



eDNA Report 2024

Land to the north of the Old Brickworks, Henfield, BN5 9SE

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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. Whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date. This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated, only dominant species may be recorded.

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 DMH Stallard Ltd to undertake environmental DNA (eDNA) surveys of the ponds within 250m the land to the north of the Old Brickworks, Henfield, BN5 9SE, hereafter referred to as the 'site' (Figure 1).



Figure 1: Approximate location of the site, indicated by the red-line boundary.

Site Context

- 1.2 The site is located on Shoreham Road, A2037, south of the town of Henfield (TQ 21889 14524). The site covers an area of c. 3.27 hectares and consists of a small cluster of horse-grazed pasture fields. These are bounded by a combination of treelines, and mixed scrub (developed from unmanaged hedgerows). It is set on the boundary of agricultural landscape to the north and west, and new and established industrial developments to the east and south with Shoreham Road running along the east

boundary. The agricultural land includes both pasture and arable, with areas of woodland, scrub and mature hedgerows/treelines, as well as low-density rural residential settlements. The industrial developments have minimal landscaping within the sites and are predominantly surfaced with concrete and tarmac.

Description of Proposed Development

- 1.3 It is understood that the current proposals for the site include construction of 12 commercial units, with associated parking, access roads and soft landscaping, on the eastern section of site. The western two fields are being enhanced for biodiversity.

2.0 METHODOLOGY

- 2.1 No ponds were identified on site. There were seven ponds identified within 250m of the site boundary, although two ponds (P2 and P3) were technically opposite ends of the same water body, divided by a recently dried section.
- 2.2 Some ponds (P1-5) were on land owned by the client and of these, three were accessible for surveys to be undertaken (P1, P2, and P3). Ponds 4 and 5 were not surveyed due to them being both inaccessible behind security fencing and bramble scrub, whilst also having unsafe sheer concrete sides.
- 2.3 All landowners were contacted to request permission for eDNA surveys to occur on their respective ponds. No responses were received, and permission was therefore not granted to access these private ponds and no surveys were conducted
- 2.4 Ponds 1, 2, and 3 were subject to an eDNA survey on 21st June 2024 to determine if great crested newts *Triturus cristatus* have been within the ponds this year. All water samples were analysed by SureScreen Scientifics in accordance with the protocol set out in Appendix 5 of Biggs et al. (2014).



Figure 2: Ponds wholly or partially within 250m of site. Red dots indicate negative eDNA results, green indicate positive eDNA results and grey indicates no surveys being undertaken.

3.0 RESULTS

- 3.1 Of the three surveyed ponds, one returned negative results, whilst two returned positive results (see Appendix 1). The two positive ponds were P2 and P3, which were approximately 235m and 250m away respectively.

4.0 DISCUSSION

- 4.1 The results of the eDNA survey indicate the presence of a GCN population within the local area. The proposed plans will involve the development of the eastern portion of site, with the westernmost fields being retained, as indicated below in figure 3. As such, although the GCN ponds (P2 and P3) are located 230-250m from the red line boundary, they are realistically 270-280m from the impacted area of site.
- 4.2 At this distance, it is considered that the ponds are outside of the generally accepted maximum migration range and core activity ranges of GCN (Franklin, 1993; Oldham and Nicholson, 1986; Jehle, 2000). GCN are known to conduct terrestrial activity

(foraging, refuge etc) dependent on the suitability of local terrestrial habitat (Cresswell *et al.*, 2004). The habitats surrounding the off-site ponds appears to be of far more significant value than that contained within the site. The site offers relatively poor terrestrial habitat, being dominated by short-sward horse pasture grassland, with no refugia of note or clear commuting pathways across site. This is compared to the combination of woodland and scrub which appear to border P2 and P3, habitats known to offer much higher value to GCN.

4.3 Given increased separation from the impact site, as well as the higher value provided by off-site terrestrial habitats, it is considered highly unlikely that GCN would be present within site, although the possibility of individual GCN commuting across the site cannot be completely ruled out. The almost complete continuation of edge habitats around site and the retention of the western fields means that, loss/disruption of commuting pathways, although already limited on site, would not be exacerbated by works.

4.4 With the relative unsuitability of site and factors limiting likelihood of on-site presence, it is recommended that works are conducted under a system of Reasonable Avoidance Measures (RAMs). This is considered a proportionate mitigation plan, in line with considerations recommended by Natural England. No further surveys or licencing are deemed necessary.

4.5 Although no suitable hibernation habitat will be impacted by works, as a precautionary approach, habitat clearance of ground level habitats should be limited to times outside of the GCN hibernation period (Avoiding November – March inclusive, weather dependent). **If a GCN is recorded during any site works in, all works will stop and Natural England / NatureSpace consulted on how to proceed.** Mitigation for GCN is as follows:

- Grassland within the development area should be kept in an unsuitable state, preferably grazed or alternatively maintained and mown short, up until development occurs. If this is not undertaken and the site becomes suitable terrestrial habitat for GCN then a Natural England licence will be required. The site will be walked by a suitably qualified ecologist prior to development to confirm this; and

- The site should also be kept clear of any features that may provide refuge for amphibians such as rubble, log or brash piles.
- Prior to any clearance on site, a toolbox talk should be provided to be given to all workers on site about the legality regarding GCN, their habitat requirements, basic identifying features and what to do if they are found.
- All clearance works should begin at the eastern end of site and work towards the western end, where there is either retained habitat or suitable off site habitat for potential GCN to disperse into.

4.6 During development work construction materials, as well as skips and pallets, should be stored on hardstanding where possible and furthermore, should be elevated off the ground. This is so that no features are created that GCN could potentially use as refuge habitat.

4.7 Where trenches and holes are dug, these should not be left open overnight. GCN (and other amphibians, reptiles and small mammals) may get trapped in vertical-sided trenches. Therefore, where there is a risk of this occurring, the holes should be refilled, or planks of wood should be placed so that any trapped animals may use these to escape.

4.8 Additional native scrub and hedgerow planting can be used around the site boundaries to help increase connective commuting habitat around the site. Species can include: field maple (*Acer campestre*), dogwood (*Cornus sanguinea*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), wild privet (*Ligustrum vulgare*), honeysuckle (*Lonicera periclymenum*), blackthorn (*Prunus spinosa*), dog rose (*Rosa canina*), and guelder rose (*Viburnum opulus*). The fruiting plants will provide important food resources for native wildlife. Longer sward grassland can be left unmanaged in and around the site to provide additional habitat for amphibians. Log piles (Figure 10) and hibernacula should be created within the site, or on adjacent land owned by the applicant.



Figure 10: Log piles and hibernacula can be created within the edges of the site or in the retained habitats on site

5.0 Conclusions

- 5.1 Ponds 2 and 3, located 270m and 280m from the proposed works area on site, tested positive for the presence of GCN. There were no ponds on site and the terrestrial habitat was limited in suitability with no refugia identified and short-sward grazed grassland dominating.
- 5.2 Given the distance from the positive ponds, higher value GCN habitat being present off-site and nearer those ponds, and the retention of significant green space on site, no further survey work or licencing was deemed necessary. Works should instead be conducted under a system of Reasonable Avoidance Measures, as laid out in this report. Should these be followed, it is considered that the favourable conservation status of the species will be upheld during development.
- 5.3 Enhancements for increasing the value of site for GCN, post development, have also been recommended within this report.

6.0 REFERENCES

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The Ecology Partnership (2024) *Land to the north of the Old Brickworks– Preliminary Ecological Appraisal*

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Internet resources:

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

Magic Interactive Map: www.magic.gov.uk

Appendix 1: eDNA Results

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