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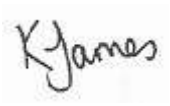
GREAT CRESTED NEWT IMPACT ASSESSMENT

At

Land at Gwyndy Quarry
Llandrygan
Llanerchymedd
Anglesey
LL71 7AW

NGR: SH 39784 79563

Prepared for:	Hogan Holdings Ltd c/o Christine House, House Associates.
Written by:	Bethany Dineley, UES Graduate Ecologist
Approved by:	Kathryn James, UES Senior Project Manager



Date:	3rd June 2024
UES reference:	UES04229/03

CONTENTS

EXECUTIVE SUMMARY

This report is written by Bethany Dineley BSc, Graduate Ecologist for United Environmental Services (UES) Ltd. It provides an assessment of the potential impacts on great crested newts (GCNs) *Triturus cristatus* as a result of a proposed development at Gwyndy Quarry, Anglesey. The proposed development includes the vertical extension of the existing quarry where the base of the quarry will be excavated further and dropped to a lower level. For this application, only the existing quarry and gravel will be affected.

A preliminary ecological appraisal (PEA) was undertaken by UES in January 2024 (UES04229/01). The survey boundary has an area of approximately 20ha and is mainly comprised of a working quarry with associated access roads, spoil mounds and buildings associated with the ongoing operation of quarry machinery. The areas surrounding the quarry contain a range of additional habitats including dense scrub, semi-improved grassland, scattered trees and a mixed, semi-natural woodland.

There are three ponds and two ditches within the base of the quarry, with a further three ponds in the ownership boundary, and an additional pond directly adjacent to the western boundary of the site. These waterbodies were subject to eDNA analysis in April 2024. Ponds 2-7 and Ditches 1-2 returned negative eDNA results showing 0 replicates out of 12, indicating that GCN are likely absent from these waterbodies.

Pond 1 returned positive eDNA results showing 6 replicates out of 12, indicating GCNs are likely present within the pond. Although GCN are present on the site, due to the nature of the works, the steep side of the quarry between the pond and working area, and as the access to the working area (base of the quarry) is located on the opposite side of the quarry to Pond 1, it is considered unlikely that GCN will be present within the proposed development area. **As such, works should proceed under a non-licensed GCN method statement. This document will detail the necessary mitigation and compensation to avoid impacts on GCN and to avoid any potential breaches of protected species legislation, in the unlikely event that GCN are present within the working area.**

The report should be read in conjunction with appendices 1 to 6, which give visual representations of the survey results. It should also be read in conjunction with the PEA also prepared for the site (UES04229/01).

1 INTRODUCTION

1.1 Author, surveyors and qualifications

This report is compiled and written by Bethany Dineley BSc, UES Graduate Ecologist. Other surveyors include:

- Robert Mooney MSc, UES Ecologist. Robert is listed as an accredited agent on the GCN survey licence of Toby Hart (S093149/1).
- Ysobella Cox BSc MBiol, UES Ecologist.
- Mark Halliwell MBiol, UES Senior Ecologist.
- James Stubbs BSc MRes, UES Graduate Ecologist

All surveyors have the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Great Crested Newt" (2013), or were under the supervision of a surveyor with the required competencies.

This report has been approved by Kathryn James BSc MRes MCIEEM, UES Senior Project Manager. Kathryn is licensed by Natural Resources Wales to disturb, take and handle great crested newts under licence number S091414/1.

1.2 Survey objectives

UES was commissioned in January 2024 to conduct site surveys which include the following activities:

- To assess the potential of the proposed development area for use by GCNs
- Conduct an HSI assessment of ponds onsite or within close proximity to the site, where accessible
- Recommend further surveys, mitigation and compensation, where appropriate

1.3 Proposed development

The proposed development includes the vertical extension of the existing quarry where the base of the quarry will be excavated further and dropped to a lower level. For this application, only the existing quarry and gravel will be affected.

