AMPHIBIANS
SURVEY & REPORT

at

Land off Beaumont Park Road
Huddersfield
West Yorkshire
HD4 5JT

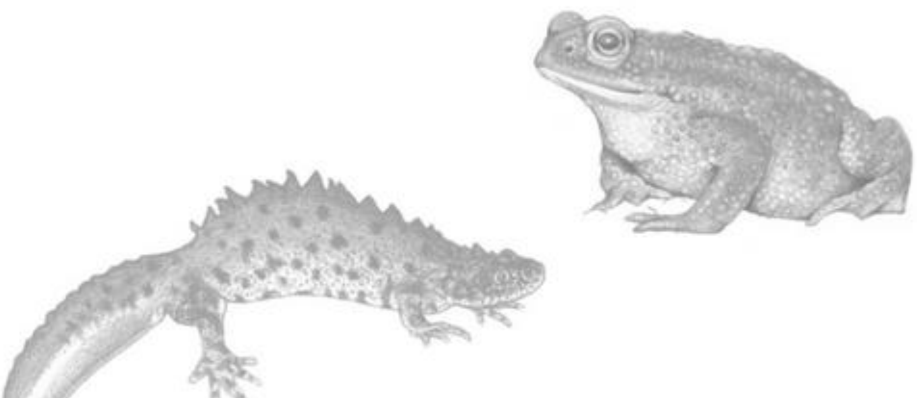
Client:
M Bains

Client Address:
58 Beaumont Park Road
Huddersfield
HD4 5JP

Client Contact:

JCA Ref:
21434e/ADo

Date of Report:
14/02/2025



JCA Limited
Arboricultural & Ecological Consultants

Quality Assurance

Version	**Desktop Survey Completed:**		**Site Surveyed:**		**Report Completed:**		**Checked:**	
	Date	Name	Date	Name	Date	Name	Date	Name
Planning	23/10/23	Alex Donovan	04/02/25	Alex Donovan Rebecca Petch-Smith	04/02/25	Alex Donovan	05/02/25	Rebecca Petch-Smith
							14/02/25	Adam West

All ecologists employed by JCA are members of, or are under application for, membership of the Institute of Ecology and Environmental Management (IEEM) and follow the Institute's code of professional conduct when undertaking ecological work.

Risk Assessment Completed	
Bio-security Procedure Completed	
Lone Worker Procedure Completed	

Summary

A report is required at **Land off Beaumont Park Road, Huddersfield** to assess the site's potential for supporting great crested newts, in the form of terrestrial habitat and/or aquatic/breeding habitat. The aim of this report is to investigate the potential impact that the proposed development may have on the local/national great crested newt population. The development proposed on this site is to build a residential dwelling**.**

The key piece of legislation protecting Great Crested Newts (GCNs) within the UK is Schedule 2 of the Conservation of Habitats and Species Regulation (CHSR) 2017 (retained in UK by the CHSR (Amendment) (EU Exit) 2019). Furthermore, these species are also protected in England and Wales under Schedule 5 of the Wildlife and Countryside Act 1981, and are listed as a priority species under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006.

If it is discovered that any proposed development may impact upon this species (thus leading to an offence being committed) a mitigation plan must be devised and a GCN Mitigation Licence applied for from the relevant government department (i.e. Natural England in England). Gaining a licence will depend on many variables.

A desktop study was undertaken in order to obtain any records of GCN and designated sites within a 2km radius of the site to determine the significance of the area for supporting these protected species. A thorough assessment of the habitat was carried out to assess the site's potential for supporting amphibians.

No waterbodies were found to be present on-site. No evidence for their presence was found during the survey. Pond 1 was assessed to have an average suitability to support great crested newts, but does not meet the requirements to conduct further eDNA surveys.

Clearance of the site must take place under the supervision of an **Ecological Clerk of Works (ECoW)**.

Contents

1. Introduction

1.1 Introduction

1.1.1 JCA Ltd has been commissioned by **M Bains** to undertake great crested newt *Triturus cristatus* surveys at a site located at **Land off Beaumont Park Road, Huddersfield**, hereafter referred to as ‘the site’.

1.2 Site Location

1.2.1 The site is located at Ordnance Survey (OS) National Grid Reference **SE 13137 14855**, with nearby postcode **HD4 5JT**. The site is bordered to the north by urban residential areas and sports fields, and urban residential and deciduous woodland on all other sides.

1.3 Scheme Description

1.3.1 The development proposed on this site is the construction of a single residential dwelling.

1.4 Survey Objectives

1.4.1 The survey is intended to determine the likelihood of great crested newts (GCNs) being present on site, whether as a breeding population or in the terrestrial phase of their life cycle.

