

Land at Hammersley Drive, Abbots Bromley
Proposal to Erect Seven Residential Dwellings

Supplementary Ecological Appraisal (with particular reference to Great Crested Newts)

P/13/00140

November 2010



A nature reserve with 2 ponds (supporting Great Crested Newts) lies immediately to the south of the proposed development.

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A. Introduction

In September 2010 Ecology-first prepared an updated ecological appraisal and impact assessment for this site. During the consultation period on the planning application, Staffordshire Wildlife Trust raised an objection because the presence of a small pond on Abbots Bromley School grounds, immediately adjacent to the south had not been considered in the ecological appraisal. Staffordshire Ecological Record holds records from this pond of Great Crested Newts (GCNs), a European legally protected species whose presence could constrain development on land close to the breeding site. This report seeks to address the original oversight by assessing the potential impacts associated with the proposed residential development and by indicating both habitat enhancement and working methods to ensure that the 'Favourable Conservation Status' of the GCN population is maintained and wildlife laws are not broken.

B. Site Survey and Appraisal

The existence of two small, plastic-lined ponds (photo 3) was confirmed during a site visit on 23rd November 2010, in the company of the applicant and the school bursar. Although small, both ponds appeared suitable to support GCNs. Terrestrial habitats immediately around the pond were also considered to be in near ideal condition to support amphibians using the ponds. Not only are there several undisturbed piles of brash and logs to provide shelter and hibernation sites (photo 4), but there are also extensive areas of both rank and mown grassland that are ideal for terrestrial forage (photos 1 & 2). In short, the 'Habitat Suitability Index' (HSI) is rated 'high'. No GCNs were actually seen in the water or found terrestrially – the recent cold spells of weather are likely to have forced newts into deeper shelters to get away from the frost.

At this late date in the year, reliable amphibian survey cannot be undertaken in the ponds because most newts have left the ponds and are in their terrestrial phase. Individual GCNs were recorded in 2007, 2008 and 2009, the first of these possibly from the year when the pond was created. It's possible that the GCNs were introduced to the pond, because there

appear to be no other ponds in the vicinity that could have acted as a source of GCNs to colonise the school ponds as quickly as they were. The small size of the ponds and their comparatively recent creation suggest that only a 'small' population of GCNs could currently be present. The school nature reserve does appear to have the capacity to support larger populations of newts as their numbers gradually increase year on year.

C. Impact Assessment

No adverse impact is predicted on the ponds themselves or any of the land the school manages immediately surrounding them.

Superficial searches in September and November didn't discover any GCNs on the proposed development land. This ground has already been subject to some disturbance while being tidied up in preparation for the implementation of the extant planning permission (for nine dwellings). While much has been rendered less attractive to GCNs by the removal of debris and surface vegetation, other parts against the southern boundary have been made more attractive by the stockpiling of debris and topsoil along that edge (photos 5 & 6). The greatest risk to GCNs will be during the remaining site preparation work - the removal of rubbish and debris shelters and the restoration of natural ground levels. Any newts sheltering in this tangle of materials could be killed during reckless use of machinery to level the site. The risk of GCNs being present on the development site is uncertain because there is ample shelter available adjacent to their breeding ponds and the population may not be large enough yet to prompt a more distant dispersal. Nevertheless, it should be borne in mind that the late autumn and winter period, following the emergence of adult and juvenile newts from the ponds is undoubtedly the time when most GCNs could be present on the development site and be put at risk by any working of the ground.

Eventually, the gardens of the new properties will provide supporting habitats for terrestrial newts moving north from the school nature reserve

D. Mitigation

Suggested mitigation comprises two elements:

- 1. Prescribed working methods to minimise risk of harm to GCNs and other amphibians.**
- 2. Provision of purpose-made habitat of benefit to the GCN population to compensate for that lost as a result of developing the land.**

1. 'Reasonable Avoidance Measures' (RAMs).

