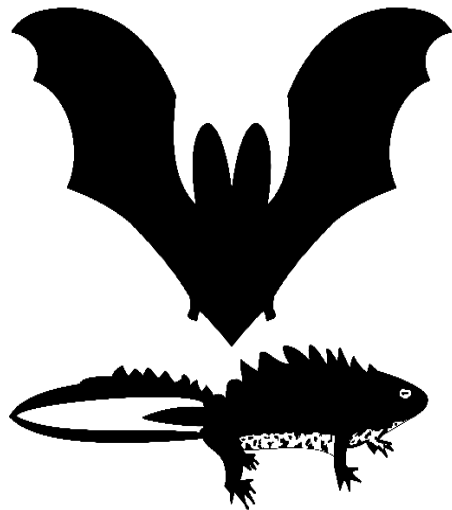




AEWC^{Ltd}

Animal Ecology & Wildlife Consultants

25-139
25/05/2026

Land at Lake View Road Great Crested Newt HSI and eDNA Survey

AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an eDNA survey regarding great crested newts (GCN) for the ponds within 100m of the Land at Lake View Road, Furnace Wood, Felbridge, RH19 2QD at central grid reference TQ 34828 39299, in order to inform the proposed development of the site.

A Preliminary Ecological Appraisal (PEA) was conducted by AEWC Ltd on the 9th April 2025. As part of this, a total of seven ponds were initially identified within the accepted maximum great crested newt (GCN) dispersal distance of 500m using MAGIC maps. One of these was located 10m to the south of the site, with all other ponds being at least 200m away. However, during the visit to undertake the eDNA sampling for the closest pond, an unmapped pond was discovered within the private garden of the neighbouring property approximately 35m south of the site, referred to as pond 2 within this report.

A Rapid Risk Assessment undertaken as part of the PEA indicated that, in the absence of mitigation:

- An offence would be **likely** if breeding ponds are present within 100m of the site;
- An offence would also be **highly unlikely** if all breeding ponds are located more than 100m from the site, due to the small size of the site and scale of the proposed works.

Based on the findings of the Rapid Risk Assessment, it was recommended that the two ponds within 100m of the site be subject to further survey. These are shown in Figure 1.

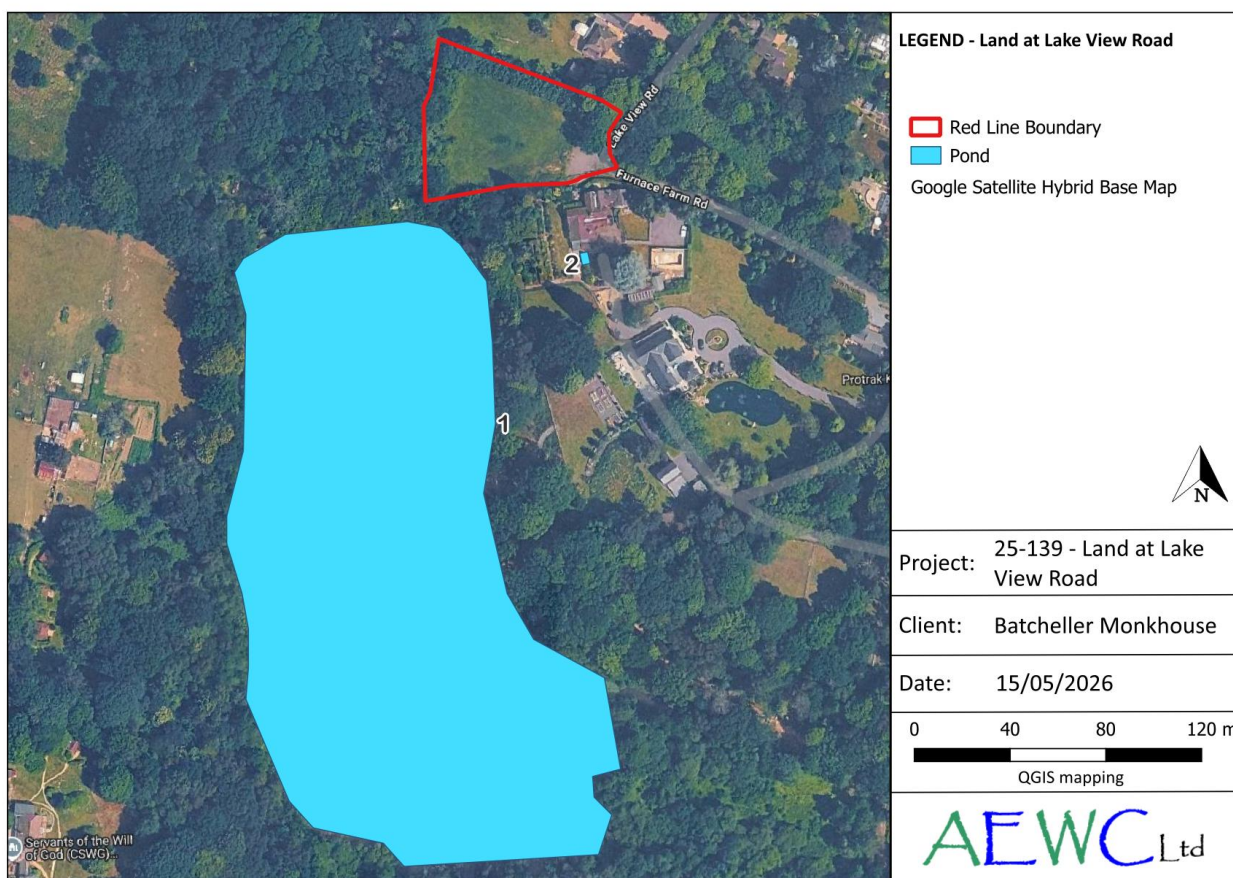


Figure 1: Ponds subject to eDNA survey

HSI Assessment

Prior to eDNA sampling, an HSI is used to quantifiably assess whether the whether ponds are suitable for GCN.

