The CRoW Act 2000 also amends the Police and Criminal Evidence Act 1984 to render Section 9 offences 'arrestable', giving the police significant additional powers.

### The use of a Natural Resources Wales licence in respect of bat species

A NRW licence is a licence which permits an action that is otherwise unlawful,

To ensure that no illegal activities are undertaken during the course of a development, it is recommended that a licence is applied for if, on the basis of survey information and specialist knowledge, it is considered that

- the site in question is demonstrably a breeding site or resting place for bats
- the proposed activity is reasonably likely to result in an offence

No licence is required if the proposed activity is unlikely to result in an offence.

## **Appendix 13.9: Birds and the Law**

All birds, their nests and eggs are protected by law and it is an offence, with certain exceptions,  
To:

- a) intentionally kill, injure or take any wild bird
- b) intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- c) intentionally take or destroy the egg of any wild bird
- d) have in one's possession or control any wild bird (dead or alive) or part of a wild bird which has been taken in contravention of the Wildlife and Countryside Act 1981 or the Protection of Birds Act 1954
- e) have in one's possession or control an egg or part of an egg which has been taken in contravention of the Act
- f) have in one's possession or control any birds of a species occurring on Schedule 4 of the Act unless registered and ringed in accordance with the Secretary of State's regulations.
- g) intentionally (or recklessly, in England and Wales only) disturb any wild bird listed on Schedule 1 while it is nest building or is at (or near) a nest with eggs or young; or disturb the dependent young of such a bird.