1.4.2 To determine this, a Habitat Suitability Index (HSI) assessment will be carried out on all waterbodies on-site, and within 500m with connectivity to the site and where accessible.

1.4.3 An assessment of the vegetation on site will also be carried out.

1.5 Legislation

1.5.1 GCNs are afforded protection under the Schedule 2 of the Conservation of Habitats and Species Regulation (CHSR) 2017 (retained in UK by the CHSR (Amendment) (EU Exit) 2019), which applies to all of its life stages. GCNs are also listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended). Under these legislations, it is an offense to:

- Capture, kill, disturb or injure great crested newts deliberately.
- Damage or destroy a breeding or resting place.
- Obstruct access to their resting or sheltering places (deliberately or by not taking enough care).
- Possess, sell, control or transport live or dead newts, or parts of them.
- Take great crested newt eggs.

1.5.2 If it is discovered that any proposed development may impact upon this species (thus leading to an offence being committed) a mitigation plan must be devised and a GCN Mitigation Licence applied for from the relevant government department (i.e. Natural England in England). Gaining a licence will depend on many variables.

1.5.3 GCNs are listed on Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006, designating it as a species of principle importance for the purpose of conserving or enhancing biodiversity.

1.5.4 GCNs is also protected by the Protection of Animals Act 1911 which prohibits any acts of cruelty or mistreatment.

2. Methodology

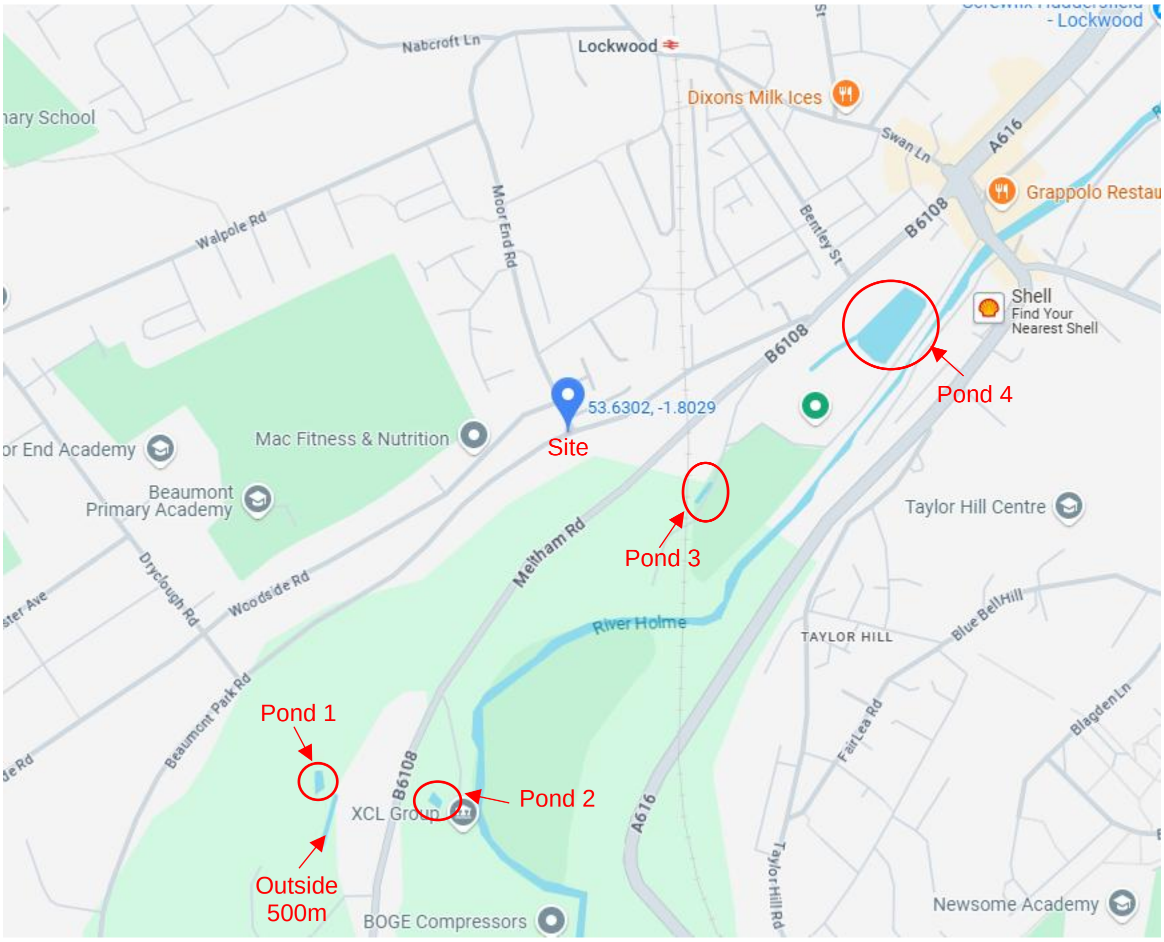
2.1 Desktop Study

2.1.1 A desktop study was undertaken in order to assess the prevalence of great crested newt in the vicinity of the site. The desk study was part of a wider desk study as part of the Preliminary Ecological Appraisal (PEA) conducted by JCA Ltd. (21434/ADo).

2.1.2 West Yorkshire Ecological Services (WYES), the ecological records centre for West Yorkshire, was commissioned to provide all records of protected species, including GCNs, within 2km of the site.

2.1.3 DEFRA's MAGIC maps website and Google Maps were used to search for ponds within 500m of the application site. MAGIC Maps did not find any priority ponds within 500m of the site. Google Maps showed four ponds within 500m of the site, shown below.

Figure 1: Ponds within 500m of the site, taken from Google Maps.



2.2 Field Survey

2.2.1 The site was surveyed on 04/02/25 by Alex Donovan (JCA Assistant Ecologist) and Rebecca Petch-Smith (JCA Graduate Ecologist).

2.3 HSI Methodology

2.3.1 The Habitat Suitability Index (HSI) is a system that was developed by Oldham *et al.* (2000) for assessing a water body's potential to support Great Crested Newts (GCN). The HSI is a numerical system that scores a pond between 0 and 1 (**Table 1**) depending on 10 quantifiable factors: geographical location, pond area, permanence, water quality, shade, waterfowl, fish, pond count, terrestrial habitat and macrophytes.

