Great Crested Newt Survey Report

for

THE WEALD, LAUGHTON

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1.0 INTRODUCTION

1.1 Corylus Ecology was commissioned to undertake surveys and prepare an Ecological Impact Assessment of an area of land approximately 200m south of the village Laughton, East Sussex, hereinafter referred to as 'the Site'. The Site measures approximately 0.41ha and is centred on OS grid reference TQ 50192 12925.

1.2 The Site is dominated by grassland, with hedgerows bordering the north, east and southern boundaries. Church Lane runs along the east of the Site and a post and wire fence along the western boundary separating the Site from another field. The surrounding landscape is dominated by fields and farmland, with residential dwellings immediately to the south and north.

1.3 The proposals are to redevelop the Site with residential dwellings.

1.4 A Preliminary Ecological Appraisal (PEA) was carried out initially in May 2022 which included a detailed Phase 1 Habitat survey. An Ecological Impact Assessment was prepared in relation to the Site (Corylus Ecology November 2022) which included an assessment of the likelihood of great crested newts (GCN) being present within the Site.

1.5 No ponds are present within the Site, however, a number of ponds occur within the wider landscape. The closest ponds are pond P1 some 53m to the west of the Site and pond P2 71m to the east of the Site. All other ponds are over 150m or further from the Site. P3 is the closest pond with GCN recorded. Access to pond P1 was granted but no access to P2 was forthcoming. Despite the assessment within the EcIA being that P1 was unlikely to have GCN due to the conditions of the pond (dry by early summer) a presence / likely absence survey was completed in 2023 to verify the status of the ponds for amphibians. The EcIA report suggested that eDNA would be carried out, however, it was determined that if the eDNA returned a positive result full surveys would be required to determine population size, therefore instead of eDNA, a traditional presence / likely absence survey would be undertaken and if GCN recorded additional surveys undertaken to determine population size.

Scope of Survey

1.6 The aims of the amphibian surveys were to:

- To determine if great crested newts (GCN) are present within the pond;
- Assess the overall assemblage of amphibians within the pond.

1.7 This report has been prepared for the exclusive use of Jarvis Homes. No part of this report should be considered as legal advice.

2.0 METHODOLOGY

2.1 GCN Presence / Absence Surveys

2.1.1 The surveys were undertaken using guidance set out in English Nature's GCN Mitigation Guidelines (English Nature, 2001). The guidance recommends that a minimum of four survey visits must be undertaken, with a further two if the presence of great crested newt is confirmed. The additional two visits establish a size class estimate. In terms of timings, at least two surveys must be conducted between mid-April and mid-May, and a third survey during this period if the presence of GCN is identified.

2.1.2 The guidelines recommend the use of at least three of the following four survey methods wherever possible:

- bottle trapping;
- torchlight searches;
- egg searches; and/or
- hand netting.

2.1.3 The torch surveys were undertaken using 1 million candle power *Clulite* torches. Guidelines relating to the precautions of preventing the spread of the fungal disease *Batracholchytrium dendrobatidis* published in 2008 were followed. For the purposes of this survey, torchlight surveys and egg searches were undertaken on each survey. Artificial egg strips were set during a site walkover on 10th April 2023. The surveys were undertaken between 12th April and 24th May 2023.

2.2 Amphibian Evaluation Methodology

2.2.1 The GCN Mitigation Guidelines (2001) provides criteria for assessing survey results to determine population size by attributing peak count data to corresponding size classes, as shown in Table 1.

GCN Peak Count	Population Size Class
< 10	Small
11 - 100	Medium
> 100	Large

Table 1 - Size Class Definitions for GCN (GCN Mitigation Guidelines 2001)

2.2.2 Guidelines for the selection of Sites of Special Scientific Interest (SSSIs) (JNCC, 2022) provide criteria for Nationally Important assemblages and populations, however, there is no similar countrywide assessment for smaller populations. The methodology applied for evaluating those of *County Importance* is based upon the Criteria for Selection and Delineation for Local Wildlife sites in Kent (KWT, 2015). These guidelines are aimed at identifying important amphibian sites and are based on estimates of population sizes as well as presence and absence of species.

