# **Preliminary report**

# **Ecological Assessment**

of land at

Aston Hall,

Aston Munslow,

Shropshire

Grid reference SO 510 866

On 15th March 2021

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Report completed 26 March 2021

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## 1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development Aston Hall, Aston Munslow, Shropshire, Grid reference SO 510 866, and advise on any mitigation measures to comply with local planning policy and government legislation.

It is proposed to carry out a range of developments on the site including construction of new driveways and installation of renewable energy systems.

The site was examined to establish the presence of or evidence of use by protected species of animals.

## **Findings**

There are three nearby ponds, only one of which is on the site. These will require further investigation.

Otherwise, we consider that provided that reasonable care and mitigation measures are taken, the developments will have minimal effects on wildlife.

This is a preliminary report of our findings, prepared to inform timely submission of a planning application. A more comprehensive report will follow.

## 2. Introduction

This report was commissioned by Giulia Baldin for Giles Quarme Architects, 7 Bishops Terrace

London SE11 4UE

The purpose of the report is to assess the potential ecological impacts of a proposed development at Aston Hall, Aston Munslow, Shropshire, Grid reference SO 510 866, and advise on any mitigation measures to comply with local planning policy and government legislation.

The site is parkland in the curtilage of Aston Hall, recently acquired by the developer. It has an area of about 5.4ha.

The site was examined to establish the presence of or evidence of use by protected species of animals. The area investigated is outlined in red in the location maps (Appendix 12.1 the aerial photograph (Appendix 12.2), the location plan (Appendix 12.3, the site plan (Appendix 12.4).

## 2.1Scope of the assessment

The report comprises a preliminary ecological assessment and two bat activity surveys as requested by Giulia Baldin.

#### 2.2 Environment

The site is on the western edge of the small village of Aston Munslow, in a completely rural environment on the dip slope of Wenlock edge, It is about 2km south east of the edge at an elevation of about 160m. There are small patches of broadleaf woodland within 500m in all directions,

and a larger broadleaf wood 1km to the west. The nearest pond is about 250m to the south, with a few others somewhat further to the east and north.

The surrounding fields are largely pastoral with associated mixed arable. Hedgerows are largely moderately managed with many hedgerow trees.

Much of Wenlock Edge is designated a Site of Special Scientific Interest, largely from the importance of the deciduous woodland there as well as the geology.

## 3. Methods

#### 3.2 Personnel

Michael Worsfold PhD (MW). Eileen Bowen (EMB) (see above)

## 3.3 Procedures and equipment

We walked over all of the site, paying particular attention to trees, hedgerows and ponds. Hedgerows were assessed according to the criteria of the Hedgerow Regulations 1997. Binoculars were used to inspect subject which were otherwise inaccessible, especially the upper parts of trees.

# 4. Field Survey

## 4.1 Description of the site.

We inspected the site on 15th March 2021.

The site comprises the gardens and orchards immediately surrounding Aston Hall, and several fields and tree plantings lying to the south east of the buildings, as far as the B4368 road.

The basic Phase 1 habitats map is shown in Appendix 12.4, with the major sections and features of the site given arbitrary labels for reference.

#### Orchard A

This area is rather damp, and has been planted with cherry trees (*Prunus sp*), probably Japanese ornamentals and now very mature. Dried remains of ruderals dominated the northern part.

### Plantation B

A maturing mixed broadleaf plantation, including ash (*Fraxinus excelsior*), oak (*Quercus robur*), beech (*Fagus sylvatica*) and sycamore (*Acer pseudoplatanus*).

#### Field C

Improved grassland.

## Field D

Improved grassland.

#### Paddock E

Semi-improved, rather damp grass, with a small stream issuing from a culvert under the adjacent roadway. A semi-ruinous stone built shed with attached ruinous corrugated steel shed.

#### Lawn F

Improved grass.

#### Orchard G

Mixed mature fruit trees in improved grass, with a walnut tree and an oak

#### Lawns H

Garden lawns, frequently mown short, with flower borders.