Table 1: The Habitat Suitability Index (HSI).

HSI	Pond Suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

2.3.2 <u>Limitations:</u> The HSI for great crested newts is a measure of habitat suitability and therefore does not substitute great crested newt surveys. The general trend is ponds with high HSI scores are more likely to support great crested newts than those with low scores. However, the system is not accurate enough to conclude that ponds with a high score will support great crested newts, or that any pond with a low score will not support great crested newts.

2.3.3 There is also a positive correlation between HSI scores, and the numbers of great crested newts observed in ponds. As a general rule of thumb, high HSI scores are likely to be linked with greater numbers of great crested newts. However, this general relationship is not adequate to predict the numbers of newts a pond. HSI scoring can be useful in:

- Evaluating the general suitability of a sample of ponds for great crested newts
- Comparing general suitability of ponds across different areas
- Evaluating the suitability of receptor ponds in a proposed mitigation scheme

2.4 Survey Limitations

2.4.1 The site is densely vegetated, with a ground layer of ivy covering much of the area, with patches of bramble, limiting the ability to view and access much of the site, and providing multiple refuge possibilities for any GCNs that may have been on-site.

3. Results

3.1 Desktop Study

3.1.1 The records obtained from the WYES did not show any records of GCNs within 2km of the site within the last 10 years. Maps and aerial imagery showed ponds within 500m of the site which may support GCNs.

3.2 Field Survey

3.2.1 The PEA survey concluded that the site contains suitable habitat to potentially support GCNs.

3.2.2 The HSI survey assessed the terrestrial habitat on-site for evidence of GCNs. No evidence was found, but the survey was limited by the dense vegetation covering the site.

3.2.3 The HSI survey assessed the potential of Pond 1 to support GCNS, with results shown in **Table 2**:

Table 2. The Habitat Suitability Index (HSI) results for ponds surveyed within 500m of the site.

Great crested newts HSI results	
Pond reference number	Pond 1
Grid reference	SE 12839 14452
Distance from site	495m
Factor 1: Location	1.00
Factor 2: Area	0.60
Factor 3: Pond permanence	1.00
Factor 4: Water quality	0.67
Factor 5: Shade	0.60
Factor 6: Waterfowl	1.00
Factor 7: Fish	0.33
Factor 8: Pond density	0.95
Factor 9: Terrestrial habitat quality	1.00
Factor 10: Macrophyte cover	0.30
HSI Score	**0.68**
Suitability for great crested newts	**Average**

3.2.4 Ponds 2-4 were not surveyed, as they lack connectivity to the site, being separated by Meltham Road (B6108) which would prevent access for GCNs to the site.

