

# Ecological Assessment Report

Site Name: Land adjacent to Netherwood Lane,  
Chadwick End.

National Grid Reference: SP 20275 73121

Client : Mrs Phillips

Date of Survey November 2019

**DR PENNY ANGOLD**  
**CONSULTANT ECOLOGIST**

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## **A - Executive summary**

The vacant plot of land off Netherwood Lane, Chadwick End is to be redeveloped to provide a detached family home. An ecological assessment report has been requested to inform the planning application.

The site is small (approximately 0.05Ha) and set between two existing large properties with mature gardens, although the adjacent land to the west is being remodelled and has planning consent for development.

There are great crested newts present in the area, with an adult male found under a stone on land immediately to the south of the survey site. The adult newts are likely to access the terrestrial habitat of the site which lies within 100 metres of two potential breeding ponds, and the log piles and any stones on the survey site may form refugia.

Although no evidence was seen, there is potential for breeding birds in the adjacent trees, and also for hedgehogs on the survey site.

In a rural location there is always a risk of animals, including badgers and hedgehogs, becoming trapped in works. These species may cross the site even though no evidence was seen during the survey. Ensuring earthworks always have an escape passage can reduce risks of entrapment for animals.

There is evidence of Japanese Knotweed adjacent to the survey site and the plants or rhizomes may have spread onto the cleared area of the site.

There is no overall predicted loss of biodiversity as a result of developing this small, cleared site. There is a low predicted adverse impact on great crested newts due to loss of habitat as a result of the proposed development so a method statement must be used to minimise the impact and the risk to individual newts, and compensation will be needed.

### **Recommendation:**

**The log piles and any stones or rubble on site must be cleared by hand under supervision of an ecologist before the start of works on site to check for great crested newts or hedgehogs. Site clearance should begin at the front of the site and work backwards allowing any animals time to escape.**

**There is a population of great crested newts, and individuals may be on the survey site. A method statement and ecological supervision will be needed to ensure that individuals are not killed or injured during works. A Natural England licence may be needed depending on the extent of works and the risk to individual newts. The method statement for great crested newt must include some compensation for the loss of habitat, whether this be an offsite agreement or an upgrade of habitat to the south of the site.**

**Any trenches left open overnight during the works must be fitted with planks for escape routes for any animals that may fall in, and checked each morning before works start to ensure that no animals become trapped on the site.**

**A method statement will be needed to ensure that Japanese Knotweed is not spread during the proposed redevelopment of the site.**

## **B - Introduction**

### **B.1.1 Background to activity/development**

The vacant plot of land off Netherwood Lane, Chadwick End is to be redeveloped to provide a detached family home. An ecological assessment report has been requested to inform the planning application.

This ecological impact report will indicate any likely impacts of the proposed development on biodiversity, any ecological constraints and opportunities, and indicate appropriate enhancement or compensation for biodiversity, or further surveys required.

### **B.2. Legislative Background**

There are various articles of protected species legislation that might apply to flora and fauna on this site. It is known that certain species of bats typically roost in buildings, and that a significant proportion of buildings may be used by bats at some time in the year. Bats are also known to use trees, caves and other crevices as places of rest or shelter.

All species of bat, both vesper bats (*Vespertilionidae*) and horseshoe bats (*Rhinolophidae*), and great crested newts are protected by law. They are European Protected Species listed on Schedule 2 of the Conservation of Habitats and Species Act 2017.

Regulation 43 (1) states that: ‘A person who

(a) deliberately captures, injures or kills any wild animal of a European Protected Species;

(b) deliberately disturbs wild animals of any such species

**(d) damages or destroys a breeding site or resting place of such an animal.’**

is guilty of an offence.

Regulation 43 (2) states that disturbance under 43(1)b particularly includes disturbance likely to impair ability to survive, to breed, reproduce, or rear or nurture young, to hibernate or migrate, or to affect significantly the local distribution and abundance of the species.