1.4 Structure of the report

This report sets out the methodology, results, and recommendations in relation to a specific GCN survey. Recommendations are in line with statutory legislation and planning policy objectives.

The report should be read in conjunction with appendices 1 to 6, which give visual representations of the survey results. It should also be read in conjunction with the PEA also prepared for the site (UES04229/01).

2 METHODOLOGY

2.1 Desk study

Aerial photographs and Ordnance Survey maps were used to identify all waterbodies on the site and within a 250m radius of the site boundary.

As part of the PEA, a desk study (including a biological records search of designated sites and protected or otherwise notable species within 2km of the proposed development site was undertaken through Cofnod – North Wales Environmental Information Service); this data has been used to inform this report.

2.2 Field survey

A site walkover and eDNA sampling was undertaken on 16th April 2024 by Robert Mooney and Bethany Dineley. The ponds were also assessed by Mark Halliwell, Ysobella Cox and James Stubbs as part of the PEA conducted by UES in January 2024 (UES04229/01).

2.2.1 Habitat suitability index (HSI)

All ponds and aquatic features onsite or directly adjacent to the site boundary were assessed for their potential to support GCNs using the HSI. The HSI is a tool used to provide a numerical indication of the quality of a waterbody in terms of GCN breeding and associated habitat requirements on a scale of 0-1 (0 indicating unsuitable habitat, 1 representing optimal habitat).

HSI scores incorporate ten suitability indices (SIs), all of which are factors thought to affect GCNs, namely:

SI 1: Site location
SI 2: Size of pond
SI 3: Pond permanence
SI 4: Water quality
SI 5: Perimeter shading
SI 6: Waterfowl presence
SI 7: Fish presence
SI 8: Number of ponds within 1km
SI 9: Terrestrial habitat
SI 10: Macrophyte cover

In some cases, a net may be used to assess certain SIs, such as water quality. Once a measurement or category has been given for each SI this can then be converted to a figure between 0 and 1 for use in the HSI calculation. This figure is either translated from an assigned category or measurement or read from a graph in the case of a percentage or number.

The HSI is then calculated from the following formula:

$$HSI = (SI1 \times SI2 \times SI3 \times SI4 \times SI5 \times SI6 \times SI7 \times SI8 \times SI9 \times SI10)^{1/10}$$

This will give a final HSI result between 0 and 1, providing a measure of habitat suitability for GCN.

The information gathered from the survey was used to provide a likelihood of GCNs and other amphibians being present in the area, in both aquatic and terrestrial habitats. All ponds were noted on the pond plan (Appendix 1).

2.2.2 Environmental DNA (eDNA) testing

eDNA testing provides a GCN presence / absence result from water samples taken from a pond, following specific protocols detailed in Biggs *et al.,* 2014. These protocols have been approved by Natural Resources Wales as a method to determine GCN presence or absence in a waterbody, within the newt breeding season, from 15th April to 30th June. Using the sterile kit provided from a laboratory, 20 water samples are taken from intervals around each pond and then mixed together. From there, a 15ml sample is transferred into each of the 6 sample tubes, which contain a preserving fluid. The samples are kept refrigerated overnight and sent to the laboratory for analysis.

eDNA analysis was undertaken of Ponds 1 – 7 and Ditches 1 and 2 by UES on 16th April 2024.

2.3 Survey limitations

The surveys were undertaken at an appropriate time of year. During the survey, Pond 4 had mostly dried up, however there was still a small section that could be surveyed. Area with very steep banks and / or dense areas of scrub, limited access in some instances and prevented samples from being taken at an equal distance around the perimeter; however, samples were still taken in the areas that were accessible and therefore this is not considered a significant survey constraint.

