



**Glaven Ecology**



**Alby Billiards Club  
Alby**

**Ecological Impact  
Assessment**

**Prepared by  
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**on behalf of  
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Services**

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*The data contained within the report are accurate to the best of our knowledge and have been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.*

*The report conforms to the British Standard 42020:2013 Biodiversity – Code of practice for planning and development.*

*We confirm that any opinions expressed are our best and professional true opinions. This report has been prepared by an ecology specialist and does not purport to provide legal advice.*

# 1 Summary

- 1.1 Glaven Ecology was commissioned to undertake an ecological assessment at Alby Billiards Club, Church Road, Alby, NR11 7HE. The survey work was completed by Carolyn Smith BSc. (Hons) MCIEEM on 14<sup>th</sup> July 2021.
- 1.2 Planning permission is sought to replace the existing building on site with two-semi detached family homes.
- 1.3 The site sits within a SSSI Impact Risk Zones for Gunton Park Lake. However, the proposal does not fall within the categories requiring further consultation with Natural England.
- 1.4 The site is comprised of approximately 0.1Ha of rough grassland with a damaged building on site. The boundaries on the eastern side were to hedgerow with trees.
- 1.5 No further surveys for protected species are required.
- 1.6 Mitigation measures recommended include
  - Timing of works to any vegetation clearance on site.
  - External lights associated with the orangery or cartshed should use warm white lights at <2700k.
- 1.7 Based on successful implementation of mitigation measures and other safeguards, no significant adverse effects are predicted as a result of the proposals.
- 1.8 Further enhancements recommended for the site include the installation of bat and bird boxes and a bat friendly planting scheme.

## 2 Introduction

### 2.1 Background

2.1.1 Glaven Ecology was commissioned to undertake an ecological assessment at Alby Billiards Club, Church Road, Alby, NR11 7HE. The survey work was completed by Carolyn Smith BSc. (Hons) MCIEEM on 14<sup>th</sup> July 2021.

2.1.2 This survey and report aim to establish the baseline ecology of the site and its suitability to support any protected species. It assesses potential impacts on these features as a result of the works and advises on the need for further surveys. It sets out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects

### 2.2 Site Location and Description

2.2.1 The site was located at OS Grid Reference TM 4331 9504 (Appendix 1) and consisted of a single storey wooden structure (the old billiard hall) which had a collapsed roof set within overgrown grass with some encroaching scrub. The eastern boundary was species poor hedgerow with mature trees.

2.2.2 The wider environment was dominated by arable land, with the villages of Aldborough to the northwest and Erpingham to the south. There was a large area of woodland and wood pasture to the north associated with Hanworth Hall and some lowland fen and meadow habitat to the south associated with Thwaite Common.

### 2.3 Project Overview

2.3.1 Planning permission is sought to replace the existing building on site with two-semi detached family homes.

## 3 Legislation

3.1.1 The main piece of legislation relating to nature conservation in Great Britain is The Wildlife and Countryside Act 1981 (as amended). This Act is supplemented by provision in The Countryside and Rights of Way (CRoW) Act 2000 and The Natural Environment and Rural Communities Act 2006 (in England and Wales). This act provides varying degrees of protection for the listed species of flora and fauna, including comprehensive protection of wild birds and their nests and eggs.

3.1.2 UK wildlife is also protected under The Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2. In 2010, these Regulations, together with subsequent amendments, were consolidated into The Conservation of Habitats and Species Regulations 2010.

### 3.2 Badgers

3.2.1 Badgers are protected under the Protection of Badgers Act 1992. Under the Act, it is a serious offence to kill, injure, interfere or take a badger. It is also an offence to damage or interfere with an actively used sett unless a licence is obtained.

### 3.3 Bats

3.3.1 All UK bat species are protected under The Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended). This legislation fully protects bats and their breeding sites or resting places, making it an offence to deliberately capture, injure or kill bats, deliberately disturb bats, damage or destroy a bat breeding or resting place.

### 3.4 Birds

3.4.1 All birds, their nests and eggs are protected by law under Part 1 of the Wildlife and Countryside Act 1981 (as amended).

3.4.2 Certain species (including barn owl *Tyto alba*) are also listed under Schedule 1 of the Wildlife and Countryside Act 1981, which prevents disturbance of the species or its nest and/or eggs at any time with protection by special penalties.