These species are also protected under schedule 5 of the Wildlife and Countryside Act (1981) (As amended) from being disturbed whilst occupying a place of rest or shelter; and under the CROW Act 2000 (which adds ‘reckless’ to ‘deliberate’). Hedgehogs, amphibians and reptiles are protected from killing or taking, or killing or injuring respectively under the Wildlife and Countryside Act 1984, and nesting birds are also protected. Badgers are protected by the Wildlife and Countryside Act as well the Protection of Badgers Act 1992, which makes it illegal to kill, injure or take badgers or to interfere with a badger sett.

Protected species are therefore a material consideration for planning. Councils also have a duty to consider biodiversity under the NERC Act.

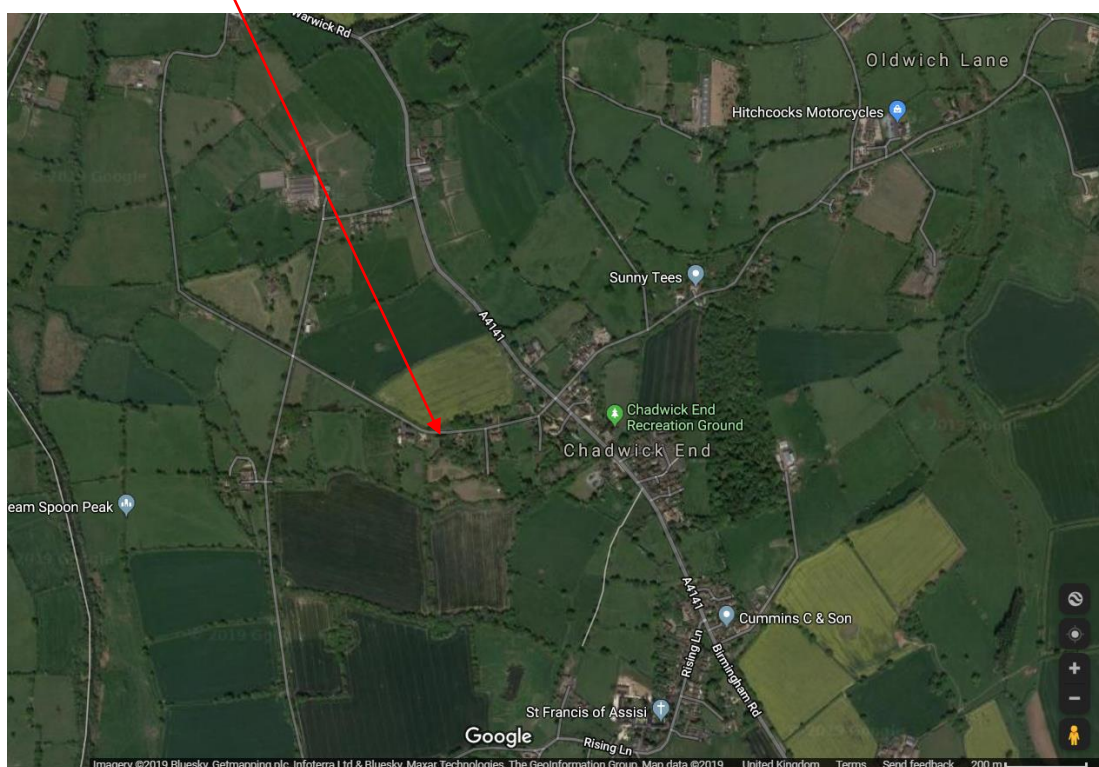
Note: this is an interpretation of the legal position. For a definitive guide to the law, the reader is referred to the original legislation.