#### Trees I

A small group of mature false cypress (*Chamaecyparis* or *Cupressocyparis*).

#### Lawn J

A garden lawn, frequently mown short.

#### North corner K

Hard surface footpaths and driveways with shrubs (some exotics) and small trees.

#### Orchard L

A small planting of mostly immature fruit trees in grass.

## Pond A

This pond is not on the site, but is adjacent on the north east boundary, so tyhat we cound inspect it visually but had no physical access. It is heavily shaded, with no apparent submerged or emergent vegetation.

#### Pond B

A very small pond close to the end of the drive. It is heavily shaded, especially by a very mature sycamore tree on the north west side. It was thickly filled with tree leaves. There was no submerged vegetation, and a small patch of yellow flag (*Iris pseudoacorus*). We could detect no invertebrate animals.

## Pond C

This pond is marked on maps, but is not on the site and is surrounded by tree. We had no access and could not inspect it. It appears from maps that it has been formed by damming of the small stream.

#### Drive

The main driveway is lined with mature beech trees, with a large mature ash near the road. We could see no evident holes or crevices in them which might be used by bats, but it is not possible to be certain that none exist.

### Other trees

There were a few dead trees near the north east boundary which had woodpecker holes and other cavities which might be used by bats and nesting birds. These should not be removed without further inspection or other survey for use by these animals.

### Hedgerows

The hedgerows are generally hawthorn (Crataegus monogyna) with some hazel (Corylus avellana) and holly (Ilex aquifolium). None of them were species-rich or important by the criteria of the Hedgerow Regulations (1997).

## 5. Assessment of Effects and Mitigation Measures

The proposed development includes creation of new hard surfaces for driveways, mostly on existing grass.

It is also proposed to install ground-source heat pump energy extraction, which will entail drilling and, depending on the system installed, possibly temporary trenching over a significant area.

There is a proposal to install a photovoltaic array (solar panels) near the middle of Field C, and to create a bund and plant trees to conceal it. Apart from the possible effects on great crested newts (GCN) of ground disturbance from the creation of the bund (see next paragraph) there would be little if any adverse ecological impact.

Some of these disturbances will be within 200m of some of the ponds. Although Ponds A and B are probably not suitable habitat for GCN, further assessment would be needed to confirm that GCN are unlikely to be present.

It is not possible to be certain, on the basis of currently available information, to be sure that GCN would not be affected by the proposed development, as currently understood.

It appears that there will be little if any removal of trees. But any increased external lighting carries a risk of disturbance of bats which might use tree crevices to roost.

. Therefore measures will be required to mitigate any possible impact of the development on these resources.

There should be an absolute minimum of extraneous lighting around the driveway and from the developed building. The removal of hedgerow shrubs must be done outside the bird nesting season (April - July).

Although it appears that no trees will need to be removed, if it should be necessary to remove or prune any trees then these should first be examined by a licensed bat worker to ensure that the risk of destroying bat roosts or disturbing bats is minimised.

### Designated sites.

No designated sites will be affected

## Habitats.

No habitats will be significantly affected except temporarily.

### **Residual Effects**

Residual effects from increases activity and lighting are possible unless mitigated...

# 6 Compensation

None indicated at present.

## 7. Enhancement Recommendations

These should be discussed when the plans are finalised. Installation of bat boxes, bird nest boxes and hedgehog refuges will probably be indicated.

# 8. Ecological Constraints

We did not do full assessments of the likely presence or absence of great crested newts.

# 9. Monitoring

None indicated at present

## 10. Conclusions

The possible effect of the developments on great crested newts are not understood at present. Otherwise, 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.

