

Land known as Bull Field, Warish Hall Farm Consultation Response Document

Appendix F

Briefing Note - Ecology Consultation Responses (Dated: September 2023).



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9282: BULL FIELD, WARISH HALL FARM, TAKELEY, ESSEX
Planning ref: 23/1583/PINS | PINS ref: S62A/2023/0019

BRIEFING NOTE: ECOLOGY CONSULTATION RESPONSES

Introduction

1. Ecology Solutions acts for Weston Homes in respect of the proposed development at Bull Field, Warish Hall Farm, Takeley.
2. A series of consultation responses relating to ecology matters has been received following the planning application. These are considered in this note, with responses on behalf of the applicant set out as appropriate.

Natural England

3. Natural England's response is dated 7 September 2023. Their position is summarised as *"no objection, subject to mitigation being secured"*. Natural England note that the site falls within the Zone of Influence for Hatfield Forest SSSI and National Nature Reserve (NNR), a position with which the applicant does not disagree. It is stated that a strategic solution is being devised in conjunction with the National Trust, but until that is delivered a bespoke interim solution should be pursued. Natural England recommends that, *"in order to mitigate these adverse effects and make the development acceptable"*, the following mitigation measures should be secured through planning conditions:
 - Financial contribution towards Strategic Access Management and Monitoring (SAMM) measures identified by the National Trust as landowners; and
 - The provision of on-site Accessible Natural Greenspace (ANG) of sufficient high quality and size (refer to GI Standards (naturalengland.org.uk)).
4. The criteria for on-site Accessible Natural Greenspace (ANG) have been fully taken on board in the design of the scheme. Draft Heads of Terms are set out in Appendix C of the Planning Statement, and include a contribution towards the visitor and botanical monitoring work at Hatfield Forest.
5. Natural England provides largely generic advice for the remainder of its letter. The section on ancient woodland does not refer to Prior's Wood specifically, or to the detail of the scheme. Under 'Environmental Gains', it is stated that Development should provide net gains for biodiversity in line with the NPPF. As shown in the Biodiversity Net Gain Assessment submitted, the proposed

development will indeed deliver a net gain for biodiversity. It is clear from the response that Natural England's focus is on mitigating effects on Hatfield Forest SSSI / NNR, and as indicated by the design of the scheme and the draft Heads of Terms, the applicant accepts Natural England's position on this topic.

National Trust

6. The National Trust's consultation response is dated 31 August 2023. It is concerned only with Hatfield Forest SSSI / NNR, and echoes Natural England's advice. Recommendations for on-site open space and a financial contribution for off-site mitigation measures is set out. A figure of £14,400 is set out for the latter, proportionate with contributions secured for other developments, and the applicant is content to pay this sum. So long as these mitigation measures are secured, the National Trust does not object to the proposed development.

Woodland Trust

7. The Woodland Trust objects to the proposed development on the basis of potential impact to Prior's Wood, the area of ancient and semi-natural woodland in the north of the site.
8. The proposed development will enhance and manage the woodland, in much the same way as that which was proposed for the wider Warish Hall Farm site. While that application was ultimately dismissed at appeal, the dismissal was not related to effects on ancient woodland. The applicant has submitted a Woodland Management Plan setting out a series of measures, and inter alia proposes a significant woodland extension as per the earlier application, albeit for this application the extension is to the north rather than to the east.
9. The Woodland Trust does not raise new issues or put forward new information in addition to that offered in their objection to the Warish Hall Farm scheme. They again advise that a large buffer zone should be established, though it is noted that this time the recommendation is for 30m rather than 50m. The minimum distance cited for ancient woodland buffer zones in the Natural England / Forestry Commission standing advice is 15m, but as was considered in detail during the Warish Hall Farm inquiry, this is largely concerned with avoiding root damage. As Richard Hyett of Barton Hyett Associates made clear in his evidence, no such root damage would occur as a result of that development, a position that applies equally to the current scheme. The Inquiry Inspector concluded in his report that that "*there would be no incursion into the root protection area and no harm to trees would result*" (paragraph 76). The Standing Advice also refers to air quality effects, a point considered in the ecology evidence on behalf of the appellant. This cited the Air Quality Assessment and the Statement of Common Ground, which noted that it was common ground between the appellant and the LPA that there was no impact on Prior's Wood by reason of air quality.
10. There was no justification for the Woodland Trust's advice for such a large buffer zone for the previous application, and there is similarly no justification for it for this application.