### B.3 Objectives of the surveys

- To predict the likely ecological impact of the proposed development, and predict the impact on biodiversity and notable or protected species
- To note the presence of any notifiable invasive non-native species seen during the survey
- Make recommendations to minimise the ecological impact of the proposed works, identifying key constraints and potential mitigation and enhancement opportunities
- Establish any requirements for further surveys

### B.4 Scaled plan/Map of survey area

Figure 1 - Location map satellite view from Google Maps  
Survey site

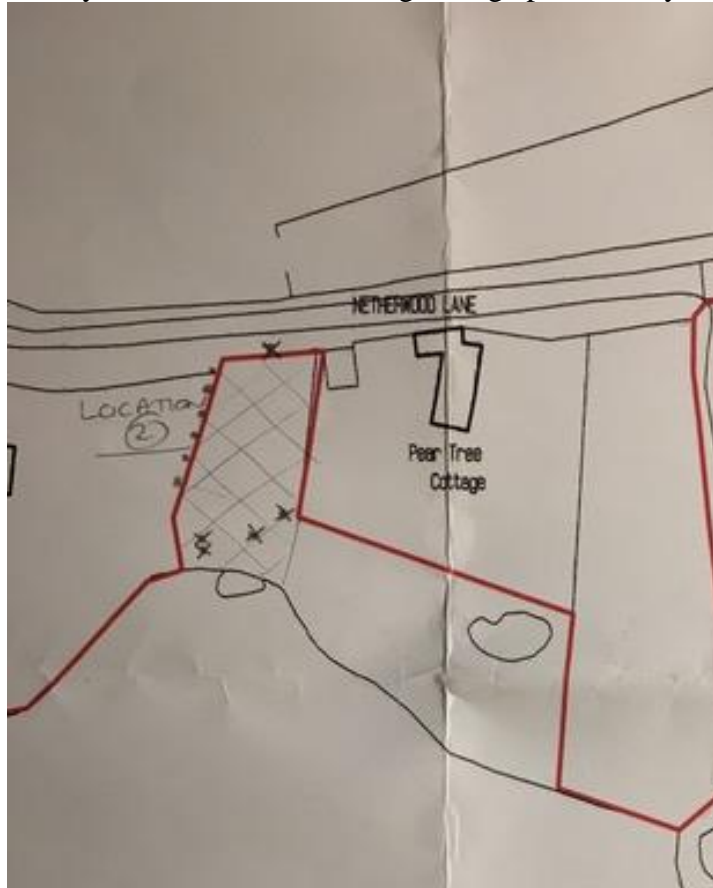


The survey site is located in rural surroundings to the east of Chadwick End, between two existing detached residences with large, mature grounds. To the south of the site is a belt of secondary woodland, then rough grassland which appears to be infrequently mown, and the wider surroundings are arable and pasture fields, edged by hedgerows with trees. To the north is a mature garden across the minor road, with larger arable fields beyond as seen in the satellite image.

## B.5 Site/Habitat description

The site itself comprises a vacant plot on the residential Netherwood Lane. The plot has previously been overgrown with bramble, but has been cleared leaving a couple of log piles.

Survey site outlined in hatching. Image provided by client.



Location plan N↑ approximate scale 10m



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## **C – Methodologies**

### ***C.1 Ecological Assessment***

A preliminary ecological assessment was conducted on the 1<sup>st</sup> November 2019 by Dr Penny Angold CEnv, CBiol MCIEEM, in good weather conditions after heavy rain. The site was small, approximately 0.05Ha, and relatively uniform. A walk over of the site recording the habitats and any features of interest was undertaken which also included evidence of any potential use by particular species.

The survey site was assessed for evidence of or potential for protected or notable species including but not restricted to; bats, nesting birds, Badger, hedgehogs, amphibians and reptiles. This included searching for direct evidence as well as signs, such as hair, fur or feathers, nests built, pathways, forms, footprints and droppings. Manual search and fingertip searches of any likely areas of usage such rock or log piles, holes, compost areas or denser foliage were also conducted where accessible. If any invasive plant species were noted then these would have also been recorded, including the location and extent of spread.

The trees surrounding the site were assessed for potential roost features or for evidence of use by bats, using high power Cluson torch, 4m ladders, close-focussing binoculars, mirrors and endoscopes as appropriate, in accordance with BCT survey guidance. Evidence includes droppings, urine splash, grease marks from fur, scratch marks etc as well as live or dead bats and assessing potential for bats in accordance with current guidance.

No waterfilled ponds were found on the site, and but there were a series of waterfilled depressions behind the site which we are told dry out each summer.

