



Great Crested Newt eDNA Report

Land at Sandgate Nursery, Henfield, West Sussex

Contents

1.0	INTRODUCTION	3
	BACKGROUND	3
	SITE CONTEXT AND STATUS	3
2.0	METHODOLOGY	5
3.0	RESULTS	6
4.0	DISCUSSION	7
	GREAT CRESTED NEWTS.....	7
	ENHANCEMENT STRATEGY FOR DEVELOPMENT ZONE	9
5.0	CONCLUSIONS.....	9
6.0	REFERENCES.....	11
	APPENDIX 1: GREAT CRESTED NEWT EDNA RESULTS	13
	APPENDIX 2: PHOTOGRAPHS	14

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.

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 Solve Planning to undertake a great crested newt (GCN) eDNA survey of ponds within 250m of the site, Sandgate Nursery in order to support a planning application.
- 1.2 The data search (conducted to support the PEA) identified three water bodies within 250m of the red-line boundary, however one of these was confirmed to be a swimming pool. Of the other two ponds, one is a newly created attenuation basin within the housing estate to the north of the site, and the other is located 100m to the west in Dear's Farm. A review of ecological reports for the recent development to the north of the site, found that an unmapped pond was also present in the gardens of Dear's Farm (Aspect Ecology, 2013). This pond was confirmed to support GCN, with a peak count of 1 female and one egg, and is located 55m to the north-west. An attempt was made by The Ecology Partnership to access these ponds and capture water samples for eDNA testing for great crested newts, however at the time the ponds were too dry in 2022. As such, a review of the ponds in 2023 was conducted.
- 1.3 This report presents the results of the surveys on site, which aim specifically to determine the presence or likely absence of GCNs on the site.

Site Context and Status

- 1.4 The site comprises a disused and overgrown nursery, and is approximately 3.7ha and located on the western edge of Henfield, bound by West End Lane to the north, residential gardens to the east, Hollands Lane to the south, and farmland to the west (TQ 20454 15995). The wider surrounding area comprises residential areas to the north and east and green open space to the south and west, largely comprising horse pasture.
- 1.5 The red line boundary is shown in Figure 1 below.



**Figure 1: Approximate location of the site, indicated by red-line boundary
(Google Earth Pro 2022)**

Description of Proposed Development

- 1.6 The full proposals for the scheme are as follows:

“Outline application for erection of a continuing care retirement community of up to 72 units of accommodation (Use Class C2) and up to 10 starter homes (Use Class C3) with associated community facilities including medical centre and onsite laundry and catering facilities, with access, infrastructure, open space, landscaping and associated works (all matters reserved except for access).”

Relevant Legislation

- 1.7 The assessment takes into consideration nature conservation and wildlife legislation including, but not limited to, the Wildlife and Countryside Act 1981 (as amended), the Natural Environment and Rural Communities (NERC) Act 2006 and the Conservation of Habitats and Species Regulations 2010.

-
- 1.8 The report has been produced with reference to current guidelines for preliminary ecological appraisal (CIEEM 2017) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.
- 1.9 Great crested newts are a European Protected Species (EPS) under Schedule 2 of the Conservation of Habitats and Species Regulations 2017, known as the Habitats Regulations. GCNs are also protected in England under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
- 1.10 Under the Habitats Regulations 2017, it is an offence to:
- Deliberately capture, injure or kill any wild animal of an EPS;
 - Deliberately disturb wild animals of any EPS;
 - Deliberately take or destroy the eggs of an EPS;
 - Damage or destroy a breeding site or resting place of an EPS.
- 1.11 Under the Wildlife and Countryside Act 1981 (as amended), it is illegal to:
- Intentionally or recklessly disturb any GCN while it is occupying a structure or place which it uses for shelter or protection;
 - Intentionally or recklessly obstruct access to any structure or place used by a GCN for shelter or protection;
 - Sell, offer or expose for sale any GCN.

2.0 Methodology

Great crested newt eDNA survey

- 2.1 There were a number of ponds identified within 250m of the site, Ponds A, B and C, as shown in figure 2 below.
- 2.2 Only Ponds A and B was sampled for GCN eDNA on 30th June 2023. All samples were analysed by SureScreen Scientifics and were submitted for eDNA analysis to the protocol stated in DEFRA WC1067 (latest amendments).

3.0 Results

3.1 The desk study identified a total of 3 ponds within 250m of the red line boundary. The ponds are shown in Figure 2 below. At the time of the survey all ponds supported water however, permission was not granted for access to pond C to obtain water samples.



Figure 2: Location of the ponds in relation to a 250m buffer from the extent of the plot

Great crested newt eDNA survey

3.2 The water sample analysis indicated GCN **absence** within Pond A and B. Therefore, it is considered that these ponds do not support GCNs and would not be considered breeding ponds for this species.

