

BOW0017/616 Chipping Great Crested Newt Advice Note

Background Information

Bowland Ecology was instructed by HOW Planning to undertake a site visit, risk assessment with respect to the potential presence of great crested newts (*Triturus cristatus*) and advise on a scope of work and/or mitigation to inform a planning application for residential development (approximately 60 dwellings) on land at Chipping, Lancashire (NGR: SD619434) (see indicative masterplan, **Appendix A**).

As well as residential development, the proposals include:

- change of use to the Grade II listed Kirk Mill to create a hotel and bar restaurant,
- works to the barn building to create seven holiday cottages,
- construction of a hotel and spa, kids club and wedding venue and trailhead centre,
- change of use of Malt Kiln House from residential to use class C1,
- construction of a new cricket pavilion,
- demolition of the group of derelict factory buildings.

The site had previously been subjected to extended Phase 1 habitat surveys in 2011 (updated 2013, Ecology Solutions, Ecological Assessment report) and 2015 (Ecology Services). There was no consideration of the potential presence of great crested newts or other amphibians in the Ecology Solutions report which accompanied the planning application.

Lancashire County Council's response to planning application reference 3/2014/0183 dated 12/06/14 stated that:

"There does not appear to have been an assessment of likely impacts on amphibians. There are waterbodies within 250m of the proposed development areas which may be suitable to support amphibians, such as Great Crested Newt (European Protected Species) and Common Toad (Species of Principal Importance), and the site supports suitable habitat for amphibians. Information should be submitted (including the results of any necessary surveys) to address this matter. The likely impacts on amphibians need to be established prior to determination of the application. If impacts are likely then mitigation measures will need to be submitted."

Ecology Services Ltd was commissioned by SCPi Bowland Ltd in March 2015 to review the Ecology Solutions Ecological Assessment Report and produce an updated Ecology Report. The Ecology Services report identified a pond approximately 100 m southwest of Parcel 2 within privately owned farmland with no physical barriers separating the pond from this development plot. The mill pond located within the site within parcel 4 was considered unsuitable to support great crested newts but suitable to support common toad (*Bufo bufo*). The report states that the development site contains suitable terrestrial habitats that provide ideal refuge and hibernation habitat for amphibians in the form of; dense vegetation, underground in small mammal holes, amongst tree roots, woodland, tussocky grassland, scrub, tall ruderal and hedgerows (Parcels 2 and 3). There was no access to the pond to assess its suitability for great crested newts. It is possible that the pond located approximately 100 m southwest of Parcel 2 may be suitable to support great crested newt and common toad. To adhere to current legislation and planning policy, an amphibian presence/absence survey of this pond was recommended to make a full evaluation. Access to survey the pond has, however, been refused.

The aim of the current assessment was to evaluate the suitability of the habitat within the residential development sites as terrestrial habitat for great crested newts and to assess habitat availability in the wider landscape surrounding the pond. This information has been used to inform an assessment of the likelihood of great crested newts (*Triturus cristatus*, if present within the pond) to be using the proposed development site. Recommendations are made as to requirements for further survey and/or mitigation and enhancement measures.

The remaining development proposals are more distant from the known pond, are on brownfield sites and / or isolated from the identified pond by Chipping Brook and are not considered further in this assessment.

Methodology

Desk Study

A desk study and data search was conducted in July 2015. Records for protected/notable species on and within 2 km of the site were obtained following a data search with Lancashire Environment Record Network (LERN). Online resources were also searched for records of great crested newts.

Ordnance Survey maps and aerial photographs were used to identify the presence of water bodies and notable habitats such as hedgerows and woodland within 0.25 km of the development area, in order to establish if the land could be used as aquatic or terrestrial habitat for great crested newts.

Field Assessment

The site visit was undertaken on the 15th July 2015 by Louise Redgrave, MA (Oxon), MSc, CEcol, CEnv, MCIEEM. The weather was sunny with intermittent cloud, no wind and warm. The survey involved a thorough walkover and habitat assessment of the proposed development site focussing on the residential development areas which are closest to the pond. The assessment also involved a walkover of the wider landscape using public rights of way and roads.

