



Natrix Ecological Limited

**Great Crested Newt Statement for land at Flint House,
Kelshall**

May 2026

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Note: This report does not constitute legal advice.

Version control

Version 1	21/05/2026
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Introduction

Natrix Ecological Limited has been instructed to assess the need for mitigation measures in advance of development on land adjacent to Flint House, Kelshall, SG8 9SE. This report summarises the results of Environmental DNA (eDNA) sampling and Habitat Suitability Index (HSI) scoring of n.4 ponds within 500m of the development site. It further assesses the likely effects of the works on great crested newt *Triturus cristatus* (hereafter GCN).

The site has a central grid reference of (TL 32849 36771) and is c. 0.19ha in area. A Preliminary Ecological Appraisal (PEA) conducted in February 2026. Gratitude is extended to the authors for their work in identifying the ponds assessed herein.

GCN are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended) it is a criminal offence to:

- Deliberately capture, injure or kill a GCN;
- Deliberately disturb wild animals of the GCN species;
- Damage or destroy a breeding site or resting place of a GCN, or
- Possess or control or transport a GCN.

Under Section 9(4) of the Wildlife and Countryside Act 1981 (as amended) it is a criminal offence to:

- Recklessly or intentionally obstruct access to any structure or place which any GCN uses for shelter or protection, or
- Recklessly or intentionally disturb any GCN while it is occupying a structure or place which it uses for shelter or protection.

Surveyor Information

This assessment was undertaken by David Willis (Natrix Ecological Limited) who has held a great crested newt survey licence (Level 1) since 2012. As of 2025, he has held a Level 2 survey class licence (Licence number 2025-83494-SCI-CL09). He is the founder and chair of Hertfordshire Amphibian and Reptile Group (HertsARG) and former council member of the British Herpetological Society (BHS). Recently appointed as the county recorder for reptiles and amphibians, he has formerly worked for the Freshwater Habitat Trust as project officer for the Newt Conservation Partnership (NCP). Data obtained from this assessment will be made available to Hertfordshire Environmental Records Centre (HERC).



Survey methodology

The PEA completed by Elite Ecology in February 2026, identified 4 ponds within 500m of the Site (Image 1). These ponds were subject to environmental DNA (eDNA) sampling.

