

Elmfield House, Salisbury

Great Crested Newt Report

Elmfield Spinney Development Ltd

October 2023



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Executive Summary

1.0 Executive Summary

- On the 4th May 2023, Daniel Ahern Ecology Ltd completed an initial assessment of the potential for amphibians, specifically great crested newt (gcn) to inhabit two waterbodies within the grounds of Elmfield House in Salisbury.
- The HSI survey of the waterbody confirmed that waterbody 1 had BELOW AVERAGE suitability for gcn to inhabit and waterbody 2 had AVERAGE suitability for gcn.
- Based on this an eDNA sample was collected from both waterbodies. These were sent for analysis and confirmed both waterbodies were **NEGATIVE for the presence of gcn.**
- **No further survey work is required, gcn do not present an ecological constraint to the proposed works.**

Introduction

1.1 Introduction

On the 4th May 2023, Daniel Ahern Ecology Ltd completed an initial assessment of the potential for amphibians, specifically great crested newt (gcn) to inhabit two waterbodies within the grounds of Elmfield House in Salisbury.

1.2 Site Location and Description

Elmfield House and its surrounding land, hereafter referred to as 'the Site', measures approximately 1.0 Ha and is situated between the A36 and Petersfinger Road, on the outskirts of Salisbury in Wiltshire (OS grid reference: SU 16298 29207).

Waterbody 1 was an ornamental pond in the garden of Elmfield House, waterbody 2 was a ponded waterbody bisecting the wider Site.

Figure 1. Redline Site boundary with the locations of waterbody 1 & 2.



1.3 Development Proposals

The proposals are;

- To construct eleven houses on the Site

1.4 Survey Objectives

The objectives of the ecological assessment comprise the following:

- Evaluate the gcN potential of the waterbodies within 250m of where works are proposed.
- Determine whether the proposed developments may have a positive or negative impact on any gcN populations on Site or immediately adjacent.

1.5 Quality Assurance

All ecological surveys are led by Ecologists who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level. By joining the CIEEM staff sign up to a professional code of conduct.

Methodology

2.0 Habitat Suitability Index Survey

An assessment of the habitat potential within waterbody 1 & 2, were completed following the Amphibian & Reptile Group (ARG) methodology, ARG UK Advice Note 5 - Great Crested Newt Habitat Suitability Index, 2010.

Based on the score achieved a pond is awarded one of the following assessment criteria. Further presence/absence surveys are recommended for all ponds achieving a HSI score of 0.60 – Average or higher, Table 1 below.

Table 1: HSI score & pond suitability.

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

2.1 Limitations

The details within this report will remain valid for a period of 24 months; beyond that date it is advised that a review of ecological conditions is undertaken.

Results

3.0 HSI Score

The results of the HSI assessment of waterbody 1 are set out in Table 2, below.

Table 2: HSI assessment of waterbody 1 & 2.

SI No	SI Description	Waterbody 1	Waterbody 2
1	Geographic location	1	1
2	Pond area	0.1	0.3
3	Pond permanence	0.9	0.9
4	Water quality	0.33	0.67
5	Shade	1	0.4
6	Water fowl effect	1	0.67
7	Fish presence	1	0.67
8	Pond Density	0.4	0.4
9	Terrestrial habitat	0.67	1
10	Macrophyte cover	0.3	0.9
HSI Score		0.55	0.64
Pond suitability		Below average	Average

The results of the eDNA survey of waterbody 1 & 2 are set out in Figure 2, below.

Figure 2. eDNA result for waterbody 1 & 2.

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Client: Daniel Ahern Ecology
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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: 18/05/2023
Date Reported: 25/05/2023
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
FK1103	Elmfield House -4775/02	SU 16253 29191	Pass	Pass	Pass	Negative	0
FK1104	Elmfield House - 4775/01	SU 16312 29191	Pass	Pass	Pass	Negative	0

If you have any questions regarding results, please contact us: ForensicEcology@surescreen.com

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Discussion

3.1 Discussion

The HSI survey of the waterbody confirmed that waterbody 1 had BELOW AVERAGE suitability for gcn to inhabit and waterbody 2 had AVERAGE suitability for gcn.

Based on this an eDNA sample was collected from both waterbodies. **These were sent for analysis and confirmed both waterbodies were NEGATIVE for the presence of gcn.**

No further survey work is required, gcn do not present an ecological constraint to the proposed works.

References

ARG. (ed.) (2010) ARG UK Advice Note 5 - Great Crested Newt Habitat Suitability Index.

Appendix 1

Legislation

Great Crested Newts

Great crested newts (gcn) *Triturus cristatus* are listed under Schedule 5 of The Wildlife and Countryside Act 1981 (as amended) and are afforded protection under Section 9(1), Section 9(4)(b&c) and Section 9(5) of the Act. Under this legislation, a person is guilty of an offence if he intentionally or recklessly:

- Kills or injures a gcn;
- Disturbs any gcn while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructs access to any structure or place which any gcn uses for shelter or protection.

GCN are afforded additional protection through their inclusion on Schedule 2 of The Conservation of Species and Habitats Regulations 2010 (as amended). Under Part 3 of this legislation, a person is guilty of an offence if he:

- Deliberately captures, injures or kills a gcn;
- Deliberately disturbs a gcn;
- Deliberately takes or destroys the eggs of a gcn; or
- Damages or destroys a gcn breeding site or resting place.

This legislation covers all life stages and includes both aquatic and terrestrial habitats.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, breed or reproduce, rear or nurture their young, migrate or hibernate. It also includes any disturbance likely to affect significantly the local distribution or abundance of the species.