English Nature (2001) advises that, ponds up to 500 m away from a development site should be checked, if it is thought likely that great crested newt populations centred on these ponds would be affected by changes to the plot.

Further to the above guidance, Natural England's licensing method statement template (Form WML-A14-2 (version April 2013¹)) advises that for developments resulting in permanent or temporary habitat loss at distances over 250 m from the nearest pond, careful consideration should be given to whether a survey is appropriate.

In terms of impact assessment, English Nature (2001) advises that destruction of terrestrial habitat within 50 m of a breeding pond represents a high impact, within 50-250 m a medium impact and beyond 250 m a low impact.

¹ <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>

Survey Results

The results of the desk study and field assessment are described below. A habitat map and associated photographs are included in Appendices B and C respectively.

Desk study

The desk study results from LERN did not identify any records for great crested newts within 2 km of the site. There were records, however, for common frog (*Rana temporaria*), common toad, smooth and palmate newts (*Lissotriton vulgaris* and *L. helveticus*). None of these records were from within the development areas. The nearest record of great crested newt on the NBN gateway² is from just south of Longridge, over 7 km to the south-west of Chipping.

The search of Ordnance Survey maps and aerial photographs identified three further ponds within 500 m of Parcel 2:

- The Mill pond (Photo 14) approximately 40 m north of Parcel 3 on the opposite side of Chipping Brook;
- A pond within an area of woodland approximately 250 m north of Parcel 3, also on the opposite side of Chipping Brook; and
- A pond within Brickhouse Cottages, approximately 460 m to the south.

The Mill pond has previously been scoped out as being unsuitable for great crested newts, but potentially suitable for common toad. It is a large water body (approximately 3,500 m²) with a large number of mallard (50+) present at the time of survey and is likely to support fish, both of which predate on great crested newt eggs and larvae. There was also no marginal vegetation for egg laying and limited submerged vegetation.

The pond within the woodland is considered likely to be isolated from the proposed development areas, the Chipping and Dobson's Brooks likely to provide barriers to movement of newts being relatively fast flowing (Photo 15).

The pond at Brickhouse Cottages is considered to be sufficiently distant from the development proposals to be not affected.

Field assessment

Description of habitat within development parcels 2 and 3

A large part of Parcel 2 (the nearest proposed development area to the pond), is occupied by a cricket field comprising close mown grassland (Photo 1). At the south western end (nearest to the pond) there is a strip of rough grassland approximately 10 m wide which provides good cover for amphibians (Photo 2 – NB the extent of this area appears to have been reduced since Ecology Services 2013 report). Within this strip was a pile of brash (Photo 3). There is a narrow strip (approximately 3 m wide) of rough grassland along the southern margin of the field. The ground at the time of the site visit was waterlogged and it is therefore considered unsuitable as hibernation habitat.

² Data courtesy of the NBN Gateway with thanks to all the data contributors. The NBN and its data contributors bear no responsibility for the further analysis or interpretation of this material, data and/or information.

Parcel 2 includes an area of dense scrub adjoining the eastern end of the cricket field (approximately 2,000 m²). The ground beneath the dense scrub near the southern boundary is largely devoid of vegetation or suitable cover for great crested newts (Photo 4). The ground appears fairly consolidated with few crevices that could provide shelter for great crested newts if present. Outside of the proposed development area to the north east but continuous with the dense scrub is an area of rough grassland with scattered scrub and an area of broadleaved plantation. The rough grassland with scattered scrub, provides suitable terrestrial habitat for great crested newts (if present) (Photo 6). Vegetation cover at the ground level beneath the broad-leaved plantation is greater with grass and locally dominant common nettle (Photo 5). As with the areas of dense scrub, the ground appears to be fairly consolidated with few crevices.