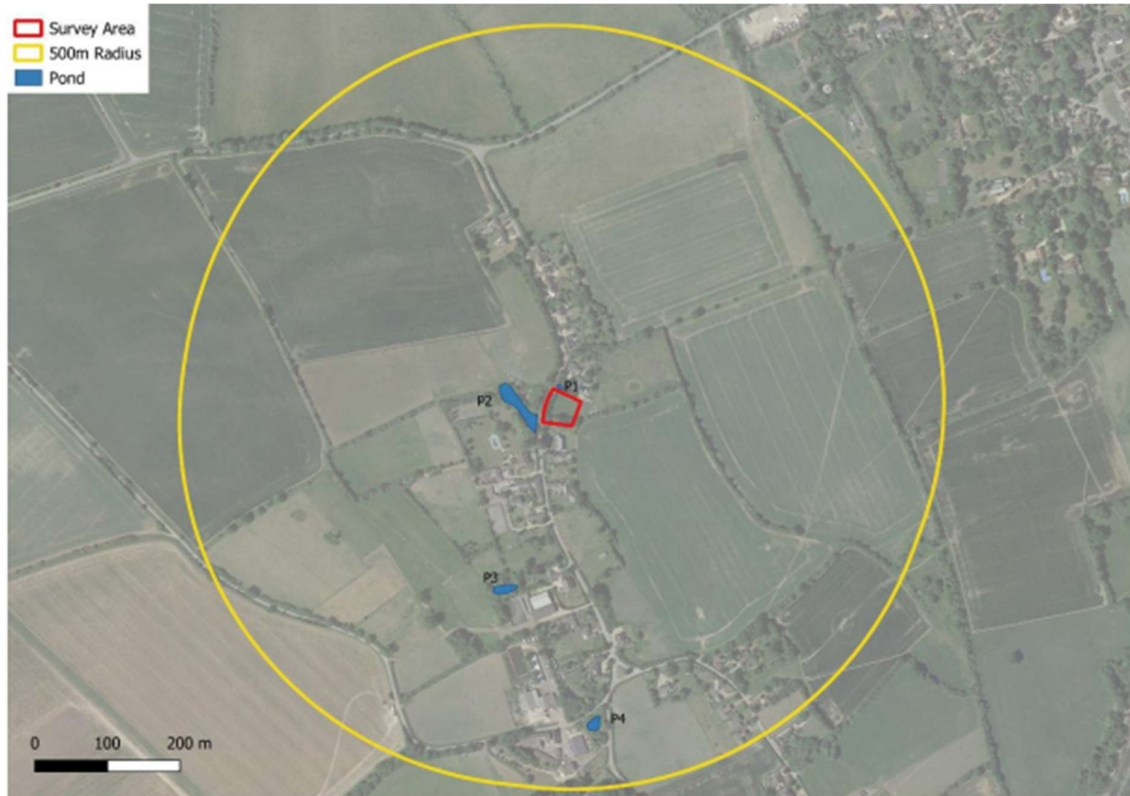


Image 1: Ponds identified in the PEA, with numbers. Elite Ecology, 2026.

The sampling of ponds for DNA must take place between the start of April and the end of June, in order to ensure sufficient likelihood of GCN presence within the water body. Water samples are taken from around the water body. These are typically taken from close to the bottom of the water column, where the denser DNA is likely to accumulate.

Samples were assessed at the laboratories of Applied Genomics Ltd.

Several of these ponds were subject to Habitat Suitability Index (HSI) scoring during the PEA. Whilst this assessment was to determine presence via DNA, rather than potential suitability these have been re-assessed and results included below.

The ditch included in the PEA is not, however, considered in this report. It is a run-off ditch, heavily shaded and dry most of the year, including the eDNA sampling period. It should not be regarded as aquatic habitat for GCN.



Results

Pond 1 is immediately adjacent to the Site (c.5m north-west) at grid ref . This is located within a residential garden and dries within the currency of the GCN breeding season (March-June). The eDNA results were **negative** for GCN. It dries annually. The HSI provided in the PEA was 0.63 making this a good pond. However, this has been revised, reducing the score from 0.72 to 0.53 on the basis of the annual water loss. This gives this pond an HIS category of **below average**.

Pond 2 is located on the other side of Road (c. 21m south-west of the Site) . It is relatively large and is heavily used by a range of waterfowl, most notably Canada goose *Branta canadensis*. The removal of aquatic vegetation by these birds, the reduction of water quality due to nutrients/turbidity and the proximity of the road significantly reduce the quality of the pond. Furthermore, whilst roads cannot be universally regarded as barriers to the distribution of GCN, the quality of the pond and the level of traffic through the village. The eDNA results were **negative** for GCN.

The PEA scored this pond at 0.70, categorising this as a good quality pond. Reassessment undertaken during the collection of water samples reduces this to 0.26 and a categorisation as **poor**. Photograph 3 (Appendix 1) illustrates the water quality.

Pond 3 is situated on a farm c.261m to the and has good terrestrial habitat in the immediate environs, including potential hibernacula within woodland and farm buildings. This potentially reduces the requirement for this population to disperse. Eggs were found during the examination of the pond (subsequent to initial sampling) growing on water mint *Mentha aquatica*. There was abundant aquatic invertebrate life observable in the water column. The eDNA results were **positive** for GCN

Despite being identified as being within 500m of the Site, this pond was not categorised by the original PEA. It has a score of 0.91 and is categorised as **excellent**.

Pond 4 is located on farmland c. 4 m to the south, surrounded by mature hedge and scrub growth, and managed grassland. There are waterfowl present but in limited numbers, with no evidence of droppings or excessive grazing on the banks. The eDNA results were **positive** for GCN, with eggs being found during the assessment.

This pond is also within 500m of the Site. It has a score of 0.79 and is categorised as **good**.

GCN mitigation risk assessment

GCN are protected via several statutory instruments. The undertaking of any development work within, or, near, GCN and their habitat carries with it the risk of an offence (see Table 1).