### 3.5 Great Crested Newt

3.5.1 Great crested newts *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by The Wildlife and Countryside Act 1981 (Section 9, Schedule 5 and as amended) and The Conservation (Natural Habitats & c.) Regulations 1994. It is an offence to:

- 1) Disturb, injure or kill recklessly a great crested newt.
- 2) Disturb or destroy recklessly great crested newt habitat (a breeding site or place of shelter).

### 3.6 Reptiles

3.6.1 Reptiles are all given limited legal protection under part of Section 9 (1) and all of Section 9 (5) of the Wildlife and Countryside Act 1981 (as 1.1.1 amended). This means that it is an offence to intentionally kill, injure and offer for sale.

### 3.1 Statutory Designated Conservation Sites

3.1.1 National designations such as Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR), are afforded statutory protection. SSSIs are notified and protected under the Wildlife and Countryside Act 1981 as amended. SSSIs are notified based on specific criteria, including the general representativeness and rarity of the site and of the species or habitats supported by it.

## 4 Survey Methods

### 4.1 Desk Study

- 4.1.1 Records held on Magic.gov.uk on Designated Sites and granted European Protected Species Licences were reviewed in July 2021.
- 4.1.2 A data search from Norfolk Biodiversity Information Service (NBIS) with a 2km zone of influence was conducted in June 2021 to inform baseline ecology of the site and surrounding area.
- 4.1.3 The types of features considered within the desk study includes designated sites, habitats and species of principal importance for conservation of biodiversity and protected species.

### 4.2 Field Survey

- 4.2.1 A brief Phase 1 habitat survey of the site was conducted using the methodology to describe habitats as laid down in NCC (1990) and an assessment made for the presence of protected species.
- 4.2.2 The survey was undertaken by Carolyn Smith BSc (Hons) (Natural England Level 1 Licence for bats [reference 2018-34461-CLS]; Great Crested Newts [reference 2017-29746-CLS-CLS] and barn owl class licence [reference CL29/00568]) on 14<sup>th</sup> July 2021.
- 4.2.3 The weather was dry with 30% cloud cover at the time of the survey, 15°C with a light breeze.

### 4.3 Protected Species

#### Amphibians and reptiles

- 4.3.1 The habitat was assessed for reptiles and amphibians and suitable materials were lifted to check for signs of reptiles.

#### Birds

- 4.3.2 Evidence of nesting birds was searched for and the site was assessed as to its potential to support nesting birds.



## Bats

4.3.3 A general assessment was made of the suitability of site features for roosting, commuting and foraging bats and the likely presence of bats within the site area.

4.3.4 A Preliminary Roost Assessment was completed on the billiard hall in accordance with the Bat Conservation Trust's "Bat Surveys for Professional Ecologists" (Collins, 2016). A scoring system was applied to the building using the criteria shown in Table 1.

4.3.5 The structure was investigated for evidence of bat use and evaluated for bat roosting potential. The visual search for signs of bats consisted of a slow methodical search both internally and externally for actual roosting bats and their signs:

- Droppings on walls, windowsills and floors can be used to identify species;
- Scratch marks and staining at roosts and exit holes can be used to identify the presence of bats;
- Dense spider webs at a potential roost can often indicate bat absence;
- The presence of butterfly wings may be an indication of bat presence.

Table 1: Assessing the potential suitability of a development site for bats (Collins, 2016)

Suitability	Description of roosting habitats	Description of commuting and foraging habitat
Negligible	Negligible habitat features on site likely to be used by roosting bats	Negligible habitat features onsite likely to be used by commuting or foraging bats
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.</p> <p>A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed)	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge

### Badger

4.3.6 The habitats on site and in the immediate surrounding area were assessed for their potential to support badgers.

4.3.7 Evidence of badger activity (including setts, footprints, latrines, trails, scratching posts, guard hairs and foraging activity) was searched for within the site.

