



108 ABBEY ROAD SOUTH, WREXHAM

INDUSTRIAL ESTATE:

REASONABLE AVOIDANCE MEASURES (RAMs) FOR GREAT CRESTED NEWTS (GCN)

DATE	ECOLOGIST	APPROVED	VERSION	COMMENTS
06/12/2022	Richard Cutts	Dr Katy Read CEcol MCIEEM CEnv DipSM	V1	

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Executive Summary

Site	108 Abbey Road South, Wrexham Industrial Estate, Wrexham, LL13 9RF	OS Grid Reference:	SJ 38680 49732
Surveyor(s)	Richard Cutts	Survey Date:	20/09/2022
Type of Report	Reasonable Avoidance Measures (RAMS) method statement		
Summary of Proposed work	Construction of a building, and landscaping to upgrade and expand the existing parking facilities.		
Habitats affected	Hardstanding, bare ground.		
Species affected	Great crested newts (GCN) and other common amphibians		
Reasonable Avoidance Measures	Reasonable avoidance measures have been recommended for GCN and common amphibians. These include construction of an artificial hibernaculum, pre-works checks and supervision, timing of works, and instructions should any individuals be found within the works area.		

1.0 Introduction

- 1.1 Enfys Ecology Limited were commissioned by Jackie Huxley to provide a Reasonable Avoidance Measures method statement (RAMS) for great crested newts (GCN) for a site at Wrexham Industrial Estate, Wrexham.
- 1.2 The site is centred on approximate OS grid reference SJ 38680 49732. The site is an industrial unit within the Wrexham Industrial Estate. It contained predominantly hardstanding, with areas of bare gravel that had sparse cover of small plants. An agricultural field was immediately to the east of the site.
- 1.3 The proposed works comprise the construction of a building in the south of the site, and landscaping to upgrade and expand the existing parking facilities.
- 1.4 Great crested newts (GCN) have previously been recorded from the vicinity of the site. GCN are protected by the Conservation of Habitats and Species Regulations 2017 and Schedule 5, Section 9 (1 and 5) of the Wildlife and Countryside Act 1981 (as amended) against disturbance, deliberate or reckless killing and injuring, damage or destruction of habitat, and from being sold.
- 1.5 This method statement details reasonable measures to be undertaken in order to ensure that this species is not harmed during the development works.
- 1.6 Enfys Ecology carried out an inspection of the site to inform this report in September 2022. Habitats and species found within a discrete area of land are subject to change; this report should therefore be considered valid for a period of two years (from September 2022) in accordance with best practice.

2.0 Site Description

2.1 Survey Area

- 2.1.1 The site is an industrial unit located within the Wrexham Industrial Estate. Its immediate surroundings consist of buildings and associated infrastructure of the industrial estate, with areas of grassland, scrub and woodland interspersed within them. An agricultural field is located immediately to the east. A larger block of woodland lies a short distance to the south of the site (Figure 2.1).



FIGURE 2.1. SITE LOCATION - THE APPROXIMATE SURVEY AREA IS SHOWN IN RED
BACKGROUND IMAGE © GOOGLE 2022

- 2.1.2 The wider landscape consists of the Wrexham Industrial Estate, which is surrounded by agricultural grassland and blocks of woodland. Hedgerows provide some connectivity with the wider landscape (Figure 2.2).



FIGURE 2.2. WIDER SITE LOCATION - THE APPROXIMATE SURVEY AREA IS SHOWN BY RED STAR
BACKGROUND IMAGE © GOOGLE 2022

3.0 Methodology

3.1 Desk Study

- 3.1.1 A desk study was undertaken in September 2022, through Cofnod, North Wales Environmental Information Service, to determine the presence and distribution of great crested newts (GCN) within a 1km radius of the site. The records were used to inform the site inspection and recommendations, and to provide context for evaluating the species and habitats found during the site inspection. Any relevant species results from the desk study will be referred to in Section 4.

3.2 Site Inspection

- 3.2.1 A site inspection was conducted by a suitably experienced ecologist walking over the site and immediately adjacent areas. All habitat types on site were visited. Notes were taken on the habitat types present, and their suitability for protected species.
- 3.2.2 The site inspection was conducted on the 20th September 2022 by Richard Cutts, a suitably experienced professional ecologist. Conditions were dry but overcast.

3.3 Limitations

- 3.3.1 The results of this survey consist only of those species encountered during a short space of time on one day. Species that use the site infrequently or at different times of the year may not be recorded, and the absence of species from the results of a single survey should not be taken as indicating the species definite absence from the area in question. Descriptions of plant species concentrate on the most obvious and abundant species present as determinant of habitats present.

3.4 Report and Terminology

- 3.4.1 For the purposes of this report, the terms 'site' and 'survey area' are used to refer to the area surveyed on the ground by the ecologist at the clients request, which usually includes the entire area subject to the proposed works.