2.2.3 The criteria used to designate amphibian populations of *County Importance* is based on a scoring system for the selection of SSSIs. The use of a scoring system allows sites with exceptional populations to be identified, as well as sites with a good diversity of species. All sites with either exceptional populations of great crested newts or scoring five points or more based on their amphibian assemblage would be evaluated as being of County Importance under this criterion and qualify for consideration as Local Wildlife Site. The scoring system is set out in Table 2 below.

Species	**Method**	**Small population Score 1**	**Medium population Score 2**	**Large population Score 3**
Great crested newt	Seen or netted in day	<5	5-50	>50
	Counted at night	<10	10-100	>100
Smooth newt	Netted in day or counted at night	<10	10-100	>100
Palmate newt	Netted in day or counted at night	<10	10-100	>100
Common toad	Estimated	<500	500-5000	>5000
	Counted	<100	100-1000	>1000
Common frog	Spawn clumps counted	<50	50-500	>500

Table 2 - Amphibian Assemblage Evaluation Criteria

N.B. If four species are present, add 1 point. If five species are present, add two points to the total.

2.3 Survey Constraints

2.3.1 No constraints were identified, or encountered, in relation to the completion of this survey.

3.0 RESULTS

3.1 The surveys were conducted by Bill Wadsworth (Associate Ecologist, Corylus Ecology Licence No. 2016-19573-CLS-CLS) on 12th April, 20th April, 2nd May and 24th May 2023.

3.2 No GCN were recorded during any of the four surveys. No amphibians were recorded during any of the four surveys. No eggs of any amphibian species nor tadpoles, toadpoles or efts were recorded during any of the four surveys. A summary of the survey results is provided in Table 3 below.

Table 3: Survey Results Summary

Pond P1

Visit	Date	Surveyor	Methodology	Great Crested Newt				Smooth Newt				Palmate Newt				Smooth / Palmate			Other	Obscuring Veg	Turbidity	Pond notes
				Male	Female	Juv	Peak	Male	Female	Juv	Peak	Male	Female	Juv	Peak	Count	Juv	Peak				
1			Torch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	12/04/2023	BW	Egg Strips	3 x Set																0	0	
			Bottle Trap																			
2			Torch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	20/04/2023	BW	Egg strip	No eggs found																0	1	
			Bottle Trap																			
3			Torch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	02/05/2023	BW	Egg search	No eggs found																0	2	
			Bottle Trap																			
4			Torch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	24/05/2023	BW	Egg search																	0	2	
			Bottle Trap																			
5			Torch																			
			Egg search																			
			Bottle Trap																			
6			Torch																			
			Egg search																			
			Bottle Trap																			

Weather Conditions			
Date	Air Temp ^{0}C	Cloud cover	Rain
12/04/2023	12	40% %	0
20/04/2023	11	100%	0
02/05/2023	11	100%	0
24/05/2023	14	50%	0

4.0 EVALUATION AND IMPACT ASSESSMENT

4.1 The amphibian assemblage within pond P1 is considered to be negligible as none were recorded. P2 has not been subject to survey as no access was permitted. The Site lies within a red zone for GCN within the Natural England District Licencing scheme. These areas 'contain suitable habitat and GCN and most important areas for GCN.' However, the habitats within any scheme should be assessed in the same way as for any other development and the impacts should be based on risk of an offence being committed under protected species legislation. The closest pond P1 is an ephemeral, seasonally wet pond which does not support GCN or any other amphibians. The next closest pond P2 has not been subject to surveys but is over 70m from the Site, and is beyond a road. Other ponds within the landscape are further north of pond P2. The Site supports poor quality terrestrial habitat for amphibians and therefore the significance of the Site for amphibians is considered to be negligible.

4.2 Natural England provide a 'Licence Risk Assessment' in the method statement for a GCN licence. This risk assessment has been run assuming P2 supports GCN. The results of this risk assessment have been provided below and based on the size of the development (c0.41ha with only 0.13ha falling within 100m of P2) and distance of the ponds from the development, the risk of an offence being committed is Amber.