4.3.8 Table 2 shows the criteria used when assessing the likelihood of a protected species being present within the survey area:

*Table 2: Criteria considered when assessing the likelihood of occurrence of protected species*

Assessment Category	Criteria
Present	Species are confirmed as present from the current survey or historical confirmed records.
High	Habitat and features of high quality for species/species assemblage. Species known to be present in wider landscape. Good quality surrounding habitat and good connectivity.
Moderate	Habitat and features of moderate quality. The site in combination with surrounding land provides all habitat/ecological conditions required by the species/assemblage. Within known national distribution of species and local records in desk study area. Limiting factors to suitability, including small area of suitable habitat, some severance/poor connectivity with wider landscape, poor to moderate habitat suitability in local area.
Low	Habitats within the survey area poor quality or small in size. Few or no records from data search. Despite above, presence cannot be discounted as within national range, all required features/conditions present on site and in surrounding landscape. Limiting factors could include isolation, poor quality landscape, or disturbance.
Negligible	Very limited poor quality habitats and features. No local records from desk study; site on edge of, or outside, national range. Surrounding habitats considered unlikely to support species/species assemblage.

## 4.4 Evaluation and Assessment

4.4.1 Ecological features are evaluated and assessed with due consideration for the Chartered Institute of Ecology and Environmental Management (CIEEM) 2019 Guidelines for Ecological Impact Assessment (EclA).

4.4.2 The following the impact magnitude categories and criteria will be used:

- Major negative effect – that which has a harmful impact on the integrity of a site or the conservation status of a population of a species within a defined geographical area (e.g. fundamentally reduces the capacity to support wildlife for the entirety of a conservation site or compromises the persistence of a species' population).

- Intermediate negative effect – that which has no adverse impact on the integrity of a conservation site or the conservation status of a species' population but does have an important adverse impact in terms of achieving certain ecological objectives (e.g. sustaining target habitat conditions and levels of wildlife for a conservation site or maintaining population growth for a species).
- Minor negative effect – some minor detrimental effect is evident, but not to the extent that it has an adverse impact in terms of achieving ecological objectives.
- Neutral effect – that which has no predictable or measurable impact.
- Positive effect – that which has a net positive impact on an ecological receptor.

## 4.5 Survey Limitations

4.5.1 The NBIS data search is not an exhaustive record of species within the area and an absence of records does not preclude an absence of species. However, when assessed in conjunction with a field survey, they can contribute to a robust ecological assessment of a site.

4.5.2 The structure was deemed not safe to enter, but the interior was visible through the windows and doors. This was thought not to be a significant limitation.

## 5 Baseline Ecological Conditions

### 5.1 Designations

5.1.1 One Statutory Designated Sites was identified within 2km of the site via the NBIS search and MAGIC maps, and six non-Statutory Designated sites (Table 3, Appendix 2).

5.1.2 The site sits within a SSSI Impact Risk Zones for Gunton Park Lake. However, the proposal does not fall within the categories requiring further consultation with Natural England: *Infrastructure developments and industrial/agricultural proposals*.

Table 3: Statutory Designated Sites within 2km of development site

Site name and Designation	Site Name and description	Distance from site
Thwaite Common County Wildlife site (CWS) 1119	Thwaite Common is a large area of species-rich grassland with blocks of scattered scrub.	1100m south
Icehouse grove CWS 1140	This site is comprised of wet semi-natural broad-leaved coppice with standards woodland, marshy neutral grasslands, fen and mesotrophic ponds.	1150m north west
Thurgarton Wood CWS 1139	A mature broadleaved coppice with standards woodland	1200m north west
Fen Plantation CWS 1182	This is an old broad-leaved woodland which was felled and replanted about 50 years ago. The coppice layer and ground flora have maintained a fine diversity on wet ground	1600m east
The Belt and the Square CWS 1188	This site is a broad-leaved, semi-natural woodland with mixed species situated in Hanworth Park	1600m north
Calthopre Grazing Meadows CWS 1118	This site is semi-improved marshy neutral grassland.	1600m west
Gunton park Lake Site of Special Scientific Interest (SSSI)	The site consists of a lake of artificial origin set in parkland. The lake is fed by Hagon Beck, a small tributary of the River Bure, and a channel connects it with another lake downstream to the south-east. Several wetland habitats are present including alder carr, reedswamp and marginal vegetation in addition to open water	1900m north east

## 5.2 Habitats and Flora

### Notable Flora Records

5.2.1 NBIS held no records of notable plant species from within the survey site or the 2km search area.

5.2.2 Invasive plants such as Japanese knotweed, Himalayan balsam and giant hogweed were not recorded within the site.

### Habitats

5.2.3 The site was approximately 0.1Ha of rough, neutral grassland with the collapsed billiards hall in the north of the site (Figures 1 and 2). (Other site photos can be found in Appendix 3).

