

Mr Craig Western  
Client

Date: July 18, 2023

Dear Craig,

**Ecological assessment of land at Browns Place Farm, Brown Street, Old Newton, Suffolk IP14 4QB**

I am writing to provide a summary of the findings following a survey of the site on the 16 June 2023 (NGR TM 06017 63829; Figure 1), where it is proposed to erect a new 'pool house' on an area of species-poor grassland (**g4 – modified grassland**) adjacent to an existing swimming pool.

The purpose of the visit was to inspect the identify potential ecological features of relevance to the scheme, to enable an assessment of potential impacts where appropriate. The desk and field assessment completed were made with reference to the CIEEM Guidelines for Preliminary Ecological Appraisal<sup>1</sup>.

**Methodology**

A desk study was undertaken, which included the use of open-source historical biological records, MAGiC Map, OS Maps, aerial photography, and Natural England European Protected Species (EPS) mitigation species licences within 2km of the application site. The Mid Suffolk District Council planning page was accessed to assess if other local schemes and/or surveys were relevant. During the field survey notes were made. The site was assessed for its potential to support protected species, e.g., amphibians including GCNs<sup>2</sup> (*Triturus cristatus*), nesting birds<sup>3</sup>, and mammals such as hedgehog (*Erinaceus europaeus*)<sup>4</sup>, by Christian Whiting BSc MSc MCIEEM who has over 21 years' experience working as an ecologist. He holds Natural England (NE) survey licences for bats (2015-14745-CLS-CLS - Bat Survey Level 2), barn owl (CL29/00213) and great crested newts (Class A licence 2015-17633-CLS-CLS).

**Results**

**Designated sites**

A single Site of Special Scientific Interest (SSSI) is located within 5km of the proposed development site, namely Gipping Great Wood, which is located c. 1.6km to the southeast. There are no Natura 2000 sites within 13km of the application site.

**As the proposed development is limited to the erection of pool house, no impacts are predicted upon the SSSI.**

**Protected and notable species**

No protected or notable species records exist within the application site boundary. Table 1 identifies relevant protected or notable species records for within 2km of the application site boundary.

**Table 1 Protected/notable species**

Common name	Scientific name	Legal/conservation status
<b>Amphibians</b>		
<i>Bufo bufo</i>	Common toad	Sch. 5; S. 41
<i>Lissotriton vulgaris</i>	Smooth newt	Sch. 5
<i>Rana temporaria</i>	Common frog	Sch. 5
<i>Triturus cristatus</i>	Great-crested newt	Sch. 5; S. 41
<b>Bats</b>		
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	Sch. 5

<sup>1</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

<sup>2</sup> GCNs receive full protection under the WCA 1981 and Habitats Regulations 2017.

<sup>3</sup> All wild birds, their nests and eggs are protected under the WCA 1981 (as amended), level of protection varies per species.

<sup>4</sup> Hedgehogs are listed under Section 41 of the NERC Act 2006 lists as a 'species which are of principal importance for the conservation of biodiversity in England'

<i>Plecotus auritus</i>	Brown long-eared	Sch. 5; S. 41
<b>Birds</b>		
<i>Chloris choris</i>	Greenfinch	Red Status
<i>Apus apus</i>	Swift	Red Status
<i>Delichon urbicum</i>	House martin	Red Status
<i>Muscicapa striata</i>	Spotted flycatcher	Red Status; S. 41
<i>Passer domesticus</i>	House sparrow	Red Status; S. 41
<i>Prunella vulgaris</i>	Dunnoek	Amber Status
<i>Pyrrhula pyrrhula</i>	Bullfinch	Amber Status; S. 41
<i>Sturnus vulgaris</i>	Starling	Red Status
<i>Troglodytes troglodytes</i>	Wren	Amber Status
<i>Turdus philomelos</i>	Song thrush	Red Status
<i>Turdus viscivorus</i>	Mistle thrush	Red Status
<i>Tyto alba</i>	Barn owl	Sch. 1
<b>Other mammals</b>		
<i>Erinaceus europaeus</i>	Hedgehog	S. 41
<i>Lepus europaeus</i>	Brown hare	S. 41
<i>Meles meles</i>	Badger	PBA 1992

#### Other species records

Assessment of NE's GCN class licence returns data and eDNA pond survey records show the closest positive record (licence return) to be located c. 3.6km south of the site (dated 2014), which is outside the normal dispersal range of the species.