4.0 Site Inspection Results

4.1 Desk Study Results

- 4.1.1 The desk study returned records for great crested newts (GCN) from the last 20 years within the 1km search area. There are a total of 89 GCN records of GCN in the search area, and most of the records report multiple individual GCN. The closest record is just under 200m from the site.
- 4.1.2 At least 20 ponds are present within 1km of the site, and many of these have records of GCN eggs. GCN have been reported from all around the search area, in both terrestrial and aquatic habitats, with the largest concentration of records distributed around ponds to the north-east of the site. Records of GCN eggs in several of these ponds confirm that these are breeding sites, with the closest breeding pond being approximately 260m from the site.

4.2 Habitats

- 4.2.1 A large industrial building covered most of the northern part of the site. The remainder of the site was dominated by hardstanding and bare gravel, with patchy cover of grass and ephemeral/short perennial plants. The site also contained a concrete shed, a metal storage container, and various other materials. Table 4.1 below provides a brief description of the habitats; photographs of the site are included with the text.
- 4.2.2 Near to the south-western corner of the site, and separated from it by a metal palisade fence, there was a transmission tower. Vegetation at the base of the tower was a mixture of grass and tall ruderal species. This section of the site is not included in the development area.
- 4.2.3 A rough pasture field was present to the east of the site. The site boundary adjacent to the field consisted of a small depression with a defunct hedge (bramble and mature hawthorn) and a wire fence in a poor state of repair. Rubble and waste material were present within the depression, and in places was being used to block or prop up the fence.

4.3 Great Crested Newts

- 4.3.1 No great crested newts (GCN) or other common amphibians were observed during the site visit.
- 4.3.2 The habitats present at the site provided limited suitable habitat for GCN, with generally sparse plant cover. However, materials around the site (including coarser gravel substrate) would provide places suitable for resting or hibernation. This was especially the case in the depression along the site boundaries; elsewhere materials were generally stored raised from the ground and would provide few opportunities for sheltering.
- 4.3.3 The field to the east, consisting of rough grassland, had good foraging potential for GCN and along with a network of hedgerows provided connectivity to the wider area.

TABLE 4.1. HABITAT DESCRIPTIONS

Description	Photo
Hardstanding	
There was a strip of concrete hardstanding through the centre of the site and along the eastern edge of the main building. Small grass tussocks and ephemeral/short perennial plants were growing in places in the joints between concrete sections, but the surface was otherwise well sealed.	
Bare ground	
Bare gravel, grading in places to larger cobbles, was present along the southern and eastern edges of the site. This was sparsely vegetated, with scattered patches of grass and ephemeral/short perennial plants. Along the eastern site boundary, the gravel areas also had accumulations of rubble and waste material.	

Description	Photo	
		
<i>Species-poor hedgerow</i>		
A defunct hedgerow was present at the southern end of the eastern site boundary, in a depression and at a slightly lower level than the rest of the site. It consisted of bramble and mature hawthorn, with large gaps along the base. A dilapidated wire fence also ran along this section of the site boundary, and had been partially blocked or supported by waste material.		

Description	Photo	
There was a transmission tower near to the south-western corner of the site. It was fenced off from the rest of the site. Vegetation in this small area was dominated by tall ruderal plants (mainly rosebay willowherb) along with tall grasses.	<i>Tall ruderal</i>	
		

5.0 Reasonable Avoidance Measures

- 5.1 The works have the potential to affect great crested newts (and other common amphibians) through accidental injury or killing of animals during the works, and potential loss or disturbance of habitat. GCN must be assumed to be present anywhere on site for the purposes of preventing harm.
- 5.2 *Tool Box Talks*
- 5.2.1 Tool box talk(s) must be provided to all site workers by an ecologist about the identification and ecology of GCN, the potential to harm amphibians, and the measures to be taken to avoid this.
- 5.2.2 A record of attendance of tool box talks must be kept.
- 5.3 *Biosecurity*
- 5.3.1 Great crested newts and other common amphibians are highly susceptible to *Chytrid* fungus, a pathogen which can cause high levels of mortality in amphibian populations. Biosecurity measures must be in place to prevent the spread of *Chytrid*, specifically:
- Amphibians must only be handled whilst wearing disposable vinyl gloves.
 - Any equipment, machinery or workwear which has come into contact with standing water bodies must be disinfected before being brought onto site.
- 5.3.2 General biosecurity and operational control measures for invasive non-native species (INNS) and pathogens are included in a separate biodiversity risk assessment for the site (Cutts, 2022).
- 5.4 *Artificial Hibernaculum*
- 5.4.1 An artificial hibernaculum must be constructed prior to the commencement of works, including any site clearance, in order to provide a place of refuge where GCN or any other common amphibians encountered during the works can be safely transported to. The hibernaculum can be constructed any point prior to the works commencing, provided that all other mitigation measures are taken into account (see Section 5.5).
- 5.4.2 In accordance with the great crested newt mitigation guidelines (English Nature, 2001), the hibernaculum should consist of a core (clean rubble, logs or similar material) and a topsoil cap. The minimum dimensions for an artificial hibernaculum are two metres long by one metre wide, and one metre high (see Figure 5.1).