3 RESULTS

3.1 Terrestrial habitat assessment

3.1.1 The proposed development site

The survey boundary has an area of approximately 20ha and is mainly comprised of a working quarry with associated access roads, spoil mounds and buildings associated with the ongoing operation of quarry machinery. The areas surrounding the quarry contain a range of additional habitats including dense scrub, semi-improved grassland, scattered trees and a mixed, semi-natural woodland.

There are three ponds and two ditches within the base of the quarry, with a further three ponds in the ownership boundary, and an additional pond directly adjacent to the western boundary of the site.

The vegetated terrestrial habitats within the survey boundary are broadly suitable for GCNs. The grassland, woodland, tall ruderal and dense scrub may provide sheltered commuting and foraging opportunities. In addition, there are two log and brash piles within the dense scrub which may provide further sheltering opportunities. However, the proposed development includes the vertical extension of the existing quarry where the base of the quarry will be excavated further and dropped to a lower level. For this application, only the existing quarry and gravel will be affected. As such, the habitats and waterbodies surrounding the quarry working area will not be affected by the proposed works.

3.1.2 Surrounding habitats

The surrounding habitat consists of arable agricultural land, small patches of woodland, hedgerows, and residential properties in Gwalchmai village to the south-east.

3.2 Aquatic habitat assessment

There are two ditches and six ponds within the survey boundary, with an additional pond directly adjacent to the western boundary of the site. There are a further ten ponds within 500m of the site. However, given the extent and scope of the proposed works, which are restricted to the quarry base, surveys of ponds within the wider surrounding area were not considered necessary and are not discussed further in this report.

3.2.1 Pond 1 – Grid reference: SH 40125 79646

Pond 1 is located within the northeastern section of the site and measures approximately 134m^2 (see Appendix 3 - Photograph 1). There is an inflow of water into the pond as it is connected to other ponds by drainage pipes. The pond contains marginal vegetation including soft rush *Juncus effusus* and greater reedmace *Typha latifolia,* and is surrounded by grassland and dense scrub. Bankside vegetation consist of meadowsweet *Filipendula ulmaria*, broadleaved dock *Rumex obtusifolius*, common hogweed *Heracleum sphondylium*, common ragwort *Jacobaea vulgaris*, common nettle *Urtica dioca*, rosebay willowherb *Chamaeerion angustifolium*, bracken *Pteridium aquilinum*, and lesser celandine *Ficaria verna*. Common toad *Bufo bufo* tadpoles were observed within the pond.

3.2.2 Pond 2 – Grid reference: SH 40006 79629

Pond 2 is located within the northeastern section of the quarry and measures approximately 418m^2. It is a holding pool that lacks vegetation, and the boundaries of the pond are marked by spoil mounds, rubble and the quarry. The pond is cold, deep and heavily shaded by the quarry face. Ponds 2 and 3 are connected depending on water level (see Photograph 2).

3.2.3 Pond 3 – Grid reference: SH 40004 79614

Pond 3 is located within the northeastern section of the quarry and measures approximately 578m^2. It is a holding pool that lacks vegetation, and the boundaries of the pond are marked by spoil mounds, rubble and the quarry. The pond is cold, deep and heavily shaded by the quarry face. Ponds 2 and 3 are connected depending on water level (see Photograph 2).

3.2.4 Pond 4 – Grid reference: SH 39762 79559

Pond 4 is located within the base of the quarry and at the time of the PEA in January 2024, measured approximately 3883m^2. However, the depth of the pond fluctuates throughout the year and at the time of this survey only small areas of standing water remained covering approximately 140m^2. The pond contains leaf litter and a small number of wooden pallets are present along the eastern edge. There is a small amount of aquatic and marginal vegetation within the pond including greater reedmace, water crowfoot *Ranunculus sp.*, water bent *Polypogon viridis*, and sharp-flowered rush *Juncus acutiflorus*. The aquatic vegetation may provide some egg-laying opportunities for amphibians; however, the pond is shaded by the quarry, rubble piles and spoil mounds. Common toad tadpoles were observed within the pond.

