

Environmental Statement: Chapter 7

Technical Appendix 7.7: Great Crested Newt Survey

Land East of Blackmore Farm, Melksham

Gleeson Land Ltd

March 2026

Report reference	Report Status	Date	Prepared by	Authorised
Appendix 7.7 Great Crested Newt Survey	Final	13 March 2026	A. Robinson BSc	J. Cook BSc(Hons) PhD CEnv MCIEEM



EAD Ecology
Armada House
Odhams Wharf
Topsham
Exeter
EX3 0PB
Tel: 01392 260420

Email: info@eadecology.co.uk
www.eadecology.co.uk

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

This report has been prepared for the exclusive use of the client and unless otherwise agreed in writing by EAD Ecology, no other party may use, make use of or rely on the contents of the report. No liability is accepted by EAD Ecology for any use of this report, other than for the purposes for which it was originally prepared and provided.

EAD Ecology has exercised due care in preparing this report. It has not, unless specifically stated, independently verified information provided by others. No other warranty, express or implied, is made in relation to the content of this report and EAD Ecology assumes no liability for any loss resulting from errors, omissions or misrepresentation made by others.

Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that EAD Ecology performed the work.

Nothing in this report constitutes legal opinion. If legal opinion is required the advice of a qualified legal professional should be secured.

© Copyright EAD Ecology 2026

Contents

- 1 Methodology..... 1**
 - 1.1 Identification of ponds 1
 - 1.2 Habitat Suitability Index (HSI) assessment..... 1
 - 1.3 Presence/absence survey (eDNA) 1
- 2 Limitations 1**
- 3 Results 2**
 - 3.1 HSI assessment 2
 - 3.2 Presence/absence survey (eDNA) 2
- 4 References..... 2**

Tables

- Table A7.7.1: Categorisation of HSI scores..... 1**
- Table A7.7.2 Great crested newt HSI results..... 2**

Figures

- Figure A7.7.1: GCN Survey Plan**

1 Methodology

1.1 Identification of ponds

- 1.1.1 Ordnance survey mapping (1:2,500) and aerial photography were used to search for ponds within 250m of the Survey Area, in line with Natural England guidance (English Nature, 2001) taking into account the results of English Nature Research Report 576 (English Nature, 2004) and Natural England web-based standing advice (2025).
- 1.1.2 In addition to four waterbodies identified within the Survey Boundary (comprising three 'ponded' sections of wet ditch), a further five offsite ponds were identified within 250m of the Survey Boundary; refer to Figure A7.7.1.
- 1.1.3 The following waterbodies were excluded from survey:
- Pond 1 (offsite) construction and use as a slurry pit was considered to render it of negligible value to amphibians.
 - Pond 4 (offsite) and Ditch 2 (onsite) were dry at the time of the surveys, in April 2021 and May 2024, and consequently unsuitable for breeding amphibians.

1.2 Habitat Suitability Index (HSI) assessment

- 1.2.1 A Habitat Suitability Index assessment (HSI; Oldham *et al.*, 2000) of Ponds 2, 3 and 5 and Ditches 1 and 3 was undertaken on 19/20 April 2021. A HSI is a numerical index, between zero and one; zero indicates unsuitable habitat, one represents optimal habitat. The HSI for great crested newt (GCN) incorporates ten suitability indices, all of which are factors thought to affect GCN. The suitability of the waterbodies to support GCN was then categorised using the following scale shown in Table A7.7.1:

Table A7.7.1: Categorisation of HSI scores (ARG UK, 2010)

HSI score	Pond suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

1.3 Presence/absence survey (eDNA)

- 1.3.1 Environmental DNA (eDNA) samples were collected from Ponds 2, 3 and 5 and Ditches 1 and 3 on 14 May 2024 by a Natural England GCN-licensed ecologist in accordance with the methodology stated in Defra Technical Report WC1067 (Biggs *et al.*, 2014). Samples were subsequently analysed by ADAS using quantitative polymerase chain-reaction testing.

2 Limitations

- 2.1.1 There were no limitations to the surveys.

3 Results

3.1 HSI assessment

- 3.1.1 Ponds 2, 6 and 9 were assessed as having 'Poor' suitability for GCN. Pond 5 was assessed as having 'Below average' suitability for GCN. Pond 8 was assessed as having 'Good' suitability for GCN; refer to Table A7.7.2 and Figure A7.7.1.

Table A7.7.2 HSI assessment results

Waterbody	HSI Score	Suitability
Pond 1	Slurry pit – excluded from surveys	
Pond 2	0.46	Poor
Pond 3	0.32	Poor
Pond 4	Pond dry at the time of surveys	
Pond 5	0.54	Below average
Ditch 1	0.78	Good
Ditch 2	Ditch dry at the time of surveys	
Ditch 3	0.36	Poor

3.2 Presence/absence survey (eDNA)

- 3.2.1 The eDNA surveys of Ponds 2, 3 and 5 and Ditches 1 and 3 were negative for the presence of GCN eDNA, indicating that the species is absent from these waterbodies. All samples passed inhibition and degradation controls.