4. Discussion and Analysis of Results

4.1 HSI Survey

4.1.1 No ponds occur on-site. Terrestrial habitat on-site has the potential to support GCNs. This habitat, however, is isolated from most nearby ponds. There is connectivity between the site and Pond 1, potentially allowing access.

4.1.2 Pond 1 had a HSI score of average. Occupancy of ponds with a score of average is 55%, meaning over half of average ponds are used by GCNs.

5. Conclusions and Recommendations

5.1.1 Pond 1 had a HSI score of average. Further eDNA surveys to confirm the presence/likely absence are recommended for ponds scoring average or higher, however, recently published updated guidance (Grundy, 2025) has reduced the distance required to survey ponds from 500m to 250m from the site, unless a pond located 250-500m meets all of the following criteria:

- Maps, aerial photos, walk-over surveys or other data indicate that the target waterbodies are deemed to have the potential to support a large GCN population (peak count/s >100 adult GCN),
- Site footprint contains particularly favourable GCN terrestrial habitat, especially if it constitutes the majority of such habitats available locally,
- The development would have a substantial negative effect on that GCN terrestrial habitat, and
- There are no physical barriers to GCN dispersal.

5.1.2 Pond 1 is located approximately 495m from the site, on the outer edge of the previous 500m range. It also does not meet all the criteria. The size is approximately $350m^2$ so it would likely only support a small (up to 10 individuals) or medium (11-100 individuals) sized population. The site contains favourable habitat but does not provide only favourable habitat locally, with more habitat available off-site. The proposed development is unlikely to negatively impact favourable habitat off-site.

5.1.3 Further eDNA surveys are not required.

5.1.4 The site does have the potential to support GCNs in the terrestrial stages of life. As recommended in the PEA, clearance of the site must take place under the supervision of an **Ecological Clerk of Works (ECoW)**. The ECoW will conduct a fingertip search of the areas to be cleared and, should any amphibians be found, they will move the animal to a safe place containing suitable habitat for the species.

6. References

Reports:

JCA Ltd. – Preliminary Ecological Appraisal (PEA), Nov 2023 (21434/ADo).

Guidance:

Amphibian Habitat Management Handbook. 2011. Baker J., *et al*.

Great Crested Newt Conservation Handbook. 2001. Langton T., Beckett C. & Foster J. FROGlife.

Great Crested Newt Mitigation Guidelines. 2001. Whitehurst J. English Nature (Natural England).

Grundy, J. 2025. Great Crested Newt Survey and Mitigation Guidelines 2025.

Herpetofauna workers handbook. 2003. Gent T. & Gibson S. Joint Nature Conservation Committee.

Websites:

Amphibian and Reptile Conservation (ARC). <http://www.arc-trust.org/>.

Herpetofauna Conservation Turst (HCT). < http://www.herpconstrust.org.uk/index.php >.

Multiple-Agency Geographic Information for the Countryside (MAGIC). <http://www.magic.gov.uk/>

Natural England. < http://www.naturalengland.org.uk/>

Nature on the Map. Natural England. <www.natureonthemap.org.uk>

Reptiles and Amphibians of the UK. <http://www.herpetofauna.co.uk/ >

Relevant Legislation:

Wildlife and Countryside Act (WCA) 1981 (as amended)

- http://jncc.defra.gov.uk/page-3614
- https://www.legislation.gov.uk/ukpga/1981/69/contents

The Conservation of Habitats and Regulations (CHSR) 2017.

- https://www.legislation.gov.uk/uksi/2017/1012/contents/made

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

- https://www.legislation.gov.uk/uksi/2019/579/contents/made

Natural Environment and Rural Communities (NERC) Act 2006

- https://www.legislation.gov.uk/ukpga/2006/16/contents

Environment Act 2011

- https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

Countryside and Rights of Way Act 2000

- https://www.legislation.gov.uk/ukpga/2000/37/contents

Appendices

Appendix 1: Glossary

Metamorphosis- The process by which an organism physically develops after birth, an example of this is from tadpole to frog.

Terrestrial- On or of the Earth, with the opposite being aquatic or marine.

Water body- An accumulation of water in a specific area covering the Earth. It is often a result of precipitation such as rainfall or channelization of a water course.

Hibernation- The process by which a living organism passes through the winter in an inactive or dormant state.

Ectothermic- The process by which some organisms generate heat from their surroundings in order to raise or lower their body temperature. In short, their body temperature fluctuates with the surrounding environment.

Cohort- A collective name of all offspring hatched in a calendar year.

Metapopulation- A group of spatially separated population which interact with each other via immigration and emigration of individuals.