3.2.5 Pond 5 – Grid reference: SH 39591 79609

Pond 5 is an outflow pond located directly adjacent to the northwestern boundary of the site, which measures approximately 57m^2. The pond is extremely silty and contains marginal vegetation including willowherb, soft rush, and *Typha sp.* (see Photograph 3). The pond is shaded by willow and European gorse scrub.

3.2.6 Pond 6 – Grid reference: SH 39536 79415

Pond 6 is located within the southwestern section of the site and measures approximately 364m^2. The pond is silty due to inflow of water from the surrounding hardstanding habitat, and contains marginal vegetation including goat willow *Salix caprea*, soft rush, willowherb and greater reedmace (see Photograph 4).

3.2.7 Pond 7 – Grid reference: SH 39499 79313

Pond 7 is located within the southern section of the site and measures 524m^2 (see Photograph 5). The water is clear and the pond contains marginal vegetation including soft rush, reed canary grass *Phalaris arundinacea*, gypsywort *Lycopus europaeus*, water starwort *Callitriche sp.,* and floating sweetgrass *Glyceria fluitans* (Photograph 15). Emergent vegetation comprises bog pondweed *Potamogeton polygonifolius*, soft rush, floating sweetgrass, common reed *Phragmites australis,* and water mint *Mentha aquatica*. Amphibian egg laying opportunities are provided by aquatic vegetation. Grassland species around the margins of the pond indicate that the water level varies depending on rainfall.

3.2.8 Ditch 1 – Grid reference: SH 39992 7957

Ditch 1 is located within the base of the quarry, along the eastern edge (see Photograph 6). It measures approximately 6m wide and has an unknown depth, but it shallows at the southern end which was approximately 15cm deep at the time of the survey. The ditch contains standing water and is not flowing. However, it is suspected that the water level will fluctuate depending on rainfall. The water is turbid (due to silt presence) at the centre of the ditch and there is a small amount of aquatic and marginal vegetation including yellow flag iris *Iris pseudacorus*, sharp-flowered rush, water crowfoot, willowherb, tufted hair grass *Deschampsia cespitosa*, and water starwort. The ditch is cold and heavily shaded by the quarry face.

3.2.9 Ditch 2 – Grid reference: SH 39927 79563

Ditch 2 is located within the centre of quarry, along the western aspect of the access road (see Photograph 7). It measures approximately 2m wide and the depth was approximately 50cm at the time of the survey, however, it is suspected that the water level will fluctuate depending on rainfall. The ditch contains standing water and is not flowing. The boundaries of the ditch are marked by a spoil mound and an access road. There is a small amount of scattered scrub around the margins, but the majority of the ditch lacks aquatic / marginal vegetation except for water crowfoot at the southern end and algae. Two palmate newts were identified within the ditch during the walkover survey.

4 IMPACT ASSESSMENT

4.1 HSI results

There are two ditches and six ponds within the survey boundary, with an additional pond directly adjacent to the western boundary of the site. The results of the HSI surveys are detailed in Table 1 below; detailed scores and calculations are included in Appendix 4 – HSI results.

Table 1 – HSI results

Pond number	HSI score	HSI rating	SIs which particularly reduces the overall score
Pond 1	0.58	Below average	Pond area, water quality, and macrophyte cover
Pond 2	0.58	Below average	Shade, terrestrial habitat, and macrophyte cover
Pond 3	0.68	Average	Terrestrial habitat and macrophyte cover
Pond 4	0.61	Average	Pond area, terrestrial habitat, and macrophyte cover
Pond 5	0.54	Below average	Pond area, water quality, and macrophyte cover
Pond 6	0.63	Average	Terrestrial habitat and macrophyte cover
Pond 7	0.72	Good	Shade
Ditch 1	0.58	Below average	Shade, terrestrial habitat, and macrophyte cover
Ditch 2	0.58	Below average	Pond area, terrestrial habitat, and macrophyte cover

4.2 eDNA results

Ponds 1 – 7 and Ditches 1 and 2 were subject to eDNA surveys to determine GCN presence or absence (see Appendix 5 – eDNA results).

