



Great Crested Newt eDNA Survey

Land at Kings Pond, Alton, Hampshire

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LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species maybe recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

Background

- 1.1 The Ecology Partnership was commissioned by Alton Town Council to undertake a Great Crested Newt (GCN) eDNA survey of waterbodies on or close to the land at Kings Pond, Alton, Hampshire, GU34 2SZ, hereafter referred to as 'site'.
- 1.2 This report presents the results of the eDNA survey, which aims to specifically determine the presence or likely absence of great crested newts within the waterbodies surveyed and inform a suitable mitigation strategy if presence is established.
- 1.3 This report comprises:
- Site context including previous surveys conducted on site (Section 1);
 - Assessment methodology (Section 2);
 - Results (Section 3);
 - Discussion and recommendations (Section 4);
 - Conclusions (Section 5).

Site Context and Status

- 1.4 The site is located in the town of Alton (SU 72272 39356) and covers an area of approximately 3.98 hectares consisting of grassland, buildings, woodland, and a pond the pond lies on the course of the River Wey, the river flows into the southern end of the waterbody and then exits from an outflow to the north. The site is surrounded by a mix of residential and light industrial units, with a railway running along the eastern side of the site.
- 1.5 The aerial photograph overleaf (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.



*Figure 1: Approximate location of the site, indicated by the red line boundary
(Google Earth Pro, 2021)*

Description of Proposed Development

- 1.6 Final plans for site have not yet been produced, however, works are understood to be focused on hydrological/ecological restoration of the River Wey. There are currently two proposed conceptual ideas for the site. The first focuses on extensive dredging of silt, to restore a more natural hydrological state to the aquatic habitats on site. The second focuses on realignment of the River Wey to a more natural course, removing the dammed outflow, and creation of ponds and wetlands adjacent to it.

Previous On-site Survey Work

- 1.7 A preliminary ecological appraisal was carried out by The Ecology Partnership's Chris Jennings BSc (Hons) MSc MCIEEM and Edward Simpson BSc (Hons) MSc on the 16th

- January 2025. This included an assessment of both the habitats and protected species potential of the site.
- 1.8 The site comprised a large pond, set within the centre of Alton. The pond is edged with areas of woodland and grassland, as well as small areas of scrub, tall forbs, and scattered trees. The site, being within Alton town, was bordered primarily by housing, with a railway and associated embankment running along the western edge. The River Wey flows into King's Pond at the southern end, draining at the northern end of the pond into a culvert.
- 1.9 OS mapping and aerial identified one pond present on site, with no other ponds indicated within 250m of the site, but there are stretches of the River Wey located within 250m of the site (Figure 2).