The south western and southern boundaries of Parcel 2 comprise tree lines (Photos 1 and 2) with good cover for great crested newts amongst roots and scrub at their bases. There is a row of planted poplar trees with a wire fence alongside the access track along the north-western boundary (Photo 7). A bank (part of which is reinforced with a stone wall) with hedge forms the majority of the boundary along the northern side providing good terrestrial habitat for great crested newts. There is an internal hedgerow between the cricket ground and the area of dense scrub, rough grassland and broadleaved plantation at the north-eastern end of the site.

Parcel 3 lies beyond 280 m of the pond in question and there is a high, vertical, mortared stone retaining wall along the roadside to the south for much of its length which would pose a barrier to movement of great crested newts, although the site is accessible from the west. Parcel 3 comprises rough pasture bordered by hedgerows.

Description of habitat within 250 m of the pond

The pond is approximately 160 m south west of Parcel 2 (not 100 m as stated in the Ecology Services report) and 280 m south west of Parcel 3. The habitat within 50 m of the pond comprises garden (including a small area of conifer plantation with a grass dominated ground flora (Photo 10)). A domestic duck and goose were observed in the field in the vicinity of the pond (although the pond itself was not visible due to the topography). To the south is an area of poor semi-improved grassland which was being grazed by sheep at the time of survey (Photo 11) and to the north is an area of marshy grassland (Photo 12).

Within 50-250 m of the pond the surrounding land comprises further poor semi-improved pasture and marshy grassland, improved grassland, close-mown amenity grassland (cricket ground and playing field), gardens and hedgerows. There are a couple of rough grass banks within the playing fields adjacent to the north western boundary and between two of the pitches (Photo 13). Approximately 8,400 m² of the western end of Parcel 2 lies within 250 m of the pond predominantly comprising close-mown amenity grassland with a 10 m wide strip of rough grassland along the south-western boundary and tree lines along the boundaries.

Evaluation

An evaluation of the habitat quality within 50 m of the pond, 50-160 m (the edge of parcel 2) and 160-250 m is provided in the table below. The table show that there is more good quality habitat in closer proximity to the pond than beyond 160 m encompassing the proposed development site. The good quality habitat beyond 160 m of the pond is limited to small strips of rough grassland along the south western boundary of Parcel 2 and within the playing fields and hedgerows. There is no reason to expect great crested newts to be travelling as far from their breeding pond as the development site, given the availability of suitable terrestrial habitat within closer proximity to the pond.

Distance from pond	Habitat description	Evaluation
0-50 m	Garden (including a small area of conifer plantation with a grass dominated ground flora), poor semi-improved grassland, marshy grassland and hedgerows.	Good quality: marshy grassland and conifer plantation.
		Poor quality: grazed, poor semi-improved grassland
50-160 m (edge of Parcel 2)	Marshy, rough grassland, grazed poor semi-improved, improved and amenity grassland, conifer plantation and hedgerows.	Good quality: marshy and rough grassland, conifer plantation and hedgerows.
		Poor quality: grazed poor semi-improved, improved and amenity grassland.
160-250 m	Grazed poor semi-improved, improved, close-mown amenity (cricket ground and playing field) and rough grassland (within playing fields and south-western boundary of parcel 2) and hedgerows.	Good quality: rough grassland (small amounts) and hedgerows.
		Poor quality: grazed poor semi-improved, improved and close-mown amenity (cricket ground and playing field).

Impact Assessment and Recommendations

The desk study has not identified any records for great crested newts within 2 km of the proposed development site. The nearest known record being approximately 7 km from the site.

Parcel 3 and approximately 45% of Parcel 2 lie beyond 250m of the pond in question, a distance beyond which English Nature (2001) considers that the impact of permanent habitat loss to be low and Natural England's licensing method statement template (Form WML-A14-2 (version April 2013) advises that careful consideration should be given to whether a survey is appropriate. Natural England's guidance in the method statement template recognises a 'risk-averse' culture surrounding mitigation and licence applications and recommends a shift towards a 'more proportionate approach to mitigation, addressing tangible impacts on populations whilst giving lower priority to negligible effects' and that such an approach is consistent with the aims of the Habitats Directive.