Place Services

11. Places Services' response is dated 23 August 2023. A number of points are raised, which are addressed in turn below.

Bats

12. The response refers to the Ecological Appraisal submitted in June 2023 in support of the application, which notes that 23 trees considered to have some potential for roosting bats were noted within the application site. Place Services refer to the Arboricultural Impact Assessment, and request clarity on whether any of these trees with potential roost features are to be removed.
13. The Tree Retention, Removal & Protection Plan (p8 of the Arboricultural Impact Assessment PDF) is clear that a single tree (pink fill) is to be removed. This tree, T32, a Field Maple, was not found to support potential roost features previously. This position would be checked prior to any felling work taking place.
14. Reference to 'halo thinning' being done with caution is noted. Any such thinning would be undertaken with advice and input from a suitably experienced arboriculturalist.
15. Comments on lighting are noted. The applicant is content to accept a planning condition to secure the lighting strategy, as recommended by Place Services.

Great Crested Newts

16. Place Services highlight that survey results were pending at the time of the planning application, and request that these be provided.
17. The results of the surveys were negative, with the exception of a single pond some 330m from the application site beyond significant dispersal barriers. There is therefore no likelihood of Great Crested Newts being present within the site. The results of the surveys are set out in a note appended to this note.

Construction Environmental Management Plan for Biodiversity (CEMP: Biodiversity)

Landscape and Ecological Management Plan (LEMP)

18. The applicant is content to accept planning conditions to secure a CEMP: Biodiversity and a LEMP, as recommended by Place Services. Comments on hedgerow management are noted and will be reflected in the LEMP. Further detail on the preparation of the arable field for conversion into a wildflower meadow will be provided in the LEMP.

Biodiversity Net Gain

19. It is noted that due to a clerical error the table presented in the Ecological Appraisal of June 2023 contained incorrect figures. Those in the Biodiversity Net Gain Assessment are correct. Place Services' support for the various ecological enhancement measures is noted.
20. In relation to the River Units part of the metric, Place Services note that the "*LPA should determine if they are satisfied with the estimated net gain for Water Course Units which is currently less than 10%*". Clearly it is not the LPA making a decision on the application, but setting that aside: the requirement for 10% net gain under the Environment Act 2021 is not yet mandatory, and indeed has recently been postponed from its planned implementation in November. Uttlesford District Council lacks an adopted policy on biodiversity net gain, and thus only the provisions of the NPPF on this topic are relevant. It has been established that a net gain of 1% is compliant with the NPPF. The Biodiversity

Net Gain Assessment shows a net change in River Units of +2.48%. Hence the proposed development complies with the NPPF on this point.

Annexes:

- Annex 1: Briefing Note: Great Crested Newt eDNA Survey

Ecology Solutions
September 2023

ANNEX 1

Briefing Note: Great Crested Newt eDNA Survey

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BRIEFING NOTE: GREAT CRESTED NEWT eDNA SURVEY