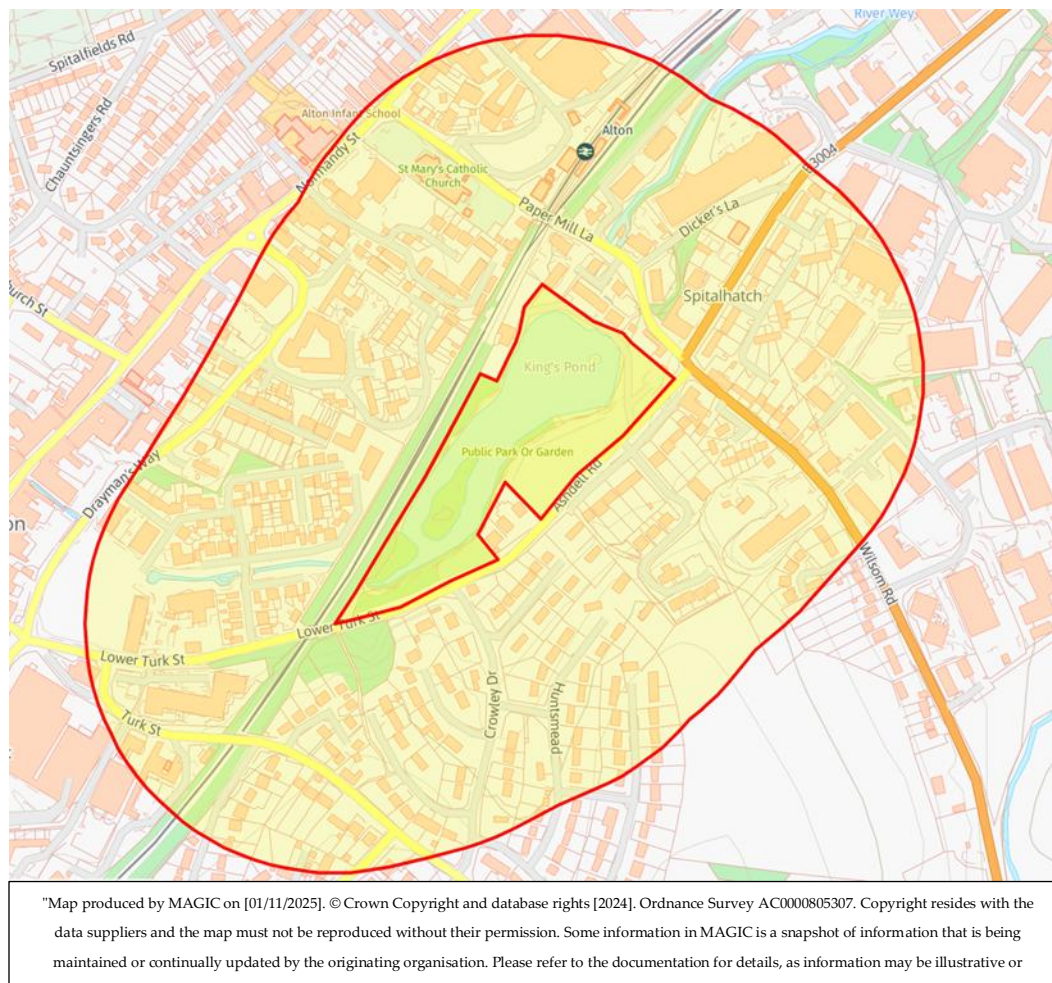


Figure 2: Ponds located within 250m of the site red line boundary

- 1.10 The suitability index for GCN was calculated for King's Pond, it can be seen that it scores 'poor' suitability for GCN (displayed in Table 1 below).

Table 1: Summary of HSI scores following the site visit 16th January 2025

Suitability Indices No.	Feature	King's Pond (P1)
1	Location	1
2	Area	N/A – pond was over 2000m ²
3	Permanence	0.9
4	Water quality	0.67
5	Shading	0.9
6	Presence of waterfowl	0.01
7	Presence of fish	0.67
8	Pond density	0.7
9	Suitable newt habitat within 250m	0.67
10	Macrophyte cover	0.3
HSI score		0.47
Pond suitability		Poor

- 1.11 The aquatic habitat on site was assessed as only being of 'poor' suitability for GCN and it considered unlikely that the pond or river on site would act as a breeding resource for GCN. The pond is considered likely to support a fish assemblage which would prey on GCN efts and eggs. A large waterfowl population, including Canada geese, which have a large impact on macrophytes growing the pond, would limit available egg laying substrate. In addition to this, OS mapping indicates there are no other ponds within 250m of the waterbody, indicating a likely lack of suitable habitat matrix for GCN to breed, locally.
- 1.12 Despite the limited possibility of GCN being present, due to the nature of the works proposed, it is recommended that an eDNA test is undertaken to establish whether GCN are using the pond or not as a precautionary approach.

2.0 GCN eDNA Survey Methodology

- 2.1 Kings Pond was sampled for eDNA on the 23rd April 2025. Water samples were taken by Edward Simpson BSc (Hons) MSc, and Tom Rayfield BSc (Hons) acting as accredited agents. All samples were analysed by SureScreen Scientifics and were submitted for eDNA analysis to the protocol stated in DEFRA WC1067 (latest amendments).

3.0 GCN eDNA Survey Results

- 3.1 The water sample analysis confirmed great crested newt likely '**absence**' within **King's Pond**.
- 3.2 Full results and methods can be found in Appendix 1.

4.0 Discussion

- 4.1 There was one pond onsite, King's Pond, which was considered to have poor suitability for GCN, particularly as the water body is in fact a sizeable dammed stretch of the River Wey. eDNA surveys were undertaken on the 23rd April 2025, the results of which confirmed absence of GCN eDNA and as such likely absence of GCN within the pond is confirmed.
- 4.2 Although the terrestrial habitats present onsite were considered to support potential to support amphibians, it was considered unlikely GCN would be present within Kings Pond itself, due to the presence of fish, a dense waterfowl population and a lack of connectivity to other potential breeding ponds. Considering the negative eDNA result the site is not considered to support GCN and as such no further mitigation for the species is considered to be necessary. Proposed works to Kings pond are not considered to be constrained by the presence of great crested newts.

5.0 Conclusion

- 5.1 Kings Pond tested **negative** for GCN presence in 2025. Considering the lack of evidence and suitability the species are considered likely absent from site and no further recommendations are required. Proposed works to the pond are not considered to be constrained by the presence of GCN.

6.0 References

Biggs, J., Ewald, N., Valentini, A., Gaboriaud, C., Griffiths, R.A., Foster, J., Wilkinson, J., Arnett, A., Williams, P. & Dunn, F. (2014) *Analytical and methodological development for improved surveillance of the Great Crested Newt*. Defra Project WC1067. Freshwater Habitats Trust, Oxford.

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Internet sources:

Google Earth: www.earth.google.com

Magic Maps: www.magic.gov.uk

Appendix 1: Site Photographs**Photograph 1:**

Kings Pond

**Photograph 2:**Larger of two islands
present on site

Photograph 3:

Wildfowl identified
onsite

**Photograph 4:**

Wildfowl identified
onsite



Photograph 5:

Public footpath
bordering the pond



Photograph 6: A view
from the south west of
the site



Appendix 2: eDNA Results

Folio No: 983-2025
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GCN eDNA Analysis

Summary

When great crested newts (GCN), 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
R25 0196	Kings Pond	SU 72301 39467	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Amy Bermudez

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