Pond 1 returned positive eDNA results showing 6 replicates out of 12, indicating GCNs are likely present within the pond.

Ponds 2 - 7 and Ditches 1 and 2 returned negative eDNA results showing 0 replicates out of 12, indicating that GCN are likely absent from these ponds and ditches.

4.3 Impacts

Pond 1 returned positive eDNA results and is located approximately 55m to the east of the development area. However, the pond is located at the top of the quarry face and the proposed development is restricted to the quarry base, which will be excavated further and dropped to a lower level. The quarry face is considered a significant barrier to movement and it is highly unlikely that GCN will move between the pond and working area.

5 RECOMMENDATIONS

Although GCN are present on the site, due to the nature of the works, the steep side of the quarry between the pond and working area, and as the access to the working area (base of the quarry) is located on the opposite side of the quarry to Pond 1, it is considered unlikely that GCN will be present within the proposed development area. As such, works should proceed under a non-licensed GCN method statement. This document will detail the necessary mitigation and compensation to avoid impacts on GCN and to avoid any potential breaches of protected species legislation, in the unlikely event that GCN are present within the working area.

6 CONCLUSION

There are three ponds and two ditches within the base of the quarry, with a further three ponds in the ownership boundary, and an additional pond directly adjacent to the western boundary of the site. These waterbodies were subject to eDNA analysis in April 2024. Ponds 2-7 and Ditches 1-2 returned negative eDNA results showing 0 replicates out of 12, indicating that GCN are likely absent from these waterbodies.

Pond 1 returned positive eDNA results, however it is considered unlikely that GCN will be present within the proposed development area. As such, works should proceed under a non-licensed GCN method statement.

7 REFERENCES

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

Chartered Institute of Ecology and Environmental Management (2013). *Competencies for Species Survey: Great Crested Newts*.

Department for Communities and Local Government (2021). *National Planning Policy Framework.*

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.

