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BY EMAIL ONLY

26th May 2020

Dear Elsie,

Great Crested Newt eDNA Testing – Newts Way, Hastings, East Sussex

Thank you for instructing The Ecology Partnership to carry out an eDNA survey for the presence/absence of great crested newts on waterbodies at Newts Way in Hastings, East Sussex.

Background

The surrounding area consists of low-density residential housing, agricultural land and woodland areas, with a railway line immediately adjacent at the south west boundary. The Combe Haven Site of Special Scientific Interest (SSSI) lies approximately 160m west of the site.

The area of the site proposed for development measures approximately 0.06ha and comprises almost entirely of dense scrub, with some scattered trees around the boundaries.

The aerial photograph below (Figure 1) shows the site and its immediate surroundings. The red-line depicts the approximate site boundary and survey area.



Figure 1: Approximate location of the red-line site boundary

The proposed development is a small-scale housing development of a single, two-storey residential dwelling (Figure 2). The building will be located at the northern aspect of the boundary, with a large open garden and perimeter tree-lines and vegetation.



Figure 2: Proposed site plan

No ponds are present within the red-line boundary of the site; however, two ponds are located within 250m of the red line boundary. A Habitat Suitability Assessment of pond 1 (c. 43m north west) undertaken by The Ecology Partnership as part of the Preliminary Ecological Appraisal (PEA) of the site (May 2020) identified this pond as having 'average' potential to support great crested newts. Pond 2, c. 200m to the south west, was discounted due to its proximity to the site and the barrier of the railway-line and steep embankments between the pond and site. Figure 3 shows the location of ponds within 250m of the survey boundary.



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Figure 3: Ponds within 250m of the site

Areas of dense scrub and adjacent tree-lines were considered to have some potential to support great crested newts in their terrestrial phase. The wooded railway corridor adjacent to the south west boundary was also considered as having potential to support GCN in their terrestrial phase, as well as providing a potential means of dispersal outside of the site boundary.

As there would be a loss of some suitable terrestrial habitat as a result of the proposals and owing to the proximity of pond 1 to the site, it was therefore recommended that pond 1 be eDNA tested for the presence/absence of great crested newts. Owing to the proximity of pond 2 to the site, on the opposite side of steep railway embankments, as well as the small extent of habitat loss proposed on site, further survey of this pond was not recommended.

Results

Permission to survey pond 1 outside of the site was granted by the landowner. Pond 1 was visited on 26th May 2020 by Vicky Hale BSc (Hons) CEnv MCIEEM (GCN Licence Ref: 2016-19967-CLS-CLS) and Lucy Groves BSc (Hons) MRes GradCIEEM PIEMA to carry out recommended eDNA testing; however, on the day of survey, the pond was found to be almost completely dry and was not considered to have held any significant amount of water for some weeks (Figure 4). The small area of water that remained was considered to be insufficient for sampling. As such, further eDNA survey of this pond could not be completed.



Figure 4: Photographs of Pond 1 outside of the site

Discussion

Pond 2 was discounted from further survey owing to its proximity to the site and the anticipated extent of habitat loss. Pond 1 was accessed to complete further recommended eDNA testing; however, this pond was found to be almost completely dry and contained insufficient water for sampling. As such, eDNA survey of this pond could not be completed.

Pond 1 was considered unlikely to have held any significant amount of water for some weeks and was considered unsuitable for breeding great crested newts at the time of survey in May 2020. It is considered likely that this pond holds water during wetter months only and dries out completely during drier spring/summer months.

Owing to the lack of ponds in the wider landscape and their proximity to the site, along with a lack of GCN records within a 500m radius and the closest pond (pond 1) being unsuitable for breeding GCNs at the time of survey in May 2020, the likelihood of GCN being present on site is considered to be low.

The proposals will not affect any GCN ponds, they are not expected to isolate one pond from another and will not result in the isolation of a breeding pond from suitable terrestrial habitat. The nature of the proposals would therefore not impact the ability of any GCNs in the local area to survive, breed, reproduce, rear young or migrate nor would they significantly affect the local distribution or abundance of the species.