The following precautions should be strictly adhered to:

- i. All risky disturbance of debris and voids to be undertaken by hand and closely supervised by at least one licensed GCN handler.**
- ii. Ideally, site levelling and habitat creation work should be undertaken during the late March to July period, when most GCNs have moved from their hibernation sites and into the ponds to breed. Some clearance of superficial debris could be undertaken before this, provided work is only undertaken when temperatures are above 5°C so that any (cold-blooded) amphibians found would be mobile enough to find safe shelter when released. There are many suitable release locations (e.g. rabbit holes) beneath the boundary hedge that would not be disturbed in the future.**
- iii. The construction site should be maintained in a very tidy condition, with no discarded materials that might attract newts seeking shelter (plastic or metal sheeting, timber or brick piles).**
- iv. All stored materials should be kept on pallets to minimise ground contact.**
- v. Foundation trench work should be completed as quickly as possible to minimise the likelihood of temporary 'ponds' forming that might attract GCNs.**

NB. The initial site clearance will be undertaken using appropriate cautious working practices. However, if more than 5 adult GCNs are discovered during this clearance process (or at any later stage), their translocation even to a safe location would actually constitute illegal disturbance (as defined in 'Disturbance and Protected Species: Understanding and Applying the Law in England and Wales - a view from Natural England and the Countryside Council for Wales' [esisgd_tcm6-3774 - 24.3.2007]). All work would have to cease pending successful application for a GCN Development Licence. This would require a full, 6-visit survey of the ponds to reliably establish the 'population size class', and once the licence has been issued, fencing the development area to prevent fresh ingress of newts and undertaking

a terrestrial clearance of any GCNs present on the development land over a period appropriate to the population size class (30, 60 or 90 days). This costly procedure will only be adopted should the legal need become evident (more than 5 adult GCNs would be disturbed).

2. Habitat creation

Once soil levels have been restored to existing boundary hedge levels, a low bund of clean rubble and timber will be constructed along the southwestern boundary of the site, covered with matting and soil, then seeded with an appropriate, native grass and wildflower mix. This structure is not proposed as a barrier to GCNs, but rather a replacement for shelter habitats lost on the development land. However, such a structure will also serve to limit the number of GCNs likely to move southwards from the pond into the development site next autumn by providing a substantial and attractive hibernation habitat. No management of the bund will be necessary, with shrubs eventually self-setting to consolidate the boundary hedge and enhance visual screening between the school grounds and the residential properties.

E. Summary and Conclusions

Whoever develops the site needs to follow this mitigation plan and it would seem appropriate to condition any planning permission accordingly. Whether the applicant takes the development forward himself or the plot is sold on to an established residential developer, the conditioned planning permission would constrain either party.

The listed Reasonable Avoidance Measures and habitat creation should be sufficient to maintain Favourable Conservation Status for Great Crested Newts in the locality, but if unreasonable disturbance appears likely, the eventual developer will have to seek the necessary GCN Development Licence in order to implement the planning permission legally.

Colin Hayes, 'Ecology-first'






26th November 2010









Land off HAMMERSLEY DRIVE, Abbots Bromley

Great Crested Newt Appraisal (November 2010)

Ecology-first

GCN Site & Mitigation

-  existing ponds
-  rank grassland
-  existing logpile refuges
-  wooden sheds
-  proposed rubble shelter

- ### Key
-  application site
 -  buildings surveyed
 -  handstanding
 -  cleared rank grassland
 -  ruderal over topsoil mounds
 -  trees
 -  Leylandii screen
 -  hedgerow