APPENDICES

Appendix 1 – Pond plan

Target note 1 – Log and brash pile

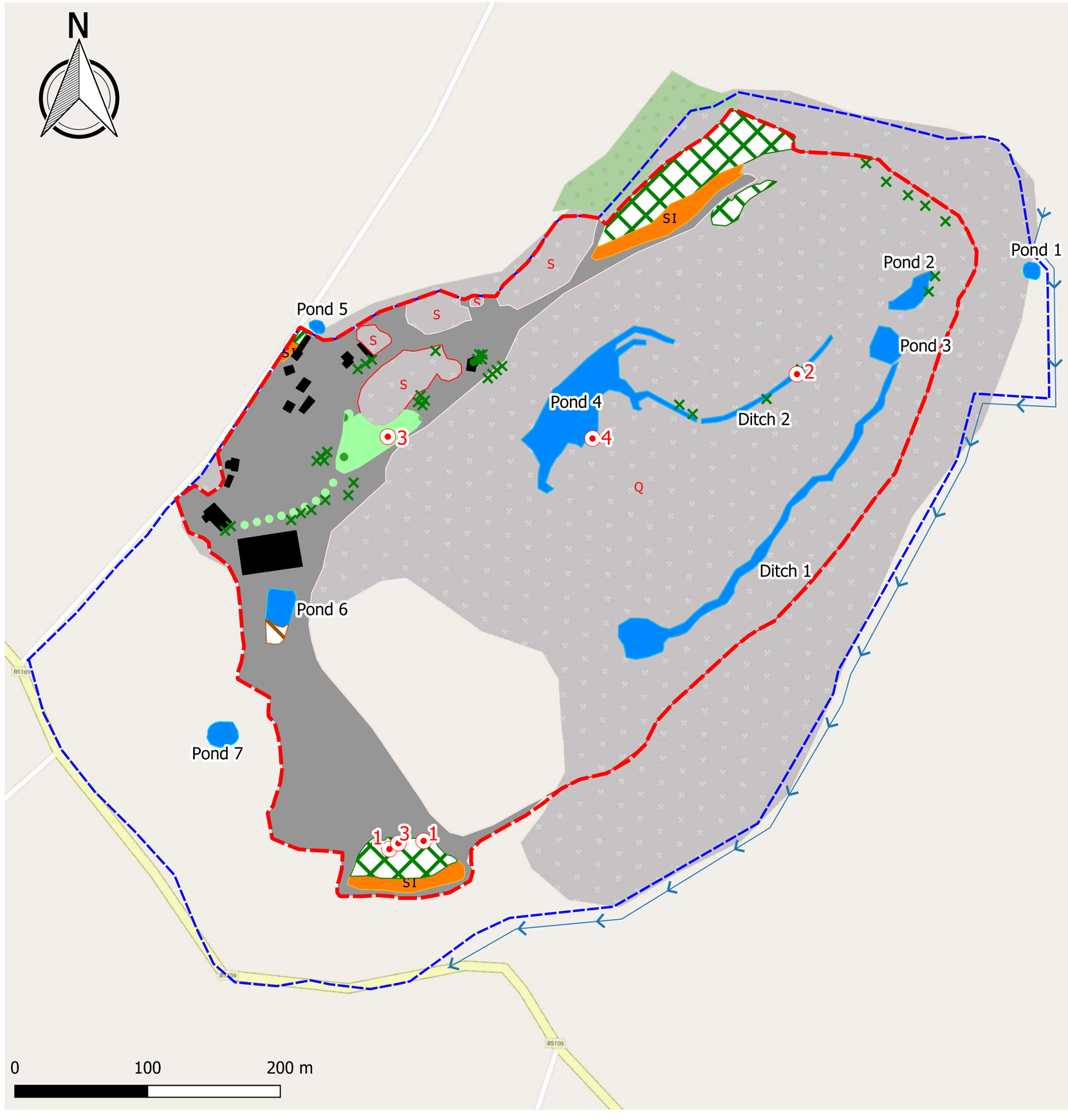
Target note 2 – Two palmate newts

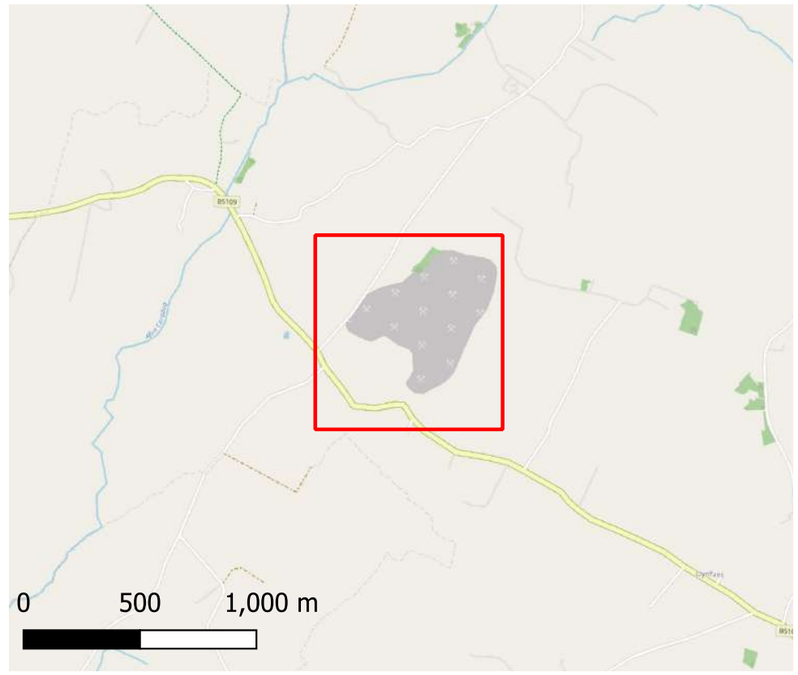
Target note 3 – Rabbit burrows

Target note 4 – Wooden pallets along the edge of a pond

Preliminary Ecological Appraisal

Site: Gwyndy Quarry, Anglesey
NGR: SJ 39800 79498
Author: Ysobella Cox
Date: 12.03.2024