5.2.4 A Phase 1 habitat map can be found in Appendix 4.



Figure 1: The billiards hall with collapsed roof.



Figure 2: Looking north across site.

### A2.2 Scrub

5.2.5 There were areas of encroaching low scrub in the south of the site and also against the southern aspect of the billiard hall. Species included bramble *Rubus fruticosus agg.*, goat willow *Salix caprea*, hazel *Corylus avellana*, cleavers *Galium aparine* and ivy *hedera helix*.

### B2.1 Neutral grassland

- 5.2.6 The majority of the site was to overgrown grass dominated by cock's foot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris*.
- 5.2.7 Other species present included ground ivy *Glechoma hederacea*, knapweed *Centaurea nigra*, ribwort plantain *Plantago lanceolata*, spear thistle *Cirsium vulgare*, smooth tare *Vicia tetrasperma*, common spotted orchid *Dactylorhiza fuchsii*, common sorrel *Rumex acetosa*, ragwort *Senecio jacobaea*, creeping buttercup *Ranunculus repens*, cow parsley *Anthriscus sylvestris*, greater stitchwort *Rabelera holostea*, goat's beard *Tragopogon pratensis* and white clover *Trifolium repens*.
- 5.2.8 There were also oak *Quercus robur* and willow saplings scattered throughout.

### C3.1 Tall Ruderal Vegetation

- 5.2.9 There was a strip of nettle *Urtica dioica* and hogweed *Heracleum sphondylium* along the western boundary.

### J2.3.2 Hedgerow with trees

- 5.2.10 The eastern boundary was to an unmaintained hedgerow with species including hawthorn *Crataegus monogyna*, hazel, field maple *Acer campestre*.
- 5.2.11 There were ash *Fraxinus excelsior* along the length and one apple *Malus sp.* in the southern corner.

### J3.6 Buildings

- 5.2.12 There was one predominantly timber structure on site requiring some repair works. It was noted that part of the roof appeared to have collapse.

## **5.3 Fauna**

### Amphibians

- 5.3.1 There were no class licence returns for great crested newts within 2km of the site.
- 5.3.2 There were nine amphibian records returned by the NBIS search., four of which were for great crested newt. All amphibian records were from Thwaite Common 1070m south of the site.

5.3.3 There were no ponds within 250m of the site.

5.3.4 The site offered a small amount of foraging habitat with some potential sheltering sites under the hedgerow to the east. However, the site was not connected to any water bodies and was largely surrounded by arable fields, residential development, infrastructure, and equine development. These can prove a barrier to great crested newt dispersal.

5.3.5 It was assessed that the likelihood of great crested newt presence within the site was **negligible**.

#### Badgers

5.3.6 There was one record of badgers within 2km of the site from the last ten years, approximately 1km northeast of the site.

5.3.7 The site did not provide suitable habitat for sett creation and provided little in the way of foraging habitat.

5.3.8 No evidence of badgers such as latrines, snuffle holes, mammal runs, or badger dung found was found during the survey.

5.3.9 The likelihood of foraging badgers being occasionally present within the site is **negligible**.

#### Bats

5.3.10 NBIS data returned 351 records of bats within 2km, notable species included Barbastelle *Barbastella barbastellus*, Natterer's *Myotis nattereri* and Serotine *Eptesicus serotinus*.

5.3.11 The nearest records to site were brown long-eared *Plecotus auritus* and common pipistrelle *Pipistrellus pipistrellus* 700m to the northwest around Aldborough and Alby Hill.

5.3.12 There were two records of granted European Protected Species Mitigation Licence within 2km showing on Magic Maps:

- 2015-13753-EPS-MIT 850m northwest of the site. The licence was for the destruction of a resting place for brown long-eared and common pipistrelle.



- EPSM2009-1590 850m northwest of the site. The licence was for the destruction of a breeding place for common pipistrelle and soprano pipistrelle *Pipistrellus pygmaeus*.

5.3.13 The trees along site boundaries had negligible potential roost features. There was some light ivy cover on the trees but this was not thick stemmed enough to provide roosting opportunities.

5.3.14 The billiard hall is in need of repair with the bitumen lined roof having partially collapsed into the internal space.