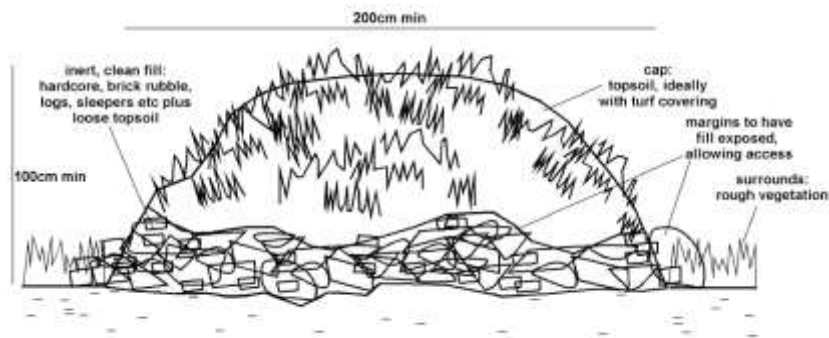


FIGURE 5.1. ARTIFICIAL HIBERNACULUM DESIGN

IMAGE © ENGLISH NATURE 2001

- 5.4.3 The hibernaculum must be located outside of the development area. The site walkover identified that an off-site location may not be possible, and that the optimal position for the hibernaculum is along the eastern site boundary (on either side of the boundary); other locations within or adjacent to the site would have very limited connectivity to suitable GCN habitat (see Figure 5.2).



FIGURE 5.2. SITE LAYOUT AND HIBERNACULUM LOCATION

BACKGROUND IMAGE © GOOGLE MAPS 2022

- 5.4.4 The suitability of the final position of the hibernaculum must be agreed with the site ecologist prior to its construction.
- 5.4.5 The hibernaculum must be checked by an ecologist upon completion, and no further works should commence until the ecologist has confirmed that the hibernaculum has been correctly constructed and is fit for purpose.

5.5 *Other Mitigation Measures*

- 5.5.1 Generally, work that risks disturbing GCN should not be carried out in cold weather, including site clearance. Note that this also includes construction of the artificial hibernaculum (see Section 5.4), which must not be carried out in cold weather if vegetation needs to be cleared or if construction materials are being repurposed from within the site. For the purpose of this method statement, 'cold' weather can be defined as when overnight temperatures fall below 5°C. Amphibians should be assumed to be mobile only when daytime temperatures rise to 15°C at the time of works, and there has been a period of at least 5 consecutive nights above 5°C prior to the works.
- 5.5.2 A walkover inspection of the site must be undertaken by a GCN licenced ecologist immediately prior to the commencement of works.
- 5.5.3 Rubble and waste piles must be removed by hand, under the supervision of an ecologist. This should be carried out between March and October and only when the air temperature has risen above 10°C, as disturbing amphibians during 'cold' weather may result in fatalities.
- 5.5.4 Any common amphibians encountered during the works should be relocated to the hibernacula, and gloves must be worn if it is necessary to handle them. In the unlikely event that GCN are encountered at any point during the works, contractors must **stop work immediately** in that area and contact a GCN licenced ecologist. GCN must only be moved by contractors if they are at immediate risk of harm.
- 5.5.5 All construction materials must be stored on hard standing as far away from the edges of the site as possible. Materials should be stored off the ground (e.g. on pallets) to prevent GCN and other amphibians from taking refuge in them.
- 5.5.6 Bulk materials delivered to the site should also be stored as far away from the edge of the site as possible, and must be used within the day of delivery to prevent GCN or other amphibians taking refuge within them.
- 5.5.7 Trenches or other excavations must be covered overnight using plywood (or equivalent boards), which must be sealed at the edges with sand or soil. Trenches must be checked by the site supervisor at the end of the day to ensure that they have been adequately secured.
- 5.5.8 Trenches must be checked for amphibians each morning, and any amphibians discovered must be moved to the artificial hibernacula. Amphibians must only be handled whilst wearing gloves, and **GCN must only be moved by a GCN licenced ecologist**.

6.0 Legislation

6.1 *Great Crested Newts*

GCN are protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations', because they have declined throughout Europe in recent decades.

Under the Habitats Regulations, it is an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species;
- Deliberately take or destroy the eggs of such an animal; or
- Damage or destroy a breeding site or resting place of such an animal.

Disturbance includes, but is not limited to, any disturbance which is likely:

- To impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or (in the case of animals of a hibernating or migratory species) to hibernate or migrate; or
- To affect significantly the local distribution or abundance of the species to which they belong.

Under the Wildlife and Countryside Act 1981 (as amended) it is illegal to:

- Intentionally or recklessly disturb any great crested newt while it is occupying a structure or place which it uses for shelter or protection, 9(4)(b).
- Intentionally or recklessly obstructs access to any structure or place used by a great crested newt for shelter or protection, 9(4)(c).
- Sell, offer or expose for sale any great crested newt, 9(5).

It is, however, legal for you to tend a disabled GCN with the intention of releasing it, or to kill a GCN that cannot recover, as long as the injury was not a result of your unlawful act (Habitat Regulations 44(2); W&CA 10(3)(a)(b)).

7.0 References

Cutts, R. (2022). '108 Abbey Road South, Wrexham Industrial Estate: Biosecurity Risk Assessment'. A report by Enfys Ecology Ltd for Jackie Huxley.

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