The purpose of this report is to identify any requirement in for European Protected Species (EPS) Mitigation. As directed by the guidance included in the GCN Method Statement to prevent risk-averse and expensive mitigation measures. These are regarded as often being unnecessary and ultimately do little to protect the species or their habitat. Indeed, it would be a prohibitive expense in the case of the habitat creation on this site.

Full EPS mitigation is not considered necessary. These works have been assessed using the guidance metric (Table 1) and the points considered in detail below are drawn directly from the suggested considerations within this guidance. It is regarded as unlikely that GCN will be encountered or disturbed during these works but a precautionary approach has been taken.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0
Individual great crested newts	No effect	0
Maximum:		0
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Table 1: Natural England matrix to indicate likelihood of offence being committed during unmitigated works

Population size: There has been no instruction to undertake the standard 6 surveys of the nearby ponds, and this is regarded as unnecessary in this instance. However, this does mean that the GCN population size classes unclear. However, the abundance of foraging habitat surrounding the ponds known to harbour GCN and the barriers to dispersal to the Site make

Pond density: There are 4 ponds identified within 500m of the Site, and these have been assessed accordingly.

Terrestrial habitat: The grassland habitat on the site itself is of low-moderate potential for GCN (Jehle *et al.* 2011, Gent *et al.* 2003). Following examination of the proximal ponds (1&2) it is regarded as unlikely that they will have dispersed here from the known breeding ponds.

Habitat fragmentation/dispersal barriers: There are barriers between the known GCN breeding ponds. This reduces the likelihood of GCN using this habitat. The woodland surrounding the breeding ponds represents the most favourable habitat.

This presents challenges in terms of the construction period, as the area is more accessible to GCN, and will be addressed through careful supervision of works. However,



the resultant works, even in the short term, do not present any barriers to these animals moving across through the habitat (Jehle *et al.* 2011).

Development footprint: The area to be developed is c.0.19ha. It is bordered by a busy road and field containing livestock. All efforts to be made to limit the spread of working area to necessary locations.

Construction period: The construction period to be as short as possible. If necessary a licenced GCN ecologist could be on site able to provide Ecological Clerk of Works (ECoW) supervision.

Recommended method Statement

The following measures are recommended for consideration, and could be incorporated into a Construction Environmental Management Plan (CEMP)

Limited number of vehicles on site: Numbers of vehicles to be limited on Site. These vehicles will be operated by qualified contractors, who are aware of the considerations necessary to avoid harm to GCN.

“Toolbox talk” and ECoW supervision: There should be a preference for site operatives who have experience of working on similar projects. Nonetheless, a licenced ecologist could be on site to provide training in species identification and what actions should be taken in the event of the discovery of GCN during the works. It should be understood that should GCN be found, work is to stop until appropriate ecological guidance has been sought. No work to commence until site has been checked by ECoW. In the event of killing or harm to GCN, work to stop and Natural England to be informed.

Before works commence, any vegetation within the working area (including the tracking and extension areas) taller than 150mm must be cut back to this height using suitable machinery and then left for no less than 2 hours. This is to allow any fauna present to disperse away from the works area. The vegetation will then be cut to soil level to remove all potential cover. This is of particular importance within the tussocks of the pond creation area (see photograph 2, Appendix 1).

Spillage/fuelling: All fuelling to be undertaken off-site, or on hardstanding at the top of the site, with fuelling diaper in place. Caution is to be exercised when working closest to the existing (off-site) pond and associated water course. No washing of the vehicles to take place on site.

Planned access: Vehicles on site should not deviate from a clearly planned route, which will facilitate thorough checking for GCN. The access plans should be followed, ensuring single tracks are used for site access and investigation works to minimise habitat damage and reduce the risk to GCN. The same tracks should be used consistently by all vehicles on site.



Timing of works: Work will only take place during daylight hours, avoiding the nocturnal movements of newts and other amphibians. Work is to take place as late as possible in the year (September-October). This needs to be balanced against the potential terrestrial damage which could be caused undertaking the works on soft ground.

Track reinstatement: Supervised efforts will be made to make good all track rutting caused during the process of construction. Where doing so will risk further damage to terrestrial habitat or pond, mild rutting might be left.