# 11. Bibliography

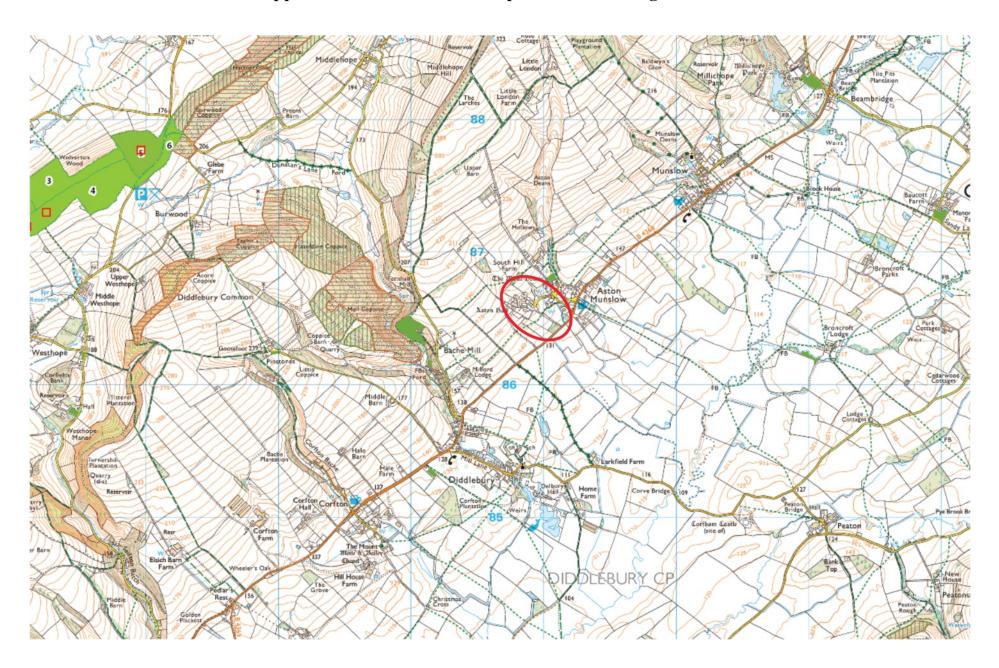
Collins J. (Ed) (2016) Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: <u>incc.defra.gov.uk</u>

Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual*, Peterborough: Joint Nature Conservation Committee

The Hedgerow Regulations (1997. Guide to the law and good practice. DEFRA 1997.