4 References

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

Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F (2014) *Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical Advice note for field and laboratory sampling of great crested newt (Triturus cristatus) environmental DNA*. Freshwater Habitats Trust, Oxford.

EAD Ecology, 2023. Barn Owl Survey. Technical Appendix 10.8, Environmental Statement. Land at Blackmore Farm, Melksham. Gleeson Land Ltd.

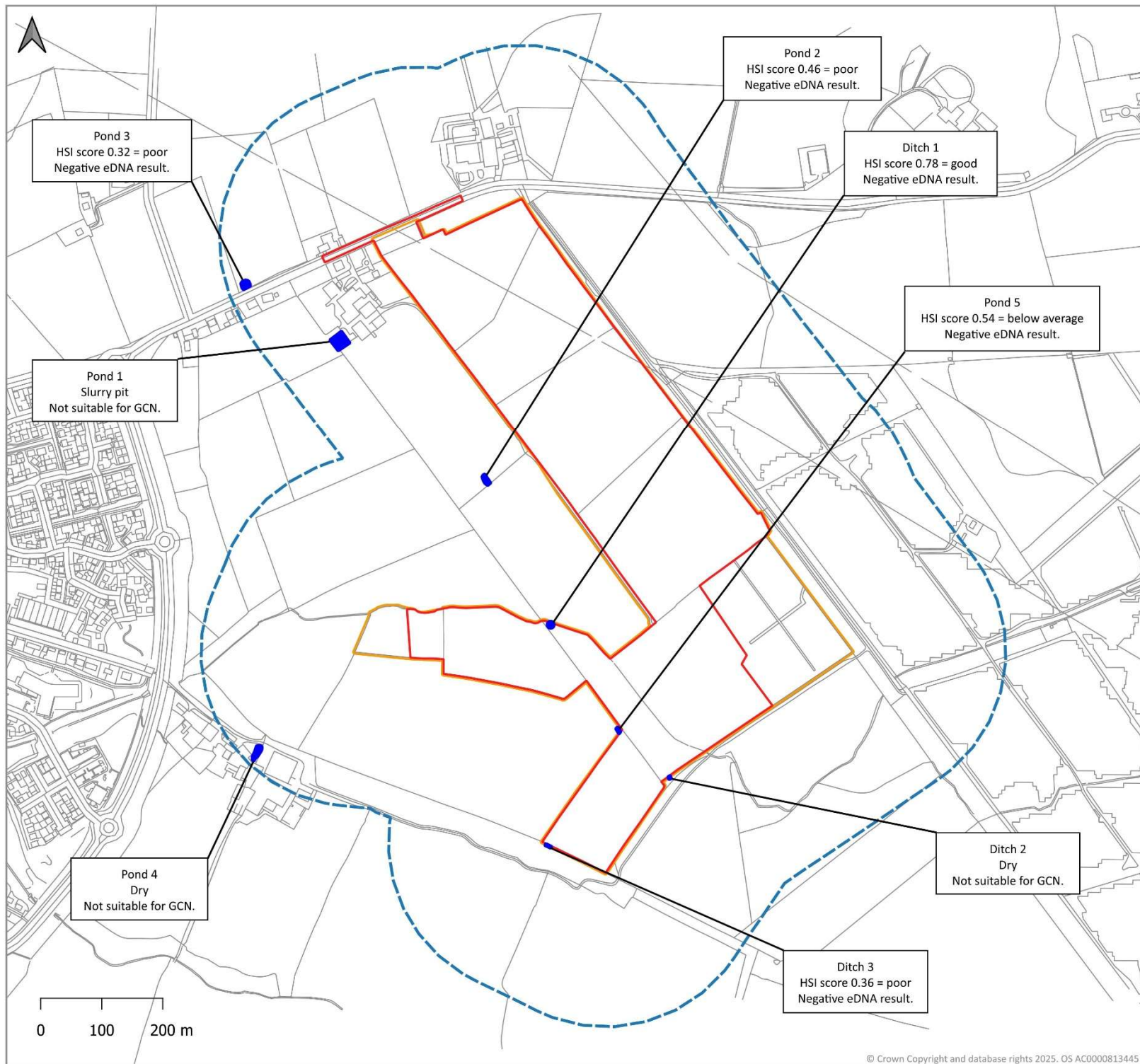
English Nature (2001) *Great Crested Newt Mitigation Guidelines*. English Nature.

English Nature (2004) *Species Conservation Handbook*. English Nature, Peterborough.

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

TOR & co, 2023. *Environmental Statement. Land at Blackmore Farm, Melksham. Gleeson Land Ltd*

Figure A7.7.1: GCN Survey Plan



Key

- Site boundary
- Survey boundary
- 250m buffer
- Waterbody



Armada House, Odhams Wharf, Topsham, Exeter EX3 0PB
t: 01392 260420 e: info@eadecology.co.uk

www.eadecology.co.uk