Whilst every effort is made to notify the client of protected or notable species, or any plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), this is not a specific survey for these species and some species may be missed.

### ***C.2 Personnel***

Experience of surveyors:

Dr Penny Angold CEnv, CBiol, MRSB, MCIEEM has over 15 years' experience of ecological surveying and holds Natural England class licences for Bats, Barn owls and Great crested newts.

### ***C.3 Constraints***

No population study has been undertaken for great crested newts since the survey was undertaken outside optimal timing for such survey. The site has been recently cleared so some plant species present may have been missed.

## D – Results

### *Habitats*

There are no habitats of note on the survey site. The survey site essentially comprises a small site of approximately 0.05Ha previously dominated by bramble but recently cleared. Other plant species noted on the cleared site include common forbs such as creeping buttercup, nettle, and ash seedlings.

Looking north across the survey site.



There are several log piles which were created during the site clearance.

The eastern boundary is fence beyond which is the mature garden of the neighbouring house; the western boundary is conifers beyond which is a previous private garden which is currently undergoing clearance work and has the remains of a large pond. To the south of the survey site is woodland leading to an earth bank across a wide ditch which is currently waterfilled to the east and appears to be part of the previous garden pond to the west.

Wooded area to the south of the survey site:





## **Species**

During the survey, field signs of any faunal species were noted. The time of year at which the survey is undertaken will affect the likelihood of observing field signs or animals during the survey.

### **Amphibians and Reptiles**

The site does have potential for use by amphibians in the terrestrial phase and by reptiles. Although the site has been recently cleared, the log piles and a tyre at the site frontage provide potential refugia.



The site frontage barrier and the log piles within the site are suitable refugia for amphibians.

The open water in the seasonal pond near the south of the site, and the previous garden pond in the adjacent garden would provide potential aquatic and foraging habitat for amphibians and reptiles. There are numerous pieces of stone or rubble in the woods to the south and scattered on the site. A great crested newt was found under a stone in the woodland to the south of the survey site, near the border of the adjacent garden to the west of the site.



Stone under which newt was found



Male great crested newt found under stone.

Given that the newts may be approaching hibernation and presence was established, no further refugia searching was undertaken after finding this individual under the second stone lifted.

Neighbouring pond.      Approximate site location      winter filled ditch



The garden pond to the west of the survey site appears to be being filled in as part of groundworks on the site:



A habitat suitability index calculation on the remainder of the pond results in a score of 0.52 which is below average suitability as a breeding pond for great crested newt; but this score is for the patch of water surveyed during the site visit and not the original pond.

The waterfilled ditch we are informed dries every summer, and has a habitat suitability index score of 0.73 reflecting good potential for great crested newt.



Waterfilled ditch with heavy leaf litter

No evidence of reptiles was seen. The water bodies and surrounding habitat would provide potential foraging habitat particularly for grass snake, although there is little suitable habitat on the survey site itself.

### **Bats**

There are no trees with potential roost features within the survey site, and no buildings. It is likely that bats forage over the site, and the surrounding habitat has excellent potential for foraging by a range of bat species.

### **Other Mammal species**

There was no evidence of hedgehogs or badgers on or adjacent to the site during the time of survey. The wider area has good potential for use by other mammal species

such as hedgehogs or badgers. There is no evidence of badger setts or trails within the redline boundary or adjacent to the survey site. There is some potential for nesting hedgehogs but the brambles have now been cleared and the logpiles have less potential for hedgehogs.



Logpile with some potential for hedgehog

### **Birds**

The cypress hedge on the western boundary of the site has potential for breeding birds but no evidence of nesting was seen.

### **Invertebrates**

No invertebrate species were noted during the survey.

### **Invasive Species.**

There are patches of Japanese Knotweed towards the southern end of the survey site.  
Japanese knotweed:



## ***E – Interpretation and Evaluation of Results***

The site is small (approximately 0.05Ha) and set between two existing large properties with mature gardens, although the adjacent land to the west is being remodelled and has planning consent for development.