Summary

The ponds closest to the pond do not appear to be used by GCN, with significant barriers to dispersal to those further away. Even in the absence of any mitigation measures, any offence under the legislation is unlikely. However, additional measures, as outlined herein will further reduce the potential for harm to these animals or their habitats, both aquatic and terrestrial.

References

Amphibian and Reptile Groups UK (2010) ARG UK Advice Note 5 Great Crested Newt Habitat Suitability Index. Available online at: [Great Crested Newt Habitat Suitability Index \(HSI\) - Amphibian and Reptile Groups of the UK](#). Accessed: May 2026

Baker, J.M.R. and Halliday, T.R. (1999). Amphibian colonisation of new ponds in an agricultural landscape. *Herpetological Journal* 9: 55-63.

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Gent, T. and Gibson, S. (Eds) (2003) *Herpetofauna Workers' Manual*. JNCC Peterborough: Pelagic.

Jehle, R. Thiesmeier, B. and Foster, J. (2011) *The Crested Newt: A dwindling pond dweller*. London: The British Herpetological Society.

Langton, T. Beckett, C. and Foster, J. (2001) *The Great Crested Newt Conservation Handbook*. Suffolk: Froglife

Natural England (2014) GCN method statement. [Online] available at: <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>. Accessed: May 2026.



Appendix 1: Photographs



Photograph 1: Pond 1, closest to the Site. Note low water levels

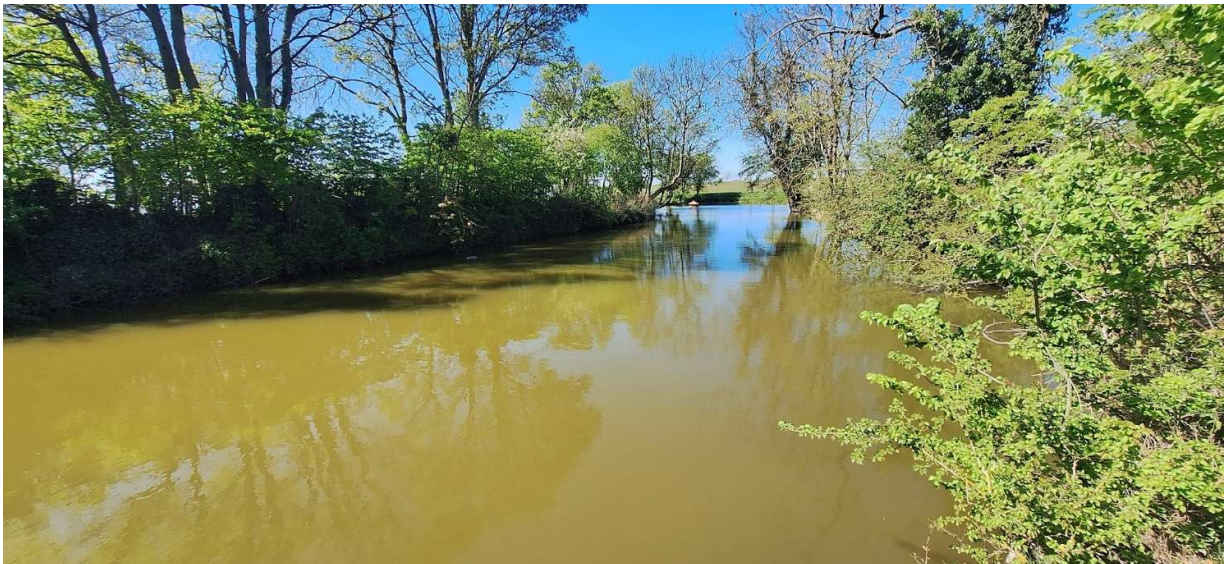


Photograph 2: Grassland habitat on Site.