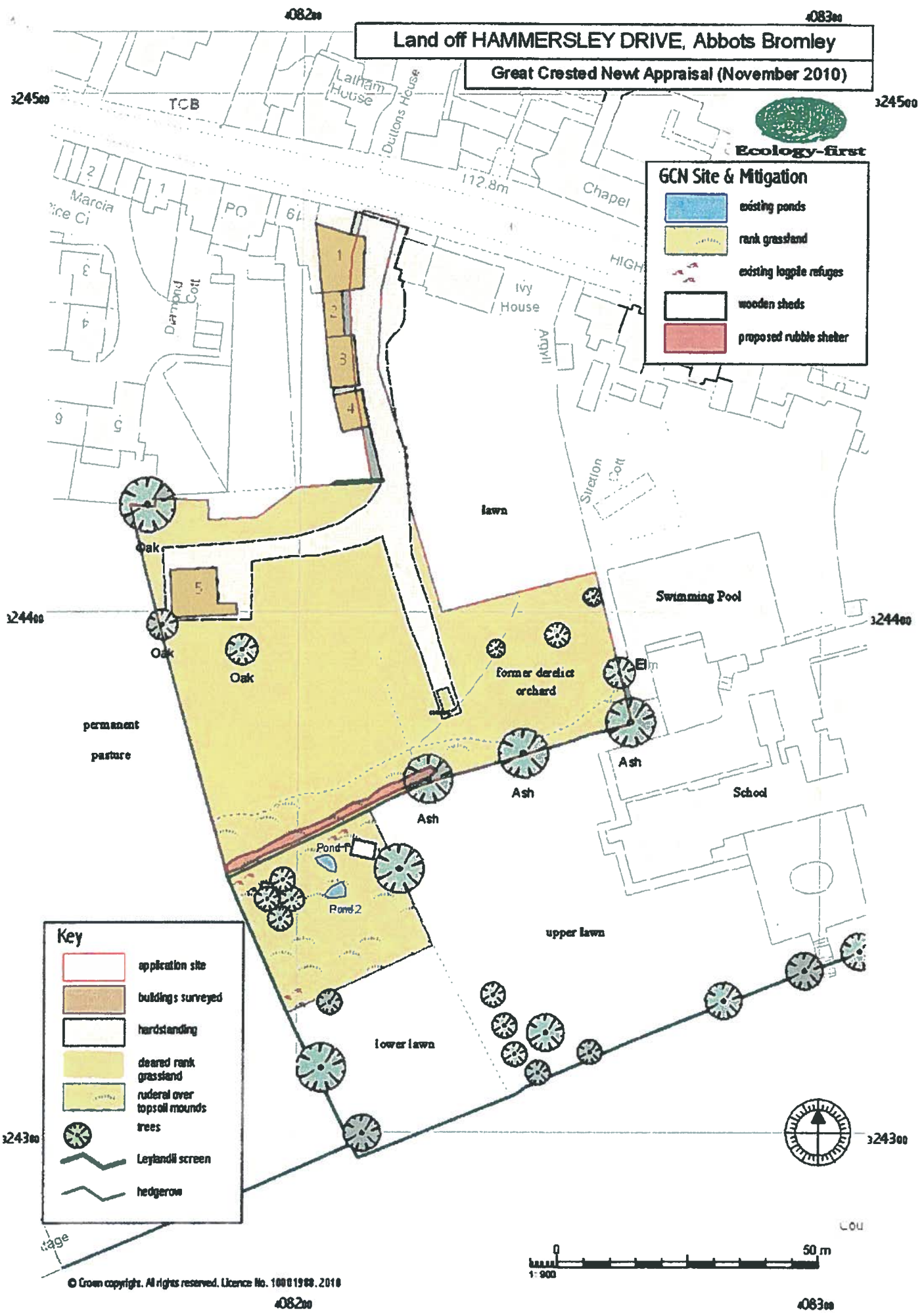




Photo 1: A distant view of the school nature reserve from SW. Short-mown grassland suitable for forage activity is in the foreground.



Photo 2: The school nature reserve from its SW corner. Note the unmanaged grassland and brush piles, both valuable habitats to support amphibians.