Key

- A1.3.1 - Mixed woodland - semi-natural
- A2.1 - Dense scrub
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved scattered trees
- A3.2 - Coniferous scattered trees
- B2.2 - Semi-improved neutral grassland
- C3.1 - Tall ruderal
- G1 - Standing water
- I2.1 - Quarry
- I2.2 - Spoil
- J3.6 - Buildings
- J5 - Hardstanding
- Target Notes
- Survey boundary
- Ownership Boundary

Appendix 2 – Aerial photographs


Gwyndy Quarry, Anglesey
Close aerial photograph
Ownership boundary
Map data © 2024 Google, Imagery © 2024 Google


Gwyndy Quarry, Anglesey
Wide aerial photograph
Site location
Map data © 2024 Google, Imagery © 2024 Google

Appendix 3 – Photographs

Photograph 1 - Pond 1

Photograph 2 - Ponds 2 and 3 combined

Photograph 3 - Pond 5

Photograph 4 - Pond 6

Photograph 5 - Pond 7

Photograph 6 - Ditch 1

Photograph 7 - Ditch 2

Appendix 4 – HSI results

GCN HSI Calculations

	Pond number	P1	P2	P3	P4	P5	P6	P7	D1	D2
	Grid reference	SH 40125 79646	SH 4006 79629	SH 40013 79610	SH 39762 79559	SH 39591 79609	SH 39536 79415	SH 39499 79313	SJ 20323 67677	SH 39927 795663
SI number	SI description	SI values								
1	Geographic location	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	Pond area	0.2	1	1	0.2	0.1	0.6	1	1	0.2
3	Pond permanence	0.9	0.9	0.9	1	1	0.9	0.9	1	1
4	Water quality	0.33	0.67	0.67	0.67	0.33	0.67	1	0.67	0.67
5	Shade	1	0.2	1	1	1	1	0.4	0.2	1
6	Water fowl	0.67	1	1	1	1	0.67	0.67	1	1
7	Fish	0.67	0.67	0.67	1	0.67	0.67	0.67	0.67	0.67
8	Pond density	1	1	1	1	1	1	1	1	1
9	Terrestrial habitat	1	0.33	0.33	0.33	0.67	0.33	0.67	0.33	0.33
10	Macrophyte cover	0.3	0.3	0.3	0.3	0.3	0.35	0.7	0.3	0.3
HSI score:		**0.58**	**0.58**	**0.68**	**0.61**	**0.54**	**0.63**	**0.72**	**0.58**	**0.58**
Pond suitability:		**Below Average**	**Below Average**	**Average**	**Average**	**Below Average**	**Average**	**Good**	**Below Average**	**Below Average**

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

Appendix 5 – eDNA results

Folio No: 252-2024
Purchase Order: UES04229
Contact: United Environmental Services Ltd (UES)
Issue Date: 19.04.2024

GCN Report

Technical Report

SureScreen Scientifics

Folio No: 252-2024
Purchase Order: UES04229
Contact: United Environmental Services Ltd (UES)
Issue Date: 19.04.2024