3.3 Full results and methods can be found in Appendix 1.

4.0 Discussion

Great crested newts

- 4.1 Results from the samples taken from the off site ponds, Pond A and B, were negative. No permission was granted to access Pond C for sampling.
- 4.2 Pond C had steep sloping edges and did not support any emergent or submerged vegetation with marginal vegetation largely restricted to newly planted willows. As such, egg laying opportunities for GCN would be limited in comparison to Pond A, which has abundant emergent and marginal vegetation suitable for egg laying, and yet no evidence of GCN was found in Pond A. As such, it is highly likely that Pond C also does not currently support GCN.
- 4.3 Whilst there are negative results from ponds A and B, and pond C is considered unlikely to support them, there is historic evidence of GCNs within Pond A (Aspect Ecology, 2013), and records of GCNs in the wider landscape. Consideration for GCNs must therefore be made.
- 4.4 The Nature Space Partnership Impact Risk Zone for Horsham district council identifies landscape scale areas where GCNs are prevalent. On reviewing the impact zones, it is thought that the site falls within the red and amber impact risk zone for GCN (Figure 3 below). The red zone is considered highly suitable habitat and includes the most important areas for GCN.
- 4.5 Whilst the ponds in closest proximity to the development site, do not support GCNs, historic presence of GCNs are known. Furthermore, due to the location of the site within the impact areas, it is considered that this development would require a District Level Licence to allow the development to proceed.

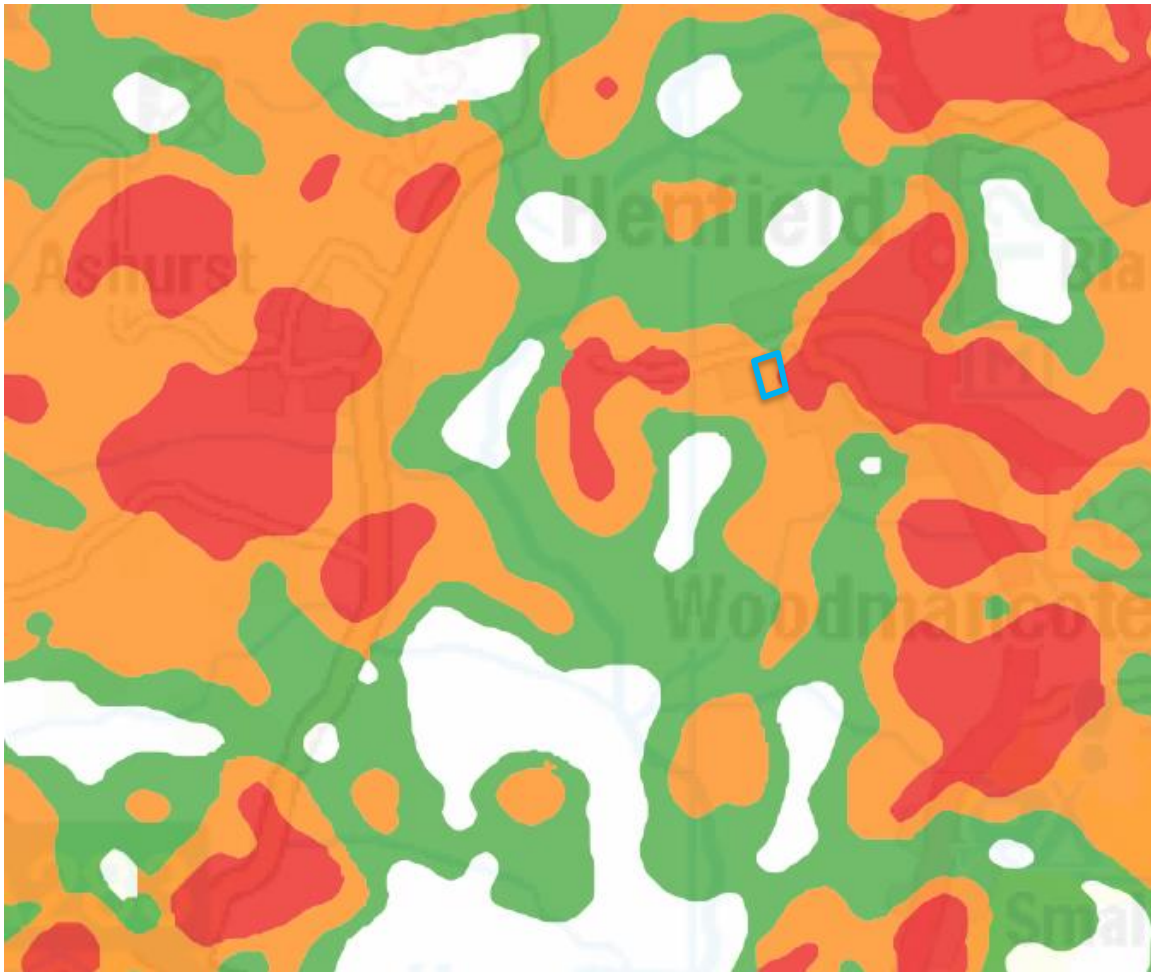


Figure 3: Nature Space Impact Risk Zones for Horsham district council (white, green, amber, red and black). Blue square indicates approximate location of site, within a red/amber zone

- 4.6 The development will result in the removal of the majority of on site habitats, and as such impacts resulting from the development, are considered to be reasonable in terms of habitat loss. The scale of the habitat loss is considered as part of the Nature Space application.
- 4.7 It must be noted that the development will not result in the loss of any suitable breeding ponds, nor will the development result in the loss of significant ecological features linking off site ponds.