English Nature (2004) states that "*The most comprehensive mitigation, in relation to avoiding disturbance, killing or injury is appropriate within approximately 50m of a breeding pond. It will also almost always be necessary actively to capture newts 50-100m away. However, at distances greater than 100m, there should be careful consideration as to whether attempts to capture newts are necessary or the most effective option to avoid incidental mortality... At distances greater than 200-250m, capture operations with hardly ever be appropriate.*"

In a study in western France, 50% of radio-tracked great crested newts remained within only 15 m of the pond shore; 95% remained within a radius of 63 m (Jehle, 2000).

The majority of the habitat within 250 m of the pond is close mown amenity grassland which provides poor quality terrestrial habitat for great crested newts. The 10 m wide margin of rough grass along the south-western boundary (approximately 1,250 m²) and the treelines bounding the site offer good quality terrestrial habitat. The area of dense scrub to be affected beyond 250 m of the pond offers poor quality habitat for great crested newts there being little ground cover and the ground being fairly consolidated with few crevices.

The habitat within 250 m of the pond outside of the development sites comprises poor semi-improved, improved, amenity and marshy grassland under varying management, gardens and hedgerows. There is no reason to believe that great crested newts (if present) would be preferentially using suitable habitats within the development site.

Access has been refused to survey the pond to establish whether or not great crested newts are present and the population size if present. Given the limited suitable habitat within the development site and its distance from the pond, it is not considered that this information is critical as, if present in the pond, it is considered relatively low risk that they would be present within the development site and affected by the development. There are also no known records of great crested newts within at least 2 km of the site. Rather than undertake a terrestrial habitat survey of the site which is an inefficient method of surveying for great crested newts, labour intensive and also disturbing to great crested newts and other wildlife (if present), a precautionary approach to development is recommended to minimise impacts on great crested newts.

To minimise risk of great crested newts (if present) using the site, the mown area of parcel 2 should be maintained close mown. It is recommended that the rough grass margin and

boundary habitats are retained and protected during development. If this is not possible, reasonable avoidance measures (RAMS) should be employed as detailed below:

- Before construction works commence, all contractors must receive a 'tool-box' talk or site induction from a suitably qualified ecologist to make them aware of the potential for amphibians, legislative context and procedure if amphibians are encountered during works;
- The construction of the new access through the northern boundary hedge and bank, although beyond 250 m of the pond, should be overseen by an ecologist in case any great crested newts are encountered;
- The rough grassland habitat adjacent to the south-western boundary is not considered to offer hibernation potential as the ground is waterlogged. As such if vegetation clearance is undertaken during the winter months, there should be no impact on great crested newts;
- If clearance of rough grassland is undertaken during the active season for great crested newts, no more than two weeks prior to works commencing on site, all vegetation within any working areas, where required, should be cut or removed using hand held machinery (i.e. strimmer, brushcutter, chainsaw) to a height of no less than 150 mm;
- The working area must be left for a minimum of two days to allow any amphibians that may be present to move out of the immediate area. A second cut using hand held machinery (i.e. strimmer or brushcutter) should be then carried out to a height of 50 mm;
- Any brash/log piles should be dismantled by hand and be taken out of the working area for use to create habitat piles in suitable locations outside of the proposed works location;
- Hand search for amphibians within the cleared areas must be completed by a suitably qualified ecologist after vegetation strimming is completed and immediately prior to the commencement of construction works;
- Any excavations should be backfilled, covered over, or a means of escape provided (e.g. plank) at the end of each day in order to prevent amphibians becoming stranded within trenches;
- All works, stockpiling of materials or storage of machinery must be contained within sub-optimal habitat (bare ground, amenity grassland or hard standing);
- In the event that any great crested newts are encountered during the works, all works must cease immediately and the ecologist contacted for further advice. Any great crested newts should be moved by a suitably qualified ecologist to a suitable location outside the works location.