5.3.15 There was some gapping of the wooden boards on the western aspect giving access inside but these appeared well cobwebbed.

5.3.16 The door on the eastern aspect was open and inside the roof could be seen dipping down to the ground. There was heavy cobwebbing and the space for flying species such as brown long-eared was poor.

5.3.17 No signs of bats such as droppings or staining were found during the visual inspection of the billiard hall. No actual bats were observed.

5.3.18 The billiard hall was assessed as having **negligible potential** to support roosting bats.

5.3.19 There is the likelihood that bats cross the site whilst commuting or foraging but the likelihood of bats being present within working areas is **negligible**.

## Reptiles

- 5.3.20 There were no records returned by NBIS of reptiles within 2km of the site.
- 5.3.21 There was limited potential for reptiles to be present on site, with only the hedgerow along the eastern boundary offering sheltering potential. The grassland offered some foraging opportunities but there were no suitable basking sites.
- 5.3.22 The likelihood of reptiles being present on site was assessed as **negligible**.

## Birds

- 5.3.23 There were 698 records of birds within 2km of the site, comprising of 107 different species with many being waterfowl recorded on Gunton Park Lake.
- 5.3.24 The nearest Schedule 1 bird was a barn owl *Tyto alba* was recorded approximately 500m northwest of site.
- 5.3.25 Nesting opportunities on site were available in boundary hedgerow and trees but the scrub on site was not yet extensive/dense enough to provide cover for nesting birds.
- 5.3.26 No old or active nests were observed during the survey.
- 5.3.27 The likelihood of nesting birds along site boundaries is assessed as **moderate**.

## 6 Assessments of Effects

### 6.1 Site proposals

6.1.1 Proposals at the Site comprise the following:

- Removal of the old billiard hall to construct two residential units on site.

### 6.2 Assessment of Likely Significant Effects

#### Designated sites

##### *Predicted Effects*

6.2.1 No potential pathways of impact are anticipated on any Designated Sites given the scale of the development and the distance to Designated Sites.

#### Habitats and Flora

##### *Predicted Effects*

6.2.2 The grassland is of low botanical and ecological importance providing very little in the way of foraging habitat for wildlife. It has a low herb presence making it relatively poor foraging for pollinators and invertebrates.

6.2.3 The eastern boundary hedgerow and the mature oak on the southern boundary would be retained throughout.

6.2.4 No significant adverse effects or legal infringements are predicted.

#### Fauna

#### Amphibians

##### *Predicted Effects*

6.2.5 The site offers minimal habitat requirements for amphibians with poor connectivity to any suitable water bodies/habitat.

6.2.6 No significant adverse effects or legal infringements are predicted.

#### Badgers

##### *Predicted Effects*

6.2.7 There was no suitable habitat for setts and foraging opportunities were limited.

6.2.8 No significant adverse effects or legal infringements are predicted.

#### Bats

##### *Predicted Effects*

6.2.9 The billiard hall had negligible potential to support roosting bats and the trees along site boundaries had negligible potential roost features.

6.2.10 Bats might commute across the site, therefore neutral effects are predicted.

##### *Mitigation Measures*

6.2.11 External lights associated with the new houses should be of a low light level to further minimise impacts on bats that might forage and commute in the vicinity and not light up any tree canopies.

6.2.12 Warm white lights should be used at <2700k. This reduces the ultraviolet component or that has high attraction effects on insects which can lead to a reduction in prey availability for some light sensitive bat species.

##### *Residual Effects*

6.2.13 Through the implementation of the above mitigation measures, no significant adverse effects are predicted.

#### Birds

##### *Predicted Effects*

6.2.14 There were nesting opportunities along the eastern site boundary and within the oak tree to the south.

6.2.15 During site clearance there is the risk of killing and injuring nesting birds, damaging their nests or eggs, as a result of vegetation clearance, especially during any maintenance works to the eastern boundary.

6.2.16 In the absence of mitigation an intermediate adverse effect is predicted at the Local level.

#### *Mitigation Measures*

6.2.17 To avoid committing an offence under the Wildlife and Countryside Act 1981 (as amended), any vegetation clearance will take place outside of the bird nesting period (i.e. outside of March to August), or failing that, following confirmation by a suitably qualified ecologist that nesting birds are absent from the habitats to be cleared.