Enhancement Strategy for Development Zone

- 4.8 The site can be enhanced for wildlife as part of the design and include features which are favoured by GCN.
- 4.9 The use of wildflower seed mixes to increase the biodiversity of the proposed area of open space will enhance the ecological value of the site for a range of important invertebrates. Habitats on the margins of the site should be left unmanaged to provide areas of suitable habitat for reptiles and amphibians, as well as invertebrates.
- 4.10 New wildlife ponds can be created within the scheme to create further opportunities for GCNs and other wildlife.
- 4.11 It is recommended that log piles are installed within greenspaces and within retained margins for use as refugia by GCN. These could be log or stone piles (see Figure 4 below) and should be located in a variety of conditions, including under shrubs. Planting around habitat piles with species such as honeysuckle or clematis can also add value.



Figure 4: Examples of log and stone habitat piles which can be incorporated into the scheme

5.0 Conclusions

- 5.1 Only Ponds A and B could be sampled for GCN eDNA. Testing of eDNA for returned negative results for GCN DNA. It is therefore considered that GCN are not present in the off site ponds. No permission was granted to Pond C at the time of the survey, however, a lack of suitable marginal/emergent vegetation, make it less suitable for GCN from Pond A, which was negative, as such it is unlikely to support GCN.

- 5.2 The site lies within what appears to be an 'amber' and potentially 'red' impact zone. Due to the extent of the development proposals and the data showing historic use of ponds in the immediate area by GCNs, it is considered that a Nature Space district licence would be a suitable way to proceed.
- 5.3 It is believed that if the mitigation measures laid out within this report are followed, that being the use of the district level licencing approach, then the favourable conservation status of GCNs in the local area will not be impacted by the development works.

6.0 References

ARC. 2010. *Guidance on Building Development (England) With Respect to Amphibians and Reptiles*. Amphibian and Reptile Conservation.

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.

Cresswell, W and Whitworth, R (2004) *An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt Triturus cristatus*. Peterborough, UK

Franklin, P.S (1993) *The migratory ecology and terrestrial habitat preferences of the great crested newt (Triturus cristatus) at Little Wittenham Nature Reserve*. De Montford University unpublished thesis.

for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

Gent, T. & Gibson, S. eds. (1998) *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.

HGBI (1998) *Evaluating local mitigation/translocation programmes: Maintaining Best Practices and Lawful Standards*. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). Herpetofauna Groups of Britain and Ireland, c/o Froglife, Halesworth.

Jehle, R (2000) *The terrestrial summer habitat of radio-tracked great crested newts (Triturus cristatus) and marbled newts (T. marmoratus)*. Herpetological Journal, 10, pp. 137-142.

Jehle, R. & Arntzen, J.W (2000) *Post-breeding migrations of newts with contrasting ecological requirements*. J. Zool., Lond., 251, pp. 297-306.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001), *Great Crested Newt Conservation Handbook*, Froglife, Halesworth.

Natural England (2001) *Great Crested Newt Mitigation Guidelines*. Natural England, Peterborough.

Oldham, R.S., Keeble, J., Swan, M.J.S. & Jeffcote, M. (2000) *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal, 10(4): 143-155.

Oldham, R.S. & Nicholson, M (1986) *Status and ecology of the warty newt Triturus cristatus*. Report to the Nature Conservancy Council (Contract HF 3/05/123), Peterborough.

Sewell, D. et al. 2013. *Survey protocols for the British Herpetofauna*. Amphibian and Reptile Conservation.

Internet resources:

Google Maps: www.maps.google.co.uk

Magic Maps: www.magic.gov.uk

Appendix 1: Great Crested Newt eDNA Results

Appendix 2: Photographs

Photo 1: Pond A 2023	 A photograph of a pond area with lush green grass and tall reeds. The water is covered in a thick layer of green algae or duckweed. In the background, there are trees and a wooden bench. A watermark in the bottom left corner reads "REDMI NOTE 9 AI QUAD CAMERA".
Photo 2: Pond B 2022	 A photograph of a path leading to a pond, flanked by large trees. The path is covered in dark mulch or gravel. The trees have thick, gnarled trunks. A watermark in the bottom left corner reads "REDMI NOTE 9 AI QUAD CAMERA".
Photo 3: Pond C 2023	 A photograph of a pond surrounded by dense green vegetation and tall reeds. The water is dark and reflects the surrounding greenery. In the foreground, there are some white flowers. A watermark in the bottom left corner reads "REDMI NOTE 9 AI QUAD CAMERA".

The Ecology Partnership

Thorncroft Manor

Thorncroft Drive

Leatherhead

Surrey

KT22 8JB

Tel: 01372 364 133

www.ecologypartnership.com

Approved by: Alexia Tamblyn MA (Oxon) MSc CEcol CEnv MCIEEM FRGS,

Date: 20/08/2023