To mitigate potential habitat loss, areas of rough grass should be provided/retained around the margins of the development site. A hedgerow/scrub should be planted along the boundary inside the line of poplars to provide additional cover for great crested newts (if present). Given the low density of ponds present within the wider landscape, provision of a new pond(s) would be of benefit to wildlife.

References

Ecology Services (2015). Land off Malt Kiln Brow, Chipping. Ecological Scoping & Habitat Appraisal Report.

Ecology Solutions (2013). Chipping, Near Preston, Lancashire: Ecological Assessment.

English Nature (2001). Great Crested Newt Mitigation Guidelines. <http://publications.naturalengland.org.uk/file/136001>.

English Nature (2004). An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt *Triturus cristatus*. English Nature Research Report 576.

Report prepared by:

Louise Redgrave, MA (Oxon), MSc, CEcol, CEnv, MCIEEM
Principal Ecologist
Bowland Ecology Ltd,
2 York Street,
Clitheroe,
Lancs.
BB7 2DL
01200 446777

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Appendix A – Illustrative Masterplan



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- KEY PLAN:
- Application Site Boundary
 - Additional Land In Ownership of Applicant

C: 07/05/15 Residential layout revised. Traffic centre removed.
 B: 13/10/14 Footpath to K&M bridge amended.
 A: 03/02/14 Proposed bridge removed, cricket pavilion relocated.



5plus architects
 4th Floor
 The Hive
 41 Leam Street
 Manchester
 M1 1TN
 +44 (0)161 228 9211
 www.5plusarchitects.com

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 Chipping
 Masterplan
 TITLE:
 Indicative Masterplan
 SCALE: 1:2000 A1
 ORDER DATE: 20.08.13
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 CHECKED: JM
 PROJECT NUMBER:
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 REV: C
 Architecture | Masterplanning | Interiors | Graphics | Branding

Appendix B – Habitat map



Appendix C – Photographs

Photo ref.	Photo	Description
1		<p>Development Parcel 2 is currently managed as a cricket field predominantly comprising close mown grassland.</p>
2		<p>There is a rough grass margin (approximately 10m wide) adjacent to the south western boundary.</p>
3		<p>A pile of brash within the rough grass margin.</p>
4		<p>Dense scrub habitat within development parcel 2 with predominantly bare ground beneath. The ground was fairly consolidated with few/no suitable crevices to provide shelter for great crested newts if present.</p>

Photo ref.	Photo	Description
		
5		<p>Area of immature broadleaved plantation (outside development area) with grass dominated ground flora.</p>
6		<p>Rough grassland habitat with scattered scrub (outside development area).</p>
7		<p>Line of mature poplar trees along access track bordering north western boundary.</p>

Photo ref.	Photo	Description
8		<p>Hedge and bank forming northern boundary of development parcel 2.</p>
9		<p>View across development parcel 3 from the south.</p>
10		<p>Conifer plantation area within garden adjacent to pond with grass dominated ground flora.</p>
11		<p>View towards conifer plantation area within garden adjacent to pond. The pond is located immediately adjacent to the property within the adjoining field. The field in the foreground supports improved grassland (silage crop?), the field within which the pond is located supports poor semi-improved grassland and was being grazed by sheep at the time of survey.</p>

Photo ref.	Photo	Description
12		<p>Marshy grassland habitat to the north of the property and garden immediately beyond which lies the pond.</p>
13	 	<p>Rough grass bank and hedge along the northern boundary of the playing fields, immediately south of development parcel 2.</p> <p>Rough grass bank between two pitches within the playing fields immediately south of development parcel 2.</p>
14		<p>The mill pond.</p>

Photo ref.	Photo	Description
15	 A photograph showing a narrow, rocky stream flowing through a dense forest. The water is clear and appears to be moving quickly over the stones. The surrounding vegetation is lush and green, with various types of leaves and ferns visible.	The relatively fast flowing Chipping Brook.