Pond 1 is 10m south of the site and is a large fishing pond. This waterbody may be unsuitable for GCN if densely stocked with large fish, however the stocking density is currently unknown and suitable boundary vegetation is present for breeding GCN, therefore their presence cannot be definitively ruled out.

Pond 2 is 35m to the south of the site and is approximately 30m² within the private garden of the neighbouring property. It is surrounded by hardstanding, with some aquatic vegetation present with good water quality. No fish or evidence of waterfowl were identified present, and it was not shaded and had reasonable macrophyte cover.

An HSI score of 0.72 was calculated for pond 1 which equates to 'good' suitability for GCN and an HSI score of 0.65 was calculated for pond 2 which equates to 'average' suitability for GCN. See Table 1 and Photographs 1 and 2 below.

Table 1 – HSI calculations

Pond ref	1	2
SI ¹ - Location	1	1
SI ² - Pond area	N/A due to large size	0.1
SI ³ - Pond drying	0.9	0.9
SI ⁴ - Water quality	0.67	0.67
SI ⁵ - Shade	1	1
SI ⁶ - Fowl	0.67	1
SI ⁷ - Fish	0.33	1
SI ⁸ - Ponds	1	1
SI ⁹ - Terrestrial habitat	1	0.33
SI ¹⁰ - Macrophytes	0.4	0.7
HSI Score	0.72	0.65
HSI Category	Good	Average



Photograph 1: Pond 1.



Photograph 2: Pond 2.

Environmental DNA

Environmental DNA (eDNA) surveys can be used to find out if GCN are present and whether to conduct population size class surveys on ponds and other waterbodies.

One visit was made in the daytime by Lexie Hobbs on the 24rd April 2026 to sample pond 1. During this visit pond 2 was identified, and therefore a subsequent visit was carried out by Lexie Hobbs on the 28th April 2026 to sample pond 2. During these visits, water samples were collected from around the pond edges in line with the methodology outlined by Defra, during the period when newts are likely to be present (this depends on location and weather conditions). Natural England will only accept eDNA survey results from samples collected between 15 April and 30 June.

The water samples are then mixed for each pond, and a standard sample is sent to a specialist approved laboratory for testing.

The results were received on the 14th May 2026 confirming the samples from both pond 1 and pond 2 to have been **negative for the presence of GCN DNA. The laboratory reports are appended to this letter.**

A negative result confirms that GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however it does not exclude the potential for GCN presence below the limit of detection.

Conclusions and Recommendations

Based on the results of the eDNA test and Rapid Risk Assessment, and the small size and sub-optimal nature of the proposed working area, **it is considered that impacts on GCN resulting from the development are highly unlikely, therefore no further surveys or licensing for GCN are required.** Whilst it is noted that GCN can disperse up to 500m from their breeding ponds, the majority of GCN activity is concentrated within 100m of these ponds. The closest un-surveyed pond is located 200m from the site, with all other ponds in the area being over 300m from the site, and therefore the likelihood of GCN breeding within these ponds using the site for terrestrial activity is low. The proposed development is for a single dwelling and will only impact on a small area within the centre of a field covered by short sward grassland of low suitability for GCN. As such, the risk posed to GCN, even if present within the closest un-surveyed pond, is extremely low. **To mitigate residual risk, it is recommended that a precautionary working method statement regarding GCN is produced and adopted for the development works, to include a series of reasonable avoidance measures.** This could be combined with the reptile method statement that was already recommended within the PEA.

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GCN Report

Technical Report



SureScreen Scientifics

Folio No: 1027-2026
Purchase Order: 25-039
Contact: AEWC Ltd
Issue Date: 14.05.2026
Received Date: 29.04.2026

GCN eDNA Analysis

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 analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN26 04367	Lake View Road - P1	TQ 34787 39090	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Ruby Fielding

Approved by: Chelsea Warner

Methodology

The samples detailed above have been analyzed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample tube which then undergoes DNA extraction. The extracted sample is then analyzed using real-time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded. Analysis of eDNA requires attention to detail to prevent the risk of contamination. True positive controls, negative controls, and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added analytical security.

SureScreen Scientifics Ltd is ISO9001 accredited and participates in Natural England's proficiency testing scheme for GCN eDNA testing.

Interpretation of Results

Sample Integrity Check:

When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results. Any samples which fail this test are rejected and eliminated before analysis.

Degradation Check:

Pass/Fail. Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.

Inhibition Check:

Pass/Fail. The presence of inhibitors within a sample is assessed using a DNA marker. If inhibition is detected, samples are purified and re-analyzed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.

Result:

Presence of GCN eDNA (Positive/Negative/Inconclusive)

Positive: GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.

Positive Replicates: Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with the WC1067 Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.

Negative: GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.

Inconclusive: Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for GCN presence or absence.



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GCN Report

Technical Report



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Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN26 04950	Lake View Road - P2	TQ 34866 39243	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Ruby Fielding

Approved by: Chelsea Warner

Methodology

The samples detailed above have been analyzed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample tube which then undergoes DNA extraction. The extracted sample is then analyzed using real-time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

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Negative: GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.

Inconclusive: Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for GCN presence or absence.