Component	**Likely effect** (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	**Notional offence probability score**
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.5
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.5
Rapid risk assessment result:	**AMBER: OFFENCE LIKELY**	

4.3 Under an amber warning, Natural England recommend the following;

> *'Amber: offence likely" indicates that the development activities are of such a type, scale and location that an offence is likely. In this case, the best option is to redesign the development (location, layout, methods, duration or timing; see Non-licensed avoidance measures tool) so that the effects are minimised. You can do this and then re-run the risk assessment to test whether the result changes, or preferably run your own detailed site-specific assessment. Bear in mind that this generic risk assessment will over- or under-estimate some risks because it cannot take into account site-specific details, as mentioned in caveats above. In particular, the exact location of the development in relation to resting places, dispersal areas and barriers should be critically examined. Once you have amended the scheme you will need to decide if a licence is required; this should be done if on balance you believe an offence is reasonably likely.'*

4.4 Therefore, whilst P2 has not been subject to surveys it is considered that it is unlikely that GCN will occur within the Site due to the following:

- the absence of amphibians within P1,
- the distance from P2,
- the presence of the road between the Site and P2 and
- the general poor quality terrestrial habitats for amphibians within the Site.

4.5 Natural England cannot grant an EPSM licence on a precautionary basis, and given the above points, it is considered that a non-licenced approach is acceptable using the Reasonable Avoidance Measures. This will include:

- Site (Heras) fencing to be installed to prevent damage to terrestrial habitat beyond the development site. If a site compound for machine storage or material storage is required this will need to be on hardstanding and not on any vegetated habitats.
- All rubbish material, including spoil piles, brick, rubble and roofing materials to be placed directly into skips to be removed from site. Piles of bricks and other building materials can be used as shelter by amphibians if not stored correctly. The Site will need to be well organized and kept tidy with waste materials removed quickly so they are not left as potential refuge sites for small animals. Before removing any materials, which have been stored on the ground, the area should be carefully checked for animals.
- Store building materials on pallets raised off the ground wherever possible;
- Any trenches which are left open overnight during construction works should have planks of wood placed in them to provide an exit ramp for terrestrial animals which may fall into them. As a precaution each morning any ditches or holes will be checked by the site manager. Trenches should be checked for animals before they are infilled.

4.6 In the unlikely event a GCN is found during site clearance (methods are described in the EcIA report in relation to the presence of grass snakes), a licence may need to be sought from Natural England, however, the Site falls within the criteria for a GCN Low Impact Licence. The enhancement measures set out below are sufficient to be considered as mitigation should any GCN be recorded and a GCN Low Impact Licence be required.

4.7 The proposed enhancements provided in relation to reptiles (grass snake) are also suitable as enhancements of terrestrial habitat for GCN and amphibians. The EcIA also recommended that Aco kerbs are used in combination with gully pots to reduce the risk of amphibians falling into gully pots. Habitat management recommendations for the long term habitat management of the landscaped areas have also been provided.

6.0 CONCLUSIONS

6.1 GCN surveys of pond P1 which is approximately 53m from the boundary of the Site have been completed in spring 2023. No amphibians were recorded within the pond. The pond is of negligible importance for amphibians.

6.2 The other nearest pond, P2 has not been subject to surveys as access was not permitted. Recommendations have been made in relation to the need or otherwise of a licence from Natural England, avoidance measures and enhancements for the Site in relation to GCN.

REFERENCES

Corylus Ecology 2022 *Ecological Impact Assessment Report for The Weald Laughton*. Unpublished report for and on behalf of Jarvis Homes

English Nature 2001. *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough

JNCC 2022. *SSSI Guidelines: Chapter 18. Reptiles and Amphibians*. https://jncc.gov.uk/our-work/guidelines-for-selection-of-sssis/

Kent Wildlife Trust 2015. *Local Wildlife Sites in Kent: Criteria for Selection and Delineation*. Ver 1.5. KWT, Tyland Barn, Kent.