SureScreen Scientifics

GCN eDNA Analysis

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 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
1828	Gwyndy Quarry Pond 2/3	SH400079629	Pass	Pass	Negative	0/12
1829	Gwyndy Quarry Pond 6	SH3954379407	Pass	Pass	Negative	0/12
1830	Gwyndy Quarry Pond 5	SH3959179609	Pass	Pass	Negative	0/12
1831	Gwyndy Quarry Pond 7	SH3949979313	Pass	Pass	Negative	0/12
1833	Gwyndy Quarry Pond 1	SH4012579646	Pass	Pass	Positive	6/12
R581	Gwyndy Quarry Ditch 1	SH3999279547	Pass	Pass	Negative	0/12
R586	Gwyndy Quarry Ditch 2	SH3992779563	Pass	Pass	Negative	0/12
R587	Gwyndy Quarry Pond 4	SH3976279559	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Daisy Chambers

Approved by: Lauryn Jewkes

SureScreen Scientifics

Methodology

The samples detailed above have been analyzed for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 'Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5.' (Biggs et al. 2014). Each of the 6 sub-sample tubes are first centrifuged and pooled together into a single sample tube which then undergoes DNA extraction. The extracted sample is then analyzed using real-time PCR (qPCR), which uses species-specific molecular markers to amplify GCN DNA within a sample. These markers are unique to GCN DNA, meaning that there should be no detection of closely related species.

If GCN DNA is present, the DNA is amplified up to a detectable level, resulting in positive species detection. If GCN DNA is not present then amplification does not occur, and a negative result is recorded. Analysis of eDNA requires attention to detail to prevent the risk of contamination. True positive controls, negative controls, and spiked synthetic DNA are included in every analysis and these have to be correct before any result is declared and reported. Stages of the DNA analysis are also conducted in different buildings at our premises for added analytical security.

SureScreen Scientifics Ltd is ISO9001 accredited and participates in Natural England's proficiency testing scheme for GCN eDNA testing.

Interpretation of Results

Sample Integrity Check: When samples are received in the laboratory, they are inspected for any tube leakage, suitability of sample (not too much mud or weed etc.) and absence of any factors that could potentially lead to inconclusive results. Any samples which fail this test are rejected and eliminated before analysis.

Degradation Check: **Pass/Fail**. Analysis of the spiked DNA marker to see if there has been degradation of the kit or sample between the date it was made to the date of analysis. Degradation of the spiked DNA marker may lead indicate a risk of false negative results.

Inhibition Check: **Pass/Fail.** The presence of inhibitors within a sample is assessed using a DNA marker. If inhibition is detected, samples are purified and re-analyzed. Inhibitors cannot always be removed, if the inhibition check fails, the sample should be re-collected.

Result: **Presence of GCN eDNA (Positive/Negative/Inconclusive)**
Positive: GCN DNA was identified within the sample, indicative of GCN presence within the sampling location at the time the sample was taken or within the recent past at the sampling location.
Positive Replicates: Number of positive qPCR replicates out of a series of 12. If one or more of these are found to be positive the pond is declared positive for GCN presence. It may be assumed that small fractions of positive analyses suggest low level presence, but this cannot currently be used for population studies. In accordance with the WC1067 Natural England protocol, even a score of 1/12 is declared positive. 0/12 indicates negative GCN presence.
Negative: GCN eDNA was not detected or is below the threshold detection level and the test result should be considered as evidence of GCN absence, however, does not exclude the potential for GCN presence below the limit of detection.
Inconclusive: Controls indicate inhibition or degradation of the sample, resulting in the inability to provide conclusive evidence for GCN presence or absence.

Appendix 6 – Statutory and planning context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Habitats

Section 7 of the Environment Act (Wales) places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists, and encourage others to take such steps.

Amphibians

<u>Great crested newts</u>

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
- their ability to survive, breed, reproduce, rear or nurture their young
- their ability to hibernate or migrate
- their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 7 of the Environment (Wales) Act 2016.

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural Resources Wales (NRW) team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by NRW is required for the legal implementation of a mitigation scheme.

An NRW mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack and common toad are also listed under Section 7 of the Environment (Wales) Act 2016.

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2018). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online