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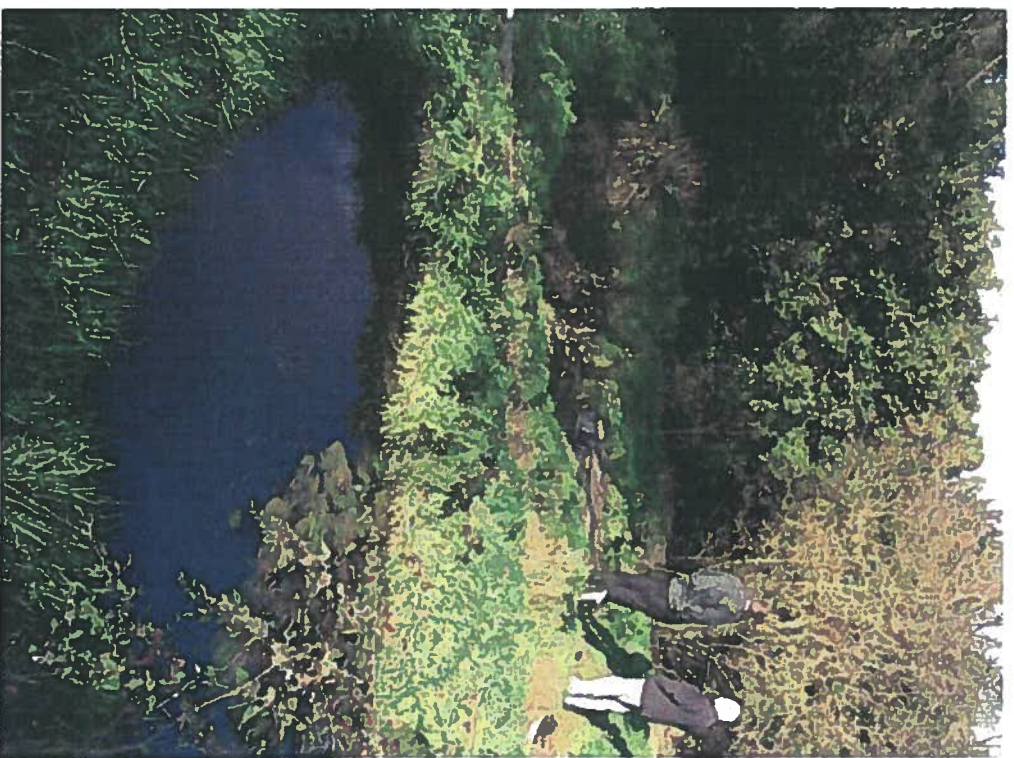


Photo 3: The two plastic-lined ponds at the heart of the reserve. The hedgerow in the background is on the common boundary between the reserve and the proposed development site.

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Photo 4: Two wooden huts on the site provide valuable shelter, but the undisturbed woodpile in the background is even more valuable.

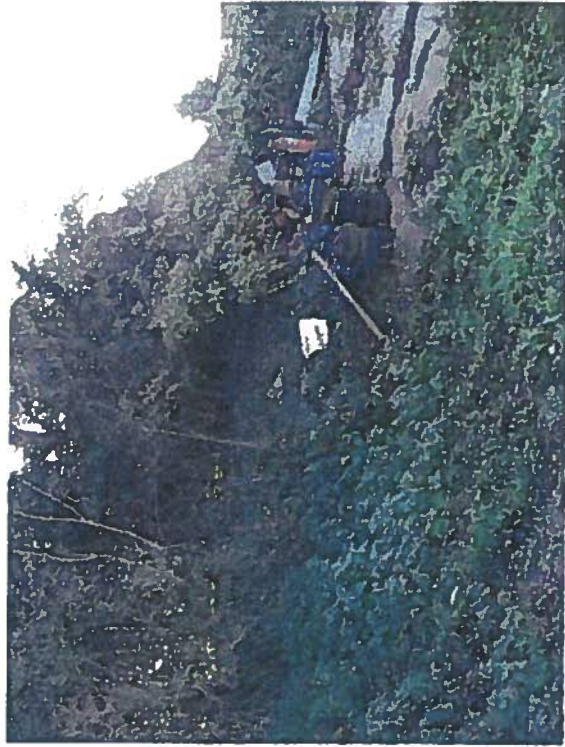


Photo 5: There is a considerable amount of superficial debris along the southern edge of the development site, which should be removed by hand under licensed supervision.



Photo 6: The S boundary adjacent to the school nature reserve has stockpiled topsoil with debris intermixed. As it is progressively sorted, the hibernaculum bund will be constructed in its place.