Refugia- Areas that provide shelter for amphibian species. They are generally natural but can also be man-made. They are typically constructed from fallen branches and a range of other organic material. Artificial refugia can be made from intertwined branches and ferns and/or corrugated iron strips.

Hibernaculum- Similar to a refuge, but specifically where organisms shelter during hibernation.

Appendix 2: Author Qualifications

Adam West, Principal Ecologist

BSc (Hons) Animal and Wildlife Management.

Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Batchelor's degree, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence, a Natural England Level 2 bat survey class licence (and the Scottish and Welsh equivalents) and a CSCS card.

Alex Donovan, Assistant Ecologist

MBIOL, BSc Biology (Industrial).

Alex joined JCA in 2023 after graduating from the University of Leeds with a First Class Honours Integrated Master's degree in Biology. As part of his degree programme, Alex spent an industrial placement year working in the Uplands Research Department of the Game and Wildlife Conservation Trust, assisting on various ecological surveys and projects. Alex is a registered Trainee Bird Ringer, licensed through the BTO and is experienced in conducting preliminary ecological surveys, bat roost assessments and emergence surveys, Biodiversity Net Gain, and has knowledge of wildlife legislation. Alex is a CIEEM Qualifying Member and is currently working towards a Natural England level 1 bat licence, level 1 great crested newt licence, and a barn owl survey licence.

Rebecca Petch-Smith, Graduate Ecologist

MBiol (Hons) Zoology

Rebecca joined JCA in 2025 after spending a year and a half in the teaching industry. Prior to this she graduated from the University of Leeds with a 2:1 Honours Integrated Master's degree in Zoology. As part of her degree programme, Rebecca spent time in Kenya conducting surveys on African ungulates. Rebecca began assisting on bat emergence surveys in 2024, after which, she gained employment as a Graduate Ecologist at JCA Ltd. She is currently conducting Preliminary Ecological Appraisals, Bat Scope Surveys and Biodiversity Net Gain Assessments and working towards her protected species licence.

The information and advice which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and *bona fide* opinions.

Signed

....

Alex Donovan *MBIOL BSc (Hons)*

04/02/2025

Reviewed by

....

Rebecca Petch-Smith *MBIOL BSc (Hons)*

05/02/2025

Approved by

....

Adam West BSc *(Hons), ACIEEM*

14/02/2025

For and on behalf of ***JCA Ltd***

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ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected species: Bat, Wintering and Nesting Bird, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes
- Butterfly & Insect Surveys

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)
- Planting Schemes
- Monitoring of bird or bat boxes.

ARBORICULTURAL SERVICES

Guidance for Architects & Developers

- British Standard 5837 Surveys
- Arboricultural Implications Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

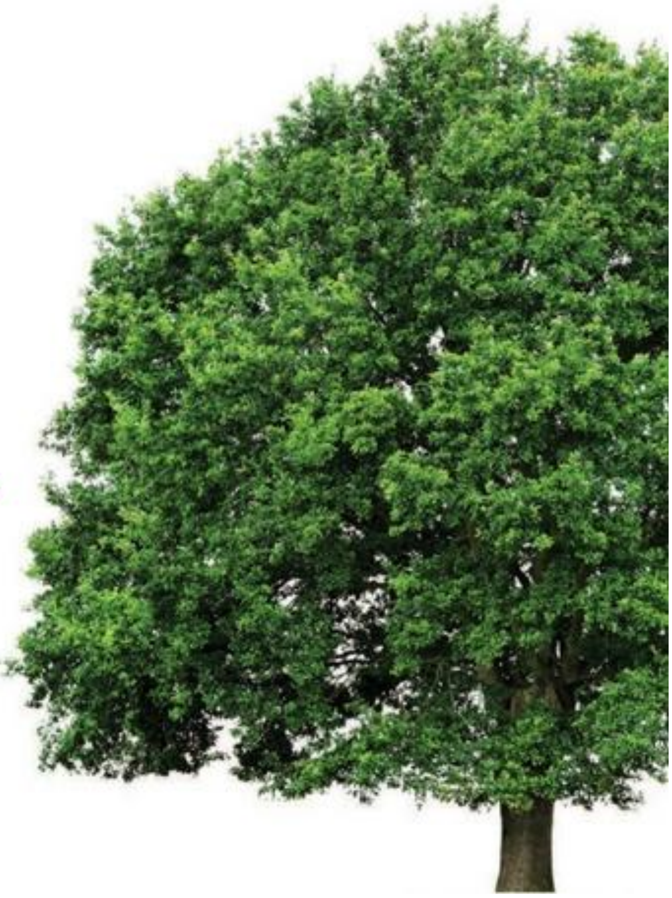
- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control



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