Introduction

1. A planning application was previously submitted for the wider Land at Warish Hall Farm (Planning Ref: UTT/21/1987/FUL), for which Ecology Solutions produced various documents including an Ecological Assessment (October 2021).
2. As part of the assessment, eDNA testing of the on-site ponds and ponds within 500m of the site was undertaken; however, owing to restrictions on social contact during the 2021 Covid-19 outbreak, Ecology Solutions was unable to survey ponds that fell within the curtilage of private residences. The results of the previous eDNA tests, undertaken in May 2021, were returned as negative, indicating the likely absence of Great Crested Newt *Triturus cristatus* from the site.
3. The wider Warish Hall Farm application has since been divided up into three parcels, with a separate planning application to be made for each. This report relates to one of those parcels of land, referred to as Bull Field. The proposals for this parcel comprise a residential development containing 96 properties with associated access, infrastructure, and public open space.
4. Comments dated 23 March 2023 were received from Ella Gibbs, Senior Ecological Consultant with Place Services, in relation to a pre-application submission for Bull Field.
5. This briefing note has been produced to address one of those comments as detailed below.

From OS mapping, 16 ponds look to be present within 500m of the site which is the distance stated in Government Standing Advice on Great crested newts that these European Protected Species are likely to travel from suitable aquatic bodies. We note that the site also contains suitable terrestrial habitat for Great Crested Newts (GCN) (hedgerows). Given the site lies within an Amber Risk Zone for the GCN District Level Licensing (GCN Risk Zones (Essex) | Natural England Open Data Geoportal (arcgis.com)) and suitable habitats are present in close proximity to the site, it is considered possible that GCN will be present. GCN should therefore be considered as part of this planning application.

The applicant may be interested to know that Natural England's District Level Licensing for GCN is now available in Essex – see <https://www.gov.uk/government/publications/great-crested-newts-district-level->

licensing-schemes - where sites can be registered to be covered by this strategic mitigation scheme. Guidance for developers and registration forms to join the scheme are available and the LPA will need an Impact Assessment and Conservation Payment Certificate (IACPC) document countersigned by Natural England as evidence of site registration prior to determination where this European Protected Species is likely to be present and affected by development.

6. In order to ensure a comprehensive survey effort towards the potential presence of Great Crested Newts within the planning area associated with Bull Field, further eDNA surveys were undertaken in June 2023 of seven ponds within and surrounding the wider Warish Hall Farm site boundary. Unfortunately, however, access was unable to be obtained to survey many of the previously identified off-site ponds within 500m of the site, with only a single off-site pond, pond P8 (referred to as off-site P6 on the appended eDNA survey results due to a recording error), able to be accessed that was not previously surveyed in May 2021. The remaining six ponds were all previously surveyed in 2021. Additionally, a single pond was found dry at the time of both surveys.
7. This briefing note summarises the findings of the eDNA surveys undertaken in June 2023 on the on-site Ponds P1, P2, and P7, and the off-site ponds P3, P4, P6, and P8.

Site Context

8. The site is approximately 19.6ha and is predominantly composed of a large arable field, known as Bull Field, intensively managed for arable agriculture, and Prior's Wood, an area of ancient and semi-natural woodland designated as a Local Wildlife Site (LWS). The site is effectively split along the centre, with Prior's Wood to the north, and Bull Field to the south. Three small ponds exist within Prior's Wood, two to the north, and one more towards the centre. Additionally, two small ponds exist along the southern boundary. Bull Field possesses neutral grassland field margins of varying width along its entire perimeter. The narrow corridor extending to the northwest from Bull Field comprises an arable field, with a small section of neutral grassland, and hardstanding. Areas of arable field and associated neutral grassland field margin exist to the north and northeast of the site, adjacent to Prior's Wood, the area to the north being much larger than the area to the northeast. A series of shallow ditches are located along field boundaries in the east of the site, and are associated with hedgerows and the woodland edge. Two hedgerows not associated with the ditches bound the site to the south and southwest.
9. Three ponds located within the site, along with several other ponds located within close proximity of the site boundary offer some suitable breeding habitat for amphibians. Suitable terrestrial habitat is also present within the neutral grassland field boundaries, hedgerows, and woodland.