#### Habitat descriptions

The proposed development site comprises a small area of regularly mown, modified grassland (**g4**) along the southern edge of a swimming pool (Photo 1). The swimming pool is located at the far southwest corner of a residential garden, with a horse paddock to the immediate south and west (Photos 2 and 3). The horse paddock (**other neutral grassland - g3c**) is grazed on rotation by two horses and features cock's foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), soft brome (*Bromus hordeaceus*), barren brome (*Anisantha sterilis*), false oat-grass (*Arrhenatherum elatius*), perennial ryegrass (*Lolium perenne*) and timothy (*Phleum pratense*). Abundant forb species recorded were common nettle (*Urtica dioica*), spear thistle (*Cirsium vulgare*), cow parsley (*Anthriscus sylvestris*), and creeping buttercup (*Ranunculus repens*).

#### Amphibians and reptiles

##### a) Ponds

Several ponds are shown on OS maps within 250m of the site. Pond (P1) (Photo 4, Figure 1) is in the garden c. 20m north of where the pool house is to be erected. It was found to be heavily shaded with limited coverage of true macrophytes. Emergent/marginal forbs such as yellow iris (*Iris pseudacorus*) and water mint (*Mentha aquatica*) were recorded. A GCN eDNA sample taken from the pond in June 2023 (Appendix A1) returned a negative result (GCNs absent).

Pond P2 is located c. 25m southeast of the works footprint. It was found to be heavily shaded by the branches of adjacent trees and nearly dry at the time of the site walkover (Photo 5) and therefore unlikely to support breeding amphibians. A third pond P3 is located c. 100m to the south and is located within an area of heavily grazed horse paddock.

##### b) Terrestrial habitat

###### i) Amphibians

The short, modified grassland within the site boundary will provide some limited foraging opportunities for common amphibians on warm, humid nights (as will the adjacent horse paddock). Refuge opportunities are limited to habitats beyond the works footprint (e.g., hedgerows and mature shrubs in the wider garden), which will remain unaffected by the proposed development.

###### ii) Reptiles

The grassland within the works footprint is kept short with regular mowing and is therefore considered suboptimal habitat for common reptiles, including species such as slow worm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*) which prefer

habitats containing scattered scrub and tussocky grassland (affording refuge from predators) along with open areas for basking. Individual grass snakes (*Natrix helvetica*) may occasionally pass through the site on-route to hunt in nearby ponds.

**The overall habitat suitability of the site for amphibians and reptiles was assessed as *low*.**

#### Nesting birds

The site supports no obvious bird nesting features, such that no impacts are anticipated.

#### Other mammals

Hedgehogs (*Erinaceus europaeus*) may occasionally enter the site when foraging at night but are unlikely to spend any significant amount of time there due to the limited amount of cover present.

### **Discussion**

#### General good working practices

Impacts likely to arise from the proposed building works will be limited, subject to good housekeeping and working practices. The following measures are suggested to minimise the risk of incidental harm to species that may be present on or adjacent to the site.

- Any trenches required for service runs (e.g. water and electricity etc.) should be filled on the same day as excavation where possible. Trenches left overnight should be covered with ply/OSB sheets to prevent animals becoming trapped. If this is not possible then amphibian/mammal ladders must be installed (wide planks, laid at shallow angles to allow animals safe egress) and they should be maintained until the excavations are filled;
- Trenches should be inspected immediately prior to infill and any animals present (**except GCNs**) relocated to suitable nearby habitats (e.g. base of hedgerows);
- Any concrete slabs internally (e.g., to create an insulated floor to meet building control energy efficiency standards) should be poured during the morning to ensure they have hardened off prior to evening to reduce the risk of wildlife coming into contact with wet concrete;
- Any hand mixing of mortar or concrete should be on ply boarding over a tarpaulin which is folded over the boarding at the end of each day to prevent animals coming into contact;
- Any excess cement/concrete should be covered and removed from site as promptly as possible to avoid animals coming into contact;
- All building materials will be stored on bare ground or hard standing, or stored off the ground on pallets; and
- Any waste or spoil stored on site temporarily will be stored on bare/hard ground or in skips;

#### Species specific

##### a) Amphibians

To ensure no wildlife offence occurs, and given the nature of the works proposed, precautionary/good working practises would avoid direct impacts upon GCNs and common amphibian species. In addition to the general recommendations the following measures should be employed:

1. All grassed areas on site should be kept short prior to and during construction.
2. Excavations should be filled on the same day they are dug or covered overnight with ply boarding and any gaps filled with damp sharp sand;
3. If this is not feasible access ramps should be created to allow animals to escape and the excavations should be inspected daily and immediately prior to infilling.
4. Any animals (except for GCN) present should be moved to retained habitats, e.g. nearby hedgerows and/or shrubs providing adequate cover;
5. The GCN poster in Appendix A2 should be erected in the welfare facilities provided for construction staff on site.
6. Should any GCNs (Appendix A2) be encountered, works should stop immediately, and advice be sought from a suitably experienced ecologist. Any other animals should be allowed to move out of the works area, or safely relocated.