6.2.18 The above could be secured by an appropriately worded planning condition and/or intrinsic design measures.

#### *Residual Effects*

6.2.19 Through the implementation of the above mitigation measures, no significant adverse effects are predicted.

#### Reptiles

##### *Predicted Effects*

6.2.20 There are limited foraging and sheltering opportunities on site with no basking places.

6.2.21 There were no records within 2km of the site.

6.2.22 No significant adverse effects or legal infringements are predicted.

#### Summary of Effects

6.2.23 Table 3 below summarises the assessment of effects, including any mitigation and subsequent residual effects.

Table 3: Summary of effects

Ecological Factor	Likely Significant Effect and/or Legal Implication (before mitigation)	Avoidance & Mitigation Measures	Mechanism by which Mitigation is Secured	Residual Effects (after mitigation)
Designated sites	No significant effects	-	-	No significant effect
Habitats and flora	No significant effects	-	-	No significant effect
Amphibians	No significant effects	-	-	No significant effect
Reptiles	No significant effects	-	-	No significant effect
Birds	Potential damage or destruction of nests and eggs	Sensitive timing of works/nest checks by ecologist	Legal requirement; secured via planning permission	No significant effect
Bats	Neutral effect	Low level lighting scheme.	-	No significant effect
Badgers	No significant effects	-	-	No significant effect

## 7 Enhancements

7.1 The Local Planning Authority has a legal duty to consider enhancements on proposed development sites. Furthermore, the National Policy Planning Framework (NPPF) requires planning decisions to aim to promote net gains in biodiversity on development sites.

7.2 The following enhancements are suggested for the site:

- Install two bat access tiles onto the southern or eastern aspects of each new house roof (to give access to crevice dwelling bats in between the tile and the lining). Something similar to the [Bat Access Tile Kit](#) would be suitable. Alternatively, two ridge access points can be created by using a spacer to create gap 20mm x 50mm in size in the mortar under the tiles.
- A bat box could be installed on the eastern or western aspect of one of the houses, at least 3m high where there is a clear flight path for bats entering and leaving.

There are two options available:

- *Integrated bat box.* These are built into the fabric of the property and come in a variety of designs depending on the materials being used. For example, the Habibat bat box comes in a selection of designs to suit brick built buildings (Figure 9), whilst the Schwegler bat tube (Figure 10) is designed to be installed beneath a rendered surface. This makes it ideal for situations where you wish the box to be discrete as only the entrance hole will be visible. It can also be painted to match your building with an air permeable paint if desired.
- *Wall mounted bat box.* Fixed to the external wall of a building, the [Beaumaris bat box](#) is a popular choice as is the [Schwegler 1FQ Bat Roost](#).



Figure 3: Habibat integrated bat box with brick finish.



Figure 4: Schwegler 1FR bat tube

- Install two bird boxes on trees around the site boundaries. Suitable boxes include the [Schwegler 1B nest box](#) and the [robin and wren FSC nest box](#).
- Consideration should be given to incorporating pollinator and bat friendly planting schemes into any planned landscaping. Suggested plants include:

Bedding Plants	Climbers
Nottingham catchfly <i>Silene nutans</i>	European honeysuckle <i>Lonicera caprifolium</i>
Night-scented catchfly <i>S. noctiflora</i>	Italian honeysuckle <i>L. etrusca superba</i>
Bladder campion <i>S. vulgaris</i>	Japanese honeysuckle <i>L. japonica halliana</i>
Night-scented stock <i>Matthiola bicornis</i>	Honeysuckle (native) <i>L. periclymenum...</i>
Sweet rocket <i>Hesperis matronalis</i>	White jasmine <i>Jasminium oiticinale</i>
Evening primrose <i>Oenothera biennis</i>	Dogrose <i>Rosa canina</i>
Tobacco plant <i>Nicotiana affinis</i>	Sweetbriar <i>R. rubiginosa</i>
Cherry pie <i>Heliotropun x hybndurr</i>	Fieldrose <i>R. arvensis</i>
Soapwort <i>Saponaria officinalis</i>	Ivy <i>Hedera helix</i>