Appendix 12.1a: Location map with some designations



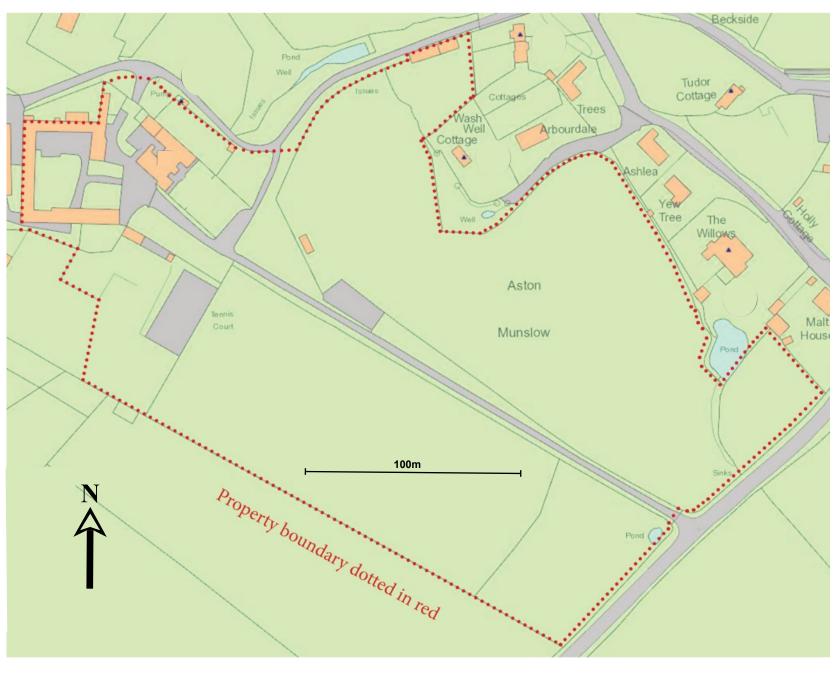
**Appendix 12.1b: Location map** 



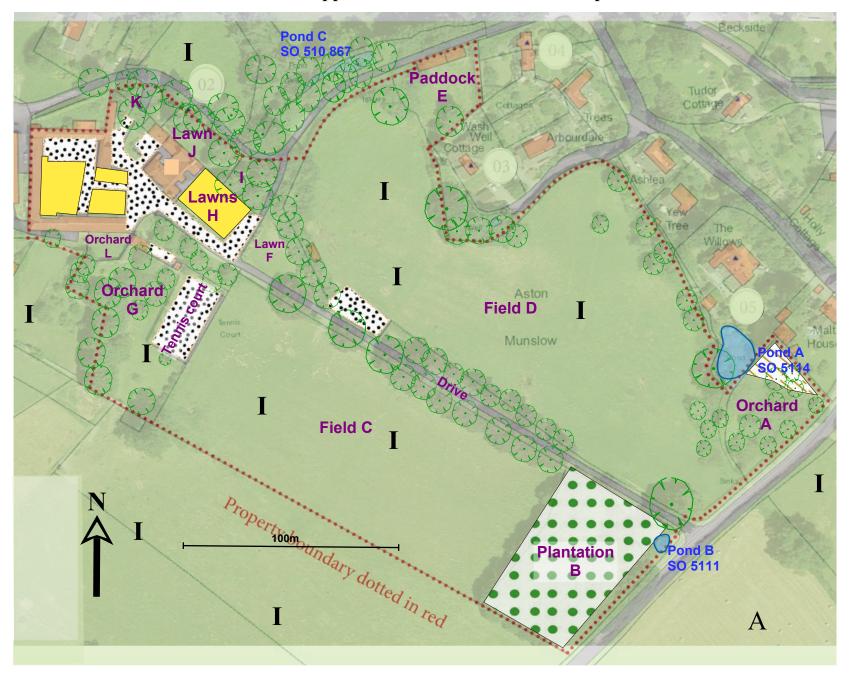
**Appendix 12.2: Aerial Photograph** 



Appendix 12.3: Site map



Appendix 12.4: Phase 1 habitats map



A

# Appendix 12.5a: Proposed driveways plan



# **Appendix 12.5b: Proposed renewable energy installations**



# Appendix 12.6.1 Photographs of south west areas

















**Appendix 12.6.2: Photographs of central areas** 



# Appendix 12.6.3: Photographs of western areas



Orchard G, yew hedge alongside tennis court



Orchard L, looking south west



# **Appendix 12.6.4: Photographs of northern areas**

















## Appendix 13.10: Worsfold & Bowen

**Worsfold & Bowen** have been professional ecological consultants since 2005, after many years' voluntary bat work.

## Michael Worsfold PhD. European Protected Species Licences

Bat survey and roost visitor licences held since 1994.

Volunteer Bat Roost Visitor licence and Volunteer Bat Roost Visitor Trainer licence (Level 2) CLS0 1727. (Natural England)

Level 4 survey licence 2014-1217-CLS-CLS. (Natural England)

Project licence 2015-14344-SCI-SCI (Natural England)

Bat Survey licence 71974:OTH:CSAB:2016 (NRW).

Great crested newt survey licence CLS0 1727. (Natural England)

Great crested newt survey licence 65948:OTH:SA:2015 (NRW)

### Eileen Bowen. European Protected Species Licences

Bat survey and roost visitor licences held since 1996.

Volunteer Bat Roost Visitor licence and Volunteer Bat Roost Visitor Trainer licence (Level 2) CLS0 [1725. (Natural England)

Level 4 survey licence 2015-14028-CLS-CLS (Natural England)

Bat Survey licence 71973:OTH:CSAB:2016 (NRW).

Great crested newt survey licence CLS0 1725. (Natural England)

## **Current EPS mitigation licences:**

EPSM 2014-7044A 2015-16429-EPS-MIT 61698:OTH:EPS:2015 71544:OTH:EPS:2016