7. **Downpipes taking water off the roof should be sealed at ground level by using a leaf and debris screen<sup>5</sup> or similar to prevent amphibians entering drains.**

b) *Hedgehogs*

See *General Good Working Practices* for measures to minimise the risk of animals falling into trenches created for the footings of the proposed pool house.

Cumulative effects

The Mid Suffolk planning portal was searched for relevant applications within 1km, dating back two years. The search only returned three previous applications, two of which were at Brown's Place Farm. The first was a householder application (DC/21/06262) for the construction of the outdoor swimming pool, adjacent to where the pool house is proposed to be erected, with landscaping and the installation of an air source heat pump. The second was for the installation of a ground-mounted photovoltaic (PV) array (DC/22/04608). The final, unrelated, application (DC/23/00731) was for the retention and subdivision of existing business (Class B2) units at Applewhites Furniture Ltd, Finningham Road, Old Newton.

**Due to the very limited nature of the scheme and planning search results, no significant cumulative effects are anticipated.**

Biodiversity enhancements

A minimum of 2 of the following biodiversity enhancements are recommended:

1. Pond restoration/enhancement

Pond P2 could be enhanced through the removal of shading trees along the south side and excess silt/mud, which would increase the water level in the pond, improve the temperature and oxygen content, and therefore attract a greater abundance and diversity of aquatic macrophytes and associated animals which prey upon them. Water from the pool house could be directed into the pond to help maintain water levels throughout the year.

The restored ponds would act as ecological 'stepping stone' habitat for amphibians as well as providing an important foraging resource for bat and bird populations, delivering a significant local ecological benefit. The following steps should be taken:

- Some trees along the southern and western edges of the pond should be felled to reduce shading. This will allow it to receive light from the morning sun, which should stimulate growth of aquatic macrophytes.
- Excess mud/silt should be removed from at least 75% of the pond area. Silt may be left on an area of short vegetation next to the pond for 48 hours to drain and then spread on the adjacent horse paddock and left to dry out before seeding.
- A mixture of aquatic macrophytes should then be planted (**UK sourced - not imported**) including a mix of floating (F), submerged, emergent (E) and bankside species from the following list:
  - ❖ Water forget-me-not (*Myosotis scorpioides*) – M
  - ❖ Water mint (*Mentha aquatica*) – M
  - ❖ Marsh marigold (*Caltha palustris*) – M
  - ❖ Water plantain (*Alisma plantago-aquatica*) – M
  - ❖ Water speedwell (*Veronica anagallis-aquatica*) – M
  - ❖ Broad-leaved pondweed (*Potamogeton natans*) – F
  - ❖ Yellow flag (*Iris pseudacorus*) – E
  - ❖ Sweet rush (*Acorus calamita*) (leaves have a lovely scent of orange) – E
  - ❖ Reed canary-grass (*Phalaris arundinacea*) – M/E or Common reed (*Phragmites australis*) – M/E

**Works should be undertaken between September and January, preferably in autumn when the ground is dry and pond water levels are low. This period also avoids breeding seasons for amphibians and birds.**

**No non-native plants, fish, or other fauna should be introduced to the pond at any time.**

<sup>5</sup> <https://www.drainagepipe.co.uk/leaf-and-debris-gully-110mm-p-D94G/>

2. Log/brush piles

Some log/brush piles (Appendix A3) could be created by either or both pond using logs/brush from trees felled during the pond enhancement works. Log/brush piles provide important refuge habitats for amphibians and are likely to support a range of fungi, dead wood invertebrates, and solitary bees, which in turn will attract foraging small mammals and birds etc.

3. Small passerine nest boxes

Three hole-entrance bird nest boxes<sup>6</sup> could be mounted on suitable trees within the applicant's garden.

4. Bat boxes

Two bat boxes such as the Eco Kent bat box or chillon woodstone box (Appendix A4) could be erected on suitable trees within the applicant's garden.

Good practice advice<sup>7</sup> should be followed in relation to the positioning of boxes.

It is generally advised that subject to no significant change in site management regimes, and dependent on the species present, baseline survey results typically remain valid for approximately 12 – 18 months (CIEEM, 2019).

Kind regards,

**Christian Whiting** BSc (Hons) MSc  
Ecologist, MHE Consulting Ltd

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<sup>6</sup> E.g. <https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box> or <https://www.nhbs.com/1b-schwegler-nest-box>

<sup>7</sup> <https://www.nhbs.com/blog/nhbs-guide-where-to-hang-and-how-to-maintain-your-bat-box> and <https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-small-birds/making-and-placing-a-bird-box>