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Project: 22051 The Weald Laughton, East Sussex

Title: Ponds within 250m

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Appendix 1 – GCN Legislation

Great crested newts receive legal protection in the United Kingdom, through both domestic and international legislation. The Wildlife and Countryside Act 1981 (WCA) (as amended) transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (referred to as the Bern Convention). The 1981 Act has been amended by several more recent acts including the Countryside and Rights of Way (CRoW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006. GCN are listed under Schedule 5 of the 1981 Act and are subject to the provisions of Section 9 which make it an offence to:

- Intentionally kill, injure or take a GCN [Section 9(1)];
- Possess or control any live or dead specimen or anything derived from a GCN [Section 9(2)];
- Intentionally or recklessly damage or destroy any structure or place which a GCN uses for shelter or protection [Section 9(4)(a)];
- Intentionally or recklessly disturb GCN while it is occupying a structure or place which it uses for shelter or protection [Section 9(4)(b)];
- Intentionally or recklessly obstruct access to any structure or place which GCN uses for shelter or protection [Section 9(4)(c)];
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisements to buy or sell a GCN [section 9(5)].

GCN are also included on Annex IV of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (known as the Habitats Directive) which is the means by which the European Union meets its obligations under the Bern Convention. This was transposed into national law through the Conservation (Natural Habitats, &c.) Regulations 1994, and later through the Conservation of Habitats and Species Regulations 2010 (known as either the Conservation Regulations or Habitats Regulations), which consolidate all the various amendments to the 1994 Regulations. The Conservation Regulations have recently been updated again (Conservation of Habitats and Species Regulations 2017), to consolidate all the amendments to the 2010 Regulations. Annex IV of the Habitats Directive requires Member States to construct a robust system of protection for species of European importance, including GCN, in order to ensure the favourable conservation status of these species. This is outlined in Article 12 of the Habitats Directive and achieved through Part 3 of the Conservation Regulations, whereby Regulation 41 makes it an offence to:

- Deliberately capture, injure or kill a GCN [Regulation 41(1)(a)];
- Deliberately disturb GCN in such a way as to be likely to i) impair their ability to survive, breed, rear or nurture their young, hibernate or migrate, OR ii) affect significantly the local distribution or abundance of that species [Regulations 41(1)(b), 41(2)(a) and 41(2)(b)];
- Damage or destroy a breeding site or resting place of GCN [Regulation 41(1)(d)].

Appendix 2 – Ecological Impact Assessment Criteria

The general approach follows the Guidelines for Ecological Impact Assessment in the UK and Ireland (EcIA) produced by the Chartered Institute of Ecology and Environmental Management (CIEEM). These guidelines are web-based and subject to review and updating. The guidance covers all stages of EcIA, including both evaluation and impact criteria. The criteria followed is summarised below.

Significance Criteria

The CIEEM guidance covers all stages of EcIA, including both evaluation and impact criteria. These guidelines set out that the emphasis in EcIA is on significant effects rather than all ecological effects. A significant effect being an effect that:

- "*Either supports or undermines biodiversity objectives for important ecological features or for biodiversity in general.*
- *"Effects can be considered significant at a wide range of scales from international to local".*
- *"A significant effect is an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project."*

The main criteria used to assess the ecological value of habitats and communities are those described by Ratcliffe (1977) and the selection criteria for Sites of Special Scientific Interest (SSSIs) produced by the Nature Conservancy Council (1989). The primary criteria include rarity, typicalness, size, diversity, naturalness and fragility. Subsidiary criteria include ecological position, intrinsic appeal, potential value, and recorded history. The designation of SSSIs is not an all-inclusive list of sites which fall within the set criteria, rather SSSIs are designated as good examples of the better habitats within the region or nationally. Therefore, certain undesignated areas may fall within the criteria for being designated. Within individual counties there are often criteria for the selection of sites of County Importance within that specific County.

Further criteria used for assessing the ecological importance of a site may be based upon their value for particular species or assemblages of species. In addition to the individual species and groups the overall species and habitat assemblage or biodiversity is evaluated. Examples of valuation criteria related to a range of spatial scales are set out in Table A1.