Survey Methodology

10. Ponds P1, P2, P3, P4, P6, P7 and P8 were each subject to an aquatic eDNA survey in June 2023 to ascertain the presence of Great Crested Newts.
11. Testing for eDNA is a method to establish presence or absence of Great Crested Newts, approved by Natural England. When present in a waterbody, Great Crested Newts deposit traces of DNA which can be detected through sampling the pond water and analysis in a laboratory. Pond samples can be collected between 15 April and 30 June inclusive.

12. Water samples of any given waterbody are taken in 20 separate locations, with a focus towards areas of higher suitability for Great Crested Newts. The samples are then pooled together into a self-supporting Whirl-pak bag.
13. Once the pooled samples have been mixed thoroughly, 15ml of water is removed and transferred into an ethanol filled test tube. This is repeated a further five times leaving six test tubes that contain a mixture of the sampled water and ethanol. These are then immediately sent to a laboratory to undergo analysis.
14. In the laboratory the samples are pooled together and tested via real time PCR (or q-PCR) in order to amplify select parts of the DNA allowing it to be detected and measured. A result of presence or absence is returned by the laboratory. No measure of the population size is obtained through this method.
15. All surveys were undertaken by two experienced ecologists under the supervision of a Great Crested Newt survey licence holder.

Results

16. Ponds P1, P2, P3, P4, P6, and P7 produced a negative eDNA result, with no positive DNA replicates found, suggesting the likely absence of Great Crested Newts (see Appendix 1).
17. Off-site pond P8 produced a positive eDNA result, with eight positive DNA replicates found.

Discussion

18. While P8 returned a positive eDNA result, it is considered that the distance from the site boundary - the pond being located approximately 330m southwest of the site boundary - and intervening urban infrastructure would act as a significant barrier to dispersal, with no suitable dispersal habitat to the site. Furthermore, the negative test results from the remaining six ponds surveyed indicate that the site is likely absent of any breeding populations of Great Crested Newt.
19. While several additional ponds in proximity to the site could not be accessed for surveys, the negative result returned for the on-site ponds and ponds to the south and east of the site continues to indicate that the site does not presently support any populations of Great Crested Newt.
20. Notwithstanding this, as a matter of best practice, habitat removal should adopt a precautionary approach during the course of site clearance and construction work, and it is recommended that any suitable terrestrial habitat and refugia removal should be conducted under the supervision of an Ecological Clerk of Works (ECoW). This will be carried out in line with the proposed reptile mitigation. In the unlikely event a Great Crested Newt is discovered during clearance works, works should cease, and advice would be sought from Natural England.
21. However, it should be noted that, as the proposed development will primarily affect arable field and some areas of the neutral grassland margins, it is considered highly unlikely that any impact to any potentially present Great Crested Newts will occur.
22. To provide greater opportunities for amphibian species within the site, all on-site ponds will be retained and enhanced. Enhancements will be centred on tree and

scrub clearance and establishing a visitor management plan within Prior's Wood, with designated pathways leading visitors away from the ponds, allowing them to develop without potential disturbance from visitors or dog walkers, improving overall water quality and allowing a greater diversity of aquatic marginal species to develop.

23. Additionally, the retention of existing woodland, hedgerows, and some neutral grassland margins, along with the establishment of additional neutral grassland, woodland, scrub, hedgerows, and amenity planting, will further promote amphibian interest within the site through providing ample terrestrial habitat. Log piles will also be included in areas of green infrastructure throughout the site.