**Figure**



**Legend**

 Proposed development site



Client: Mr. Craig Western

Project: Browns Place Farm, Brown Street, Old Newton, Suffolk

Drawn:	Date:	Drawing Ref:
AG	19/07/23	BROWNSPLACEFM/ER/23/001

**Figure 1 Site location and habitats plan**

**Photos**





**Photo 1** View of species-poor grassland where pool house will be erected



**Photo 2** View of horse paddock to the south of site, looking north



**Photo 3** View of horse paddock to the south of site, looking south



**Photo 4** Pond P1



**Photo 5 Pond P2**

**Appendices**

## **Appendix A1 GCN eDNA survey results**

Folio No: E18197  
Report No: 1  
Purchase Order: Browns Place Farm  
Client: MHE CONSULTING LTD.  
Contact: Christian Whiting

## TECHNICAL REPORT

### ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS (*TRITURUS CRISTATUS*)

#### SUMMARY

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analysing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

#### RESULTS

**Date sample received at Laboratory:** 21/06/2023  
**Date Reported:** 01/07/2023  
**Matters Affecting Results:** None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
5715	Browns Place Farm	TM 06043 63824	Pass	Pass	Pass	Negative	0

If you have any questions regarding results, please contact us: [ForensicEcology@surescreen.com](mailto:ForensicEcology@surescreen.com)

**Reported by:** Gabriela Danickova

**Approved by:** Chris Troth



**Appendix A2      GCN ID Poster**

# Great Crested Newt

If seen by any employee, works must cease immediately and an ecologist be contacted for advice

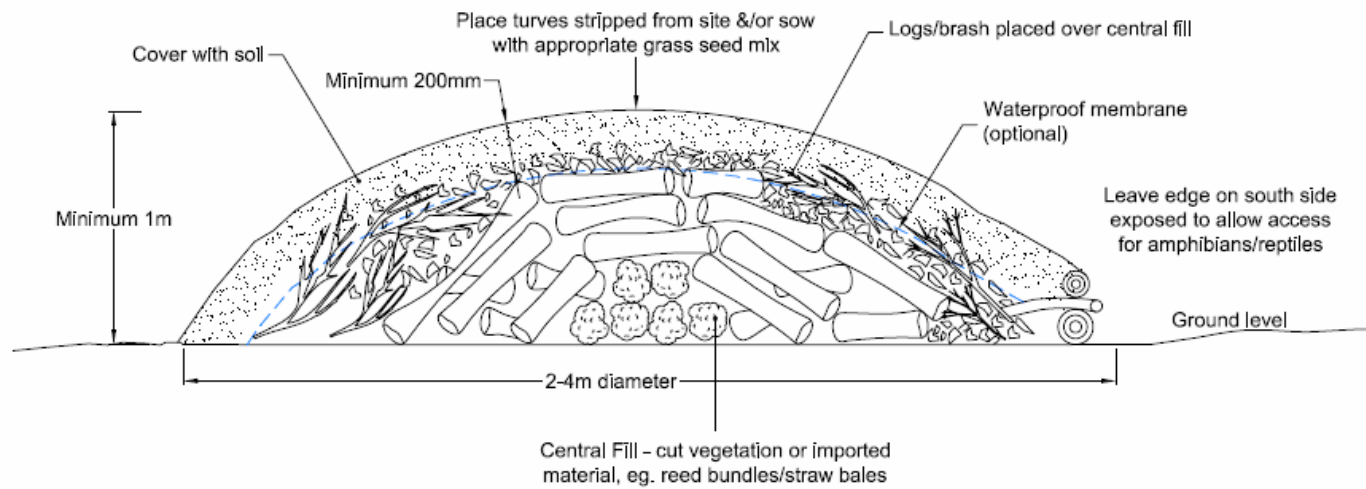
It is an offence to intentionally or recklessly disturb, injure or kill great crested newts

Further information can be found at [www.arguk.org](http://www.arguk.org)





**Appendix A3    Log/Brash Piles**



Brush/log pile recently created

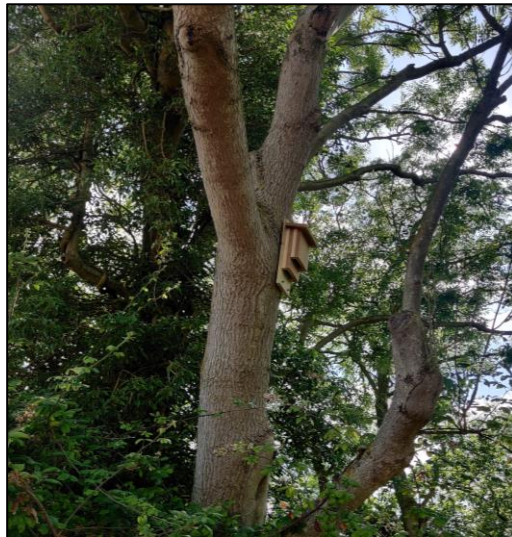


Brush/log pile (c. 2 years old) with vegetation growing through and over

**Appendix A4 Bat boxes**



Kent bat box



Vincent Pro Box