There are no habitats of note on the survey site itself, and therefore no overall predicted loss of biodiversity, although the land beyond the southern boundary of the site is wet woodland with seasonal ponds and therefore of biodiversity value.

There are great crested newts present in the area, with an adult male found under a stone on land immediately to the south of the survey site. The adult newts are likely to access the terrestrial habitat of the site which lies within 100 metres of two potential breeding ponds, and the log piles and any stones on the survey site may form refugia. A search of the MAGIC website shows that two licences have been granted for destruction of resting places of great crested newt within a 2km radius, one of which was within 1km to the south of the survey site. The local population of great crested newts is also likely to be affected by the development adjacent to the survey site which has already received planning consent.

The Natural England risk calculator for the likelihood of an offence being committed in regard to great crested newt gives a red warning (offence highly likely) if there were to be significant disturbance of newts, or trapping or killing of newts in earthworks or during works on the site. For the destruction of 0.05Ha of terrestrial habitat within 100 metres of a breeding pond, the risk assessment is amber – offence likely. However for the loss of up to 0.01Ha of habitat within 100 metres of a breeding pond the assessment is green – offence highly unlikely. The rapid risk assessment calculator does not take into account factors such as habitat quality and fragmentation, or population size. If there is a risk of great crested newts being disturbed or habitat destroyed the development should be assessed to determine whether the impact could be reduced. In this case, if 0.01Ha of land or less is to be lost to building works, the risk calculator predicts that there is low risk of an offence by destruction of a place of rest or shelter. Given that the existing habitat, with the exception of the log piles and stones, is low quality habitat a method statement approach could be used to manually search those areas before the start of site works and measures must then be taken to protect individual newts during the works by ensuring that newts cannot become trapped in earthworks or shelter under piles of earth or building material on the site.

Although no evidence was seen, there is potential for breeding birds in the adjacent trees, and also for hedgehogs on the survey site.

In a rural location there is always a risk of animals, including badgers and hedgehogs, becoming trapped in works. These species may cross the site even though no evidence was seen during the survey. Ensuring earthworks always have an escape passage can reduce risks of entrapment for animals.

**Recommendation:** The log piles and any stones or rubble on site must be cleared by hand under supervision of an ecologist before the start of works on site to check for great crested newts or hedgehogs. Site clearance should begin at the front of the site and work backwards allowing any animals time to escape.

There is a population of great crested newts, and individuals may be on the survey site. A method statement and ecological supervision will be needed to ensure that individuals are not killed or injured during works. A Natural England licence may be needed depending on the extent of works and the risk to individual newts.

Any trenches left open overnight during the works must be fitted with planks for escape routes for any animals that may fall in, and checked each morning before works start to ensure that no animals become trapped on the site.

### **Invasive Species.**

There is evidence of Japanese Knotweed adjacent to the survey site and the plants or rhizomes may have spread onto the cleared area of the site.

**A method statement will be needed to ensure that Japanese Knotweed is not spread during the proposed redevelopment of the site.**

### **Overall impact Assessment**

In summary there is no overall predicted loss of biodiversity as a result of developing this small, cleared site. There is a predicted adverse impact on great crested newts due to loss of habitat as a result of the proposed development.

**Recommendation:** The method statement for great crested newt must include some compensation for the loss of habitat, whether this be an offsite agreement or an upgrade of habitat to the south of the site.

## **F – References**

- British Standards Institution (2013). British Standard 42020: 2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.
- British Standards Institution. (2012). British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations. British Standards Institution, London.
- Department for Communities and Local Government (2012). National Planning Policy Framework. Available: <http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/>
- Institute of Environmental Assessment. (1995). Guidelines for Baseline Ecological Assessment, Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall. London.
- Mitchell-Jones, AJ. Bat Mitigation Guidelines (2004). English Nature
- BCT (2016). Bat Surveys – Good Practice Guidelines.
- Mitchell-Jones & McLeish (2004). The bat worker’s manual. JNCC

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”. The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional opinions.

*Dr Penelope Angold CEnv, CBiol, MCIEEM, MSB.  
Checked by Kate Sharma BSc Hons MCIEEM*