## 8 References

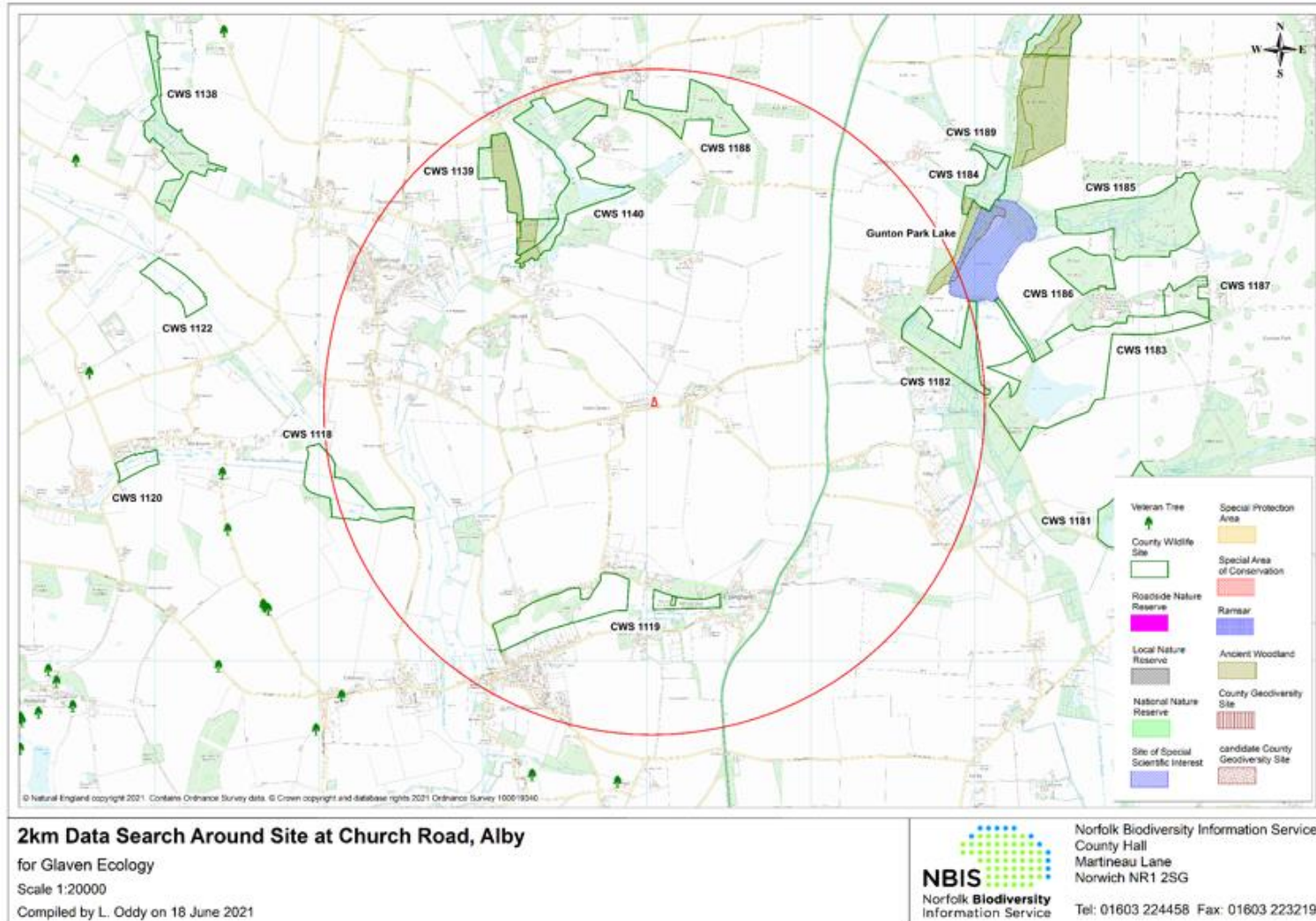
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## Appendix 1 – Site Location



Source Google Earth Pro, 2021

## Appendix 2 – NBIS Map



## Appendix 3 – Survey photos



*Photograph 1: Southern aspect of billiard hall.*



*Photograph 2: Scrub against southern aspect.*



*Photograph 3: Internal view of billiard hall.*



*Photograph 4: Grass and eastern boundary.*



*Photograph 5: Oak tree on southern boundary.*



*Photograph 6: Looking southwest across site.*



*Photograph 7: Looking south along eastern boundary.*



*Photograph 8: Eastern boundary from the roadside.*

## Appendix 4 – Habitat map