Biodiversity has been given a number of definitions but, insofar as it relates to EIA, it is generally considered as including both structural relationships (spatial linkage, fragmentation, aspect, dispersion etc.) and functional relationships (nutrient cycling rates, energy flow rates, metapopulation dynamics, etc.).

Table A1: Assessment of the Value of Ecological Resource

Value	Examples of Valuation Criteria
International	An internationally designated site or candidate site (SPA, SAC, etc);
National	A nationally designated site (SSSIs, National Nature Reserves (NNRs); Species or habitats which fulfil the JNCC SSSI selection criteria,
Regional	Viable areas of key habitat identified in the regional BAP or smaller areas of such habitat which are essential to maintain the viability of a larger whole; Sites which exceed the County-level designations but fall short of SSSI selection guidelines where these occur;
County	County sites and other sites which the designating authority has determined meet the published ecological selection criteria for designation including Local Nature Reserves (LNR) selected on County criteria;
Local (including District)	Areas of habitat identified as being of Local Value in the relevant Natural Area profile; LNR not selected on County criteria;
Parish/ Neighbourhood	Areas of habitat considered to appreciably enrich the habitat resource within the context of the Parish or Neighbourhood e.g. species-rich hedgerows;
Within the zone of influence or Site Importance	This may be the project site or a larger area;
Negligible	Sites or areas which support few or no habitats, communities or species populations of nature conservation interest. Typical of such areas are most intensively managed silage fields and arable crops.

Assessment of Effects

Activities which may affect the ecological resource need to be identified first. The associated changes and the implications for the ecological resource then need to be assessed. The following factors must be considered when assessing the effects:

- Confidence in predictions;
- Magnitude of effect;
- Extent of effect;
- Duration;
- Reversibility; and
- Timing and frequency.

A level of confidence is required in assessing effects, the standard for which is given below. The requirement for the lowest confidence level, given below as “extremely unlikely”, is for those effects which, although considered as extremely unlikely to occur, would have very serious consequences and would merit contingency planning.

- Certain/near certain;
- Probable;
- Unlikely; and
- Extremely unlikely.

Table A2 lists the broad categories used to assist in identifying the nature and types of different ecological effects. In addition to individual effects on the ecological resource being identified and evaluated, the cumulative effect of two or more effects on the resource is also evaluated using the same terminology.

Table A2: Categories of Ecological Effects (based on Treweek 1999 (ref A4)

Category	Example
Direct Effects	habitat loss or destruction (for example, through construction work); habitat fragmentation / severance; and disturbance
Indirect Effects	reduced population viability (for example, due to decrease in habitat area etc.); and habitat isolation
Associated Effects	ecological effects caused by actions linked with the Proposed Development
Cumulative Effects	overall reduction in habitat diversity; and ongoing habitat loss or fragmentation

The magnitude or physical extent of predicted effects upon an ecological feature is presented, wherever possible, in quantifiable terms. For example, the area of land taken, percentage of habitat lost or the number of communities, species or individuals affected. Magnitude also considers the context of the feature affected within the categories of relative importance described above. For example, if there is an internationally designated site, the significance of predicted effects are assessed within an international context with reference to the relevant legislation.

The potential effects of development schemes on nature conservation can be either beneficial or adverse. Neutral/negligible effects are also recognised.

In the CIEEM guidance an ecologically significant effect is defined as an effect on the integrity of a defined site or ecosystem and/or conservation status of habitats or species within a given geographical area. The value of any

feature that will be significantly affected is then used to identify the geographical scale at which the effect is significant. This value therefore relates directly to the consequences in terms of legislation, policy or development control at the appropriate level. Significant effects on features of ecological importance should be mitigated (or compensated for) in accordance with guidance derived from policies applied at the scale relevant to the value of the feature or resource. Any significant effects remaining after mitigation (the residual effects), together with an assessment of the likelihood of success in mitigation are the factors to be considered against legislation, policy and development control in determining the application