Summary and Conclusions

24. A planning application was previously submitted for the wider Land at Warish Hall Farm (Planning Ref: UTT/21/1987/FUL), for which Ecology Solutions produced various documents including an Ecological Assessment (October 2021).
25. As part of the assessment, eDNA testing of the on-site ponds and ponds within 500m of the site was undertaken; however, owing to restrictions on social contact during the 2021 Covid-19 outbreak, Ecology Solutions was unable to survey ponds that fell within the curtilage of private residences. The results of the previous eDNA tests, undertaken in May 2021, were returned as negative, indicating the likely absence of Great Crested Newt from the site.
26. The wider Warish Hall Farm application has since been divided up into three parcels, with a separate planning application to be made for each. This report relates to one of those parcels of land, referred to as Bull Field. The proposals for this parcel comprise a residential development containing 96 properties with associated access, infrastructure, and public open space.
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29. Pond P8, located approximately 330m southwest of the site boundary, produced a positive eDNA result, with eight positive DNA replicates found. All other ponds returned a negative eDNA result.
30. It is considered that the distance of pond P8 from the site boundary and intervening urban environment would act as a significant barrier to dispersal, with no available dispersal habitat to the site. Further, the negative test results from the remaining six surveyed ponds indicate that the site is likely absent of any breeding populations of Great Crested Newt.
31. Despite the negative eDNA results, it is recommended that the removal of any suitable amphibian habitat, such as hedgerows, neutral grassland, and refugia, be conducted under the supervision of an ECoW, as a matter of best practice and in line with the reptile mitigation strategy.

32. The on-site woodland ponds will be retained and enhanced through the clearance of surrounding trees and scrub and the establishment of a visitor management plan that will aim to prevent disturbance from dog walkers.

Plans:

- Plan ECO1: Pond Locations and eDNA Results

Appendices:

- Appendix 1: eDNA Survey Results June 2023

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August 2023

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Plans:

- Plan ECO1: Pond Locations and eDNA Results

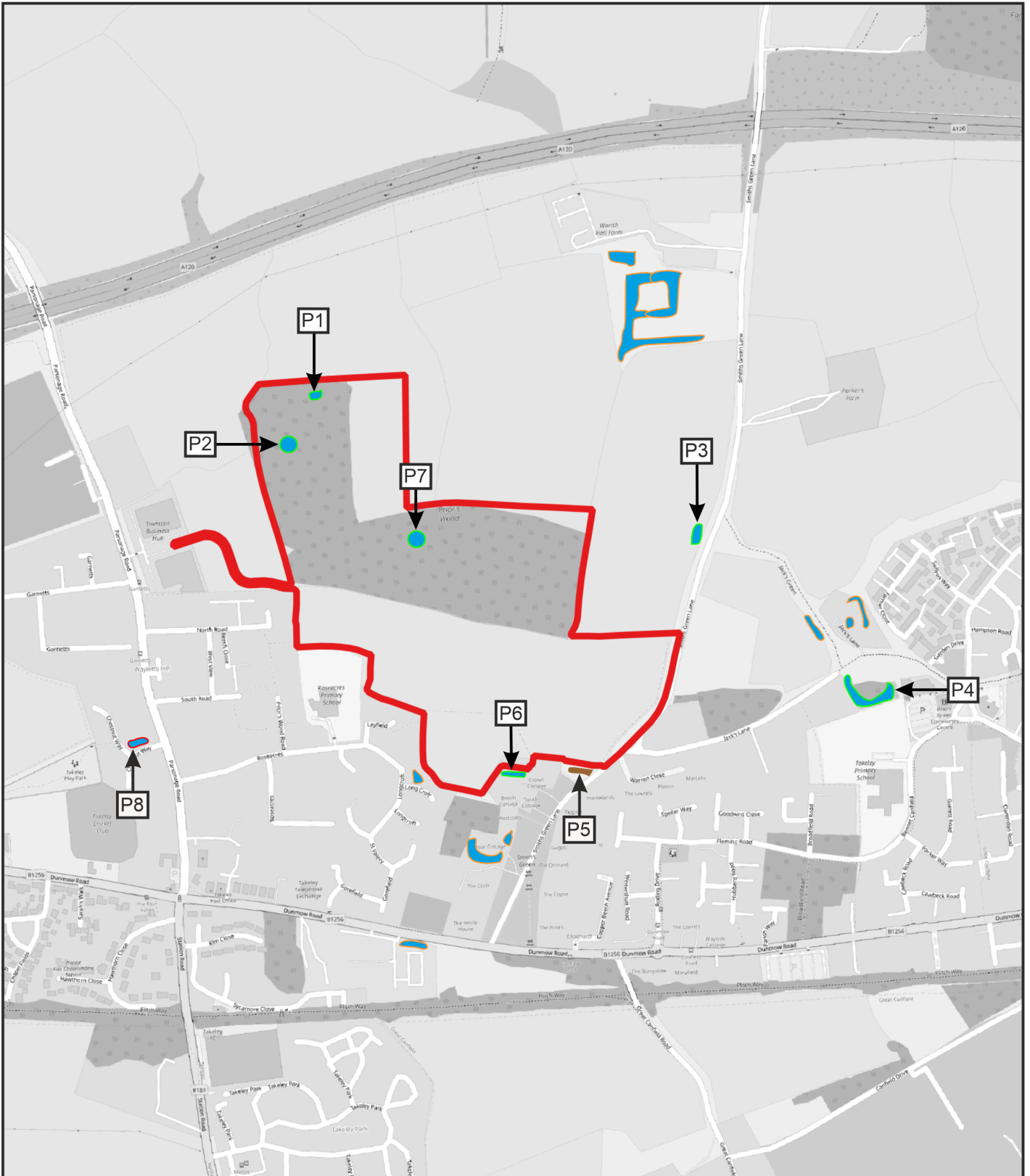
Appendices:

- Appendix 1: eDNA Survey Results June 2023






Ecology Solutions
August 2023

PLAN ECO1

Pond Locations and eDNA Results



KEY:

-  SITE BOUNDARY
-  PONDS WITH NEGATIVE eDNA TEST RESULT
-  POND WITH POSITIVE eDNA TEST RESULT
-  POND DRY AT TIME OF SURVEY
-  PONDS WITH ACCESS NOT PERMITTED



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PLAN ECO1: POND LOCATIONS
 AND eDNA RESULTS

Rev: A
 Aug 2023

APPENDIX 1

eDNA Survey Results June 2023

Folio No: E17900
 Report No: 1
 Purchase Order: 9282/EH
 Client: ECOLOGY SOLUTIONS LTD
 Contact: Emma Harvey

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: 08/06/2023
Date Reported: 15/06/2023
Matters Affecting Results: None

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
4976	Bull Field - Pond 4	TL 5712 2155	Pass	Pass	Pass	Negative	0
4978	Bull Field - Offsite Pond 6	TL 5608 2145	Pass	Pass	Pass	Positive	8
4980	Bull Field - Pond 1	TL 5630 2196	Pass	Pass	Pass	Negative	0
4984	Bull Field - Pond 2	TL 5627 2190	Pass	Pass	Pass	Negative	0
4988	Bull Field - Pond 7	TL 5640 2174	Pass	Pass	Pass	Negative	0
4989	Bull Field - Pond 6	TL 562 2142	Pass	Pass	Pass	Negative	0
4991	Bull Field - Pond 3	TL 5688 2174	Pass	Pass	Pass	Negative	0



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

Reported by: Chelsea Warner

Approved by: Jackson Young

METHODOLOGY

The samples detailed above have been analysed 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 which then undergoes DNA extraction. The extracted sample is then analysed 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 scrupulous attention to detail to prevent 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 security.

SureScreen Scientifics Ltd is ISO9001 accredited and participate in Natural England's proficiency testing scheme for GCN eDNA testing. We also carry out regular inter-laboratory checks on accuracy of results as part of our quality control procedures.

INTERPRETATION OF RESULTS

SIC: **Sample Integrity Check** [Pass/Fail]

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.

DC: **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.

IC: **Inhibition Check** [Pass/Fail]

The presence of inhibitors within a sample are assessed using a DNA marker. If inhibition is detected, samples are purified and re-analysed. 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 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.





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