Whilst it is considered unlikely that GCNs would be present on site, as a precaution, it is recommended that sensitive working practices are employed for vegetation removal, to ensure that in the unlikely event of a GCN found (or indeed other amphibians), they will not be harmed.

Employing RAMs during works on site will involve working practices to avoid killing and injuring individual newts and other animals. This method statement describes the required timings and

precautionary actions prior and during development works, which will minimise the risk of an offence being committed under Regulation 41 of the Conservation of Habitats and Species Regulations 2010.

A precautionary approach to works through sensitive clearance of scrub habitats has been recommended in the previously completed PEA (May 2020) for the site with regard to reptiles and dormice and therefore it is considered that if these procedures are adhered to, as detailed in the PEA, then the risk of harm to amphibians would be at a minimum.

Reasonable Avoidance Measures can be implemented during the site clearance phase as a precautionary approach. These will include the following:

- Sensitive removal of any vegetation under ecological watching brief in line with recommendations for reptiles and dormice (see PEA; The Ecology Partnership May 2020).
- Demolition materials, including skips and pallets, will be stored on hardstanding or an area of unsuitable habitat where possible and elevated off the ground so that no features are created that any GCNs could potentially use as refuge.
- Trenches and holes will not be left open overnight where possible or should have planks of wood placed in them so that any trapped animals may use these to escape.

Ecological Enhancements

It is considered that enhancement of the site should concentrate on strengthening retained boundaries through the planting of appropriate native tree and shrub species. Recommended species include: oak (*Quercus robur*), hazel (*Coryllus avellana*), holly (*Ilex aquifolium*), wild cherry (*Prunus avium*), apple (*Malus* sp.), hornbeam (*Carpinus betulus*), rowan (*Sorbus* sp), spindle (*Eunoymas europaea*), privet (*Ligustrum vulgare*), box (*Buxus sempervirens*), wayfaring tree (*Viburnum lantana*), bilberry (*Vaccinium myrtillus*) and yew (*Taxus baccata*).

Planting the base and edges of hedgerows and tree-lines with herbaceous plants and bulbs attract bees, butterflies and other insects as well as providing ground cover for smaller animals. Seeds that are tolerant of semi-shade and are suitable for sowing beneath newly planted or established hedges and tree-lines should be used. As a guide, the following species can be included in the mix; however, appropriate seed mixes may be purchased from native species stockists:

- Yarrow - (*Achillea millefolium*)
- Agrimony – (*Agrimonia eupatoria*)
- Garlic mustard – (*Alliaria petiolata*)
- Common knapweed – (*Centurea nigra*)
- Wild Basil – (*Clinopodium vulgare*)
- Hedge bedstraw – (*Galium album*)
- Wood avens – (*Gerum urbanum*)
- Oxeye daisy – (*Leucanthemum vulgare*)
- Ribwort plantain – (*Plantago lanceolata*)
- Cowslip – (*Primula veris*)
- Selfheal – (*Prunella vulgaris*)
- Red campion – (*Silene dioica*)
- Hedge woundwort – (*Stachys sylvatica*)
- Upright hedge parsley – (*Torilis japonica*)
- Tufted vetch – (*Vicia cracca*)

The use of wildflower mixes to increase the biodiversity of any proposed lawn areas will enhance the ecological value of the site for a range of important invertebrates.

It is recommended that log piles and hibernacula be created around the perimeter of the site (see Figure 5). Planting around log piles with species such as honeysuckle or clematis can also add value.



Figure 5: Log piles and hibernacula which may be created on the margins of the site

Conclusions

Whilst access to survey pond 1 outside of the site was granted by the landowner, on the day of survey on 26th May 2020, this pond was found to be almost completely dry with the small amount of water that remained considered insufficient for testing and unsuitable for breeding great crested newts. Pond 2 approximately 200m from the red-line boundary was discounted from further survey.

Whilst it is considered unlikely that GCNs would be present on site, the precautionary use of RAMS should mitigate for the low likelihood of the presence on site. Enhancements have been recommended to create new opportunities for amphibians on site and mitigate for the small loss of sub-optimal terrestrial habitat.

If you have any questions or queries then please do not hesitate to get in touch.



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Managing Director & Principle Ecologist

The Ecology Partnership Ltd