Photograph 3: Pond 2 viewed from the main road. Note presence of waterfowl



Photograph 4: Pond 2, showing extent and turbidity

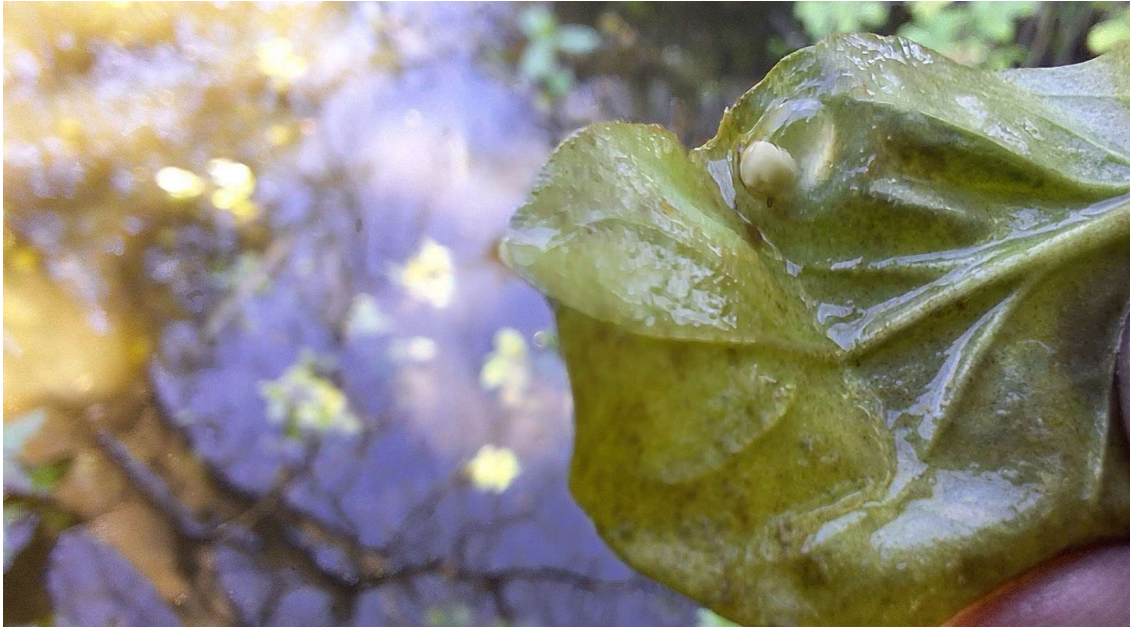


Photograph 5: Pond 3, showing terrestrial habitat and extensive aquatic plant growth



Photograph 6: Macrophyte and emergent growth within Pond 3





Photograph 7: GCN egg found at Pond 3



Photograph 8: Pond 4. Some waterfowl, but limited numbers





Photograph 9: Developing GCN egg, Pond 4



Appendix 2: eDNA results

KIT REFERENCE	CLIENT REF	GCN eDNA DETECTED
26015_01_GCN_MH001	262026_1	NO
26015_01_GCN_MH002	262026_2	NO
26015_01_GCN_MH003	262026_3	YES
26015_01_GCN_MH004	262026_4	YES

***Inhibitors were reported as present in sample 262026_3. However, the presence of GCN DNA was sufficient to give a positive detection.**



Appendix 3: HSI calculations

HSI Score						
	Pond Name Grid Ref	Example SK123456	Pond 1	Pond 2	Pond 3	Pond 4
SI No	SI Description	SI Value	SI Value	SI Value	SI Value	SI Value
1	Geographic location	1.00	1	1	1	1
2	Pond area	0.50	0.25	0.9	0.6	0.9
3	Pond permanence	0.90	0.1	0.9	0.9	0.9
4	Water quality	1.00	0.33	0.001	1	0.67
5	Shade	1.00	0.7	1	0.8	0.9
6	Water fowl effect	1.00	1	0.01	1	1
7	Fish presence	1.00	1	1	1	1
8	Pond Density	0.65	1	1	1	1
9	Terrestrial habitat	1.00	1	0.67	1	1
10	Macrophyte cover	0.90	0.3	0.3	0.9	0.2
HSI Score		0.88	0.53	0.26	0.91	0.79
Pond suitability (see below)		Excellent	Below Average	Poor	Excellent	Good
Categorisation of HSI Score by Lee Brady						
HSI Score		Pond Suitability				
< 0.50		Poor				
0.50 - 0.59		Below average				
0.60 - 0.69		Average				
0.70 - 0.79		Good				
> 0.80		Excellent				
Based on ARGUK advice note 5 - Great Crested Newt Habitat Suitability Index						

