# aspect ecology Technical Briefing Note

## Project: Land at North West Bicester

# **Great Crested Newt Mitigation Strategy**

## Date: September 2022

### 1. Introduction

- 1.1. Aspect Ecology is acting on behalf of Firethorn Developments Ltd. in respect of land at North West Bicester. The site is proposed for the development of a new neighbourhood of up to 530 homes, with associated access and landscaping (planning application reference 21/01630/OUT).
- 1.2. To inform the application, the site was surveyed in May 2020 based on standard extended Phase 1 methodology. In addition, a general appraisal of faunal species was undertaken to record the potential presence of any protected, rare or notable species and specific faunal surveys were undertaken in respect of bats, Badger, Water Vole, Otter, birds, reptiles, Great Crested Newt and Brown Hairstreak butterfly. The findings of this survey work are set out within Aspect Ecology's Baseline Ecological Appraisal report, dated April 2021, which accompanied the Environmental Statement (ES) submitted as part of the application.
- 1.3. In response to this application, consultation comments have been received from the Ecology Officer at Cherwell District Council and Newt Officer for Oxfordshire at Naturespace (emails dated April, May and June 2022). These have raised queries in relation to the method employed and the presence of Great Crested Newt, in particular that the eDNA results are out of date and the scoping out of some ponds was not ecologically justified, and cannot be relied on as proof of absence.
- 1.4. Accordingly, a note is provided with further consideration of this species, setting out why the current scope of survey is considered to be appropriate, but nevertheless indicating that update surveys could be undertaken at the pre-commencement stage and setting out a precautionary mitigation approach which could be implemented to ensure Great Crested Newt, if present, would be fully safeguarded under the proposals and the necessary licensing procedures followed.
- 1.5. Ponds referred to within this note are identified at the attached plan 5903/GCN1.

#### 2. Legislation and Ecology

#### Legislative Context

2.1. Although Great Crested Newts are regularly encountered throughout much of lowland England and Wales, the UK holds a large percentage of the world population of the species. As such, the UK has an international obligation to conserve the species and it receives full protection under domestic and European legislation. Specifically, Great Crested Newt is classified as a European Protected Species and therefore receives protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:



- Deliberately kill, injure or capture a Great Crested Newt;
- Deliberately disturb Great Crested Newts, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to hibernate, or migrate, or which is likely to affect significantly their local distribution or abundance;
- Deliberately take or destroy the eggs of a Great Crested Newt;
- Damage or destroy a breeding site or resting place of a Great Crested Newt.
- 2.2. In addition, the Great Crested Newt is also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:
  - Damage or destroy, or obstruct access to, any structure or place which any Great Crested Newt uses for shelter or protection; or
  - Disturb any Great Crested Newt while occupying a structure or place which it uses for that purpose.

#### **Licensing**

2.3. If proposed development work is likely to result in an offence a licence may need to be obtained from Natural England.

#### **Ecology**

- 2.4. The Great Crested Newt is our largest species of newt and can reach over 15cm in length. Like other British amphibians it spends much of its time in a terrestrial phase and is normally only present in water during the breeding season. It is a long-lived species and in captivity has been reported to reach 27 years of age, albeit the general lifespan is likely to be considerably lower than this figure. It feeds on a range of small invertebrates.
- 2.5. Great Crested Newts utilise terrestrial habitats surrounding their breeding ponds, with typically the majority of activity centred within 100m of the breeding pond and the maximum routine migratory activity usually considered to occur within 250m of the pond. Ideal terrestrial habitat will contain a high proportion of semi-natural habitat such as woodland, scrub and unimproved pasture. A range of different water bodies are used for breeding but generally share one common theme in that they typically lack fish.
- 2.6. Unlike other newt species, Great Crested Newt efts (larvae) are active swimmers making them particularly susceptible to fish predation. Once fully metamorphosed, the young leave the pond and disperse into the surrounding habitat, most typically returning to the pond to breed once mature (2 3 years for males and 3 4 years for females).

#### 3. Survey and Site Assessment

#### Site Characteristics and Habitats

3.1. The site is located to the north west of Bicester, Oxfordshire, south west of the B4100. The site is bound to the north-west by arable land and to the south-west by a watercourse, beyond which lies further agricultural land. The B4100 bounds a portion of the north-eastern boundary of the site whilst the Bicester Exemplar Scheme, comprising residential dwellings and active construction areas, bounds the remaining north-eastern boundary and south-eastern boundary.



3.2. The site itself is approximately 22ha in size, divided into two parcels and comprises a number of grassland fields and arable land, intersected and bound by hedgerows. A number of small areas of scrub and woodland are also present, whilst a watercourse flows off-site adjacent to the southern and eastern boundaries.

#### **Background Information**

- 3.3. No specific records of Great Crested Newt from within or adjacent to the site were returned from Thames Valley Environmental Records Centre (TVERC) during the initial desktop study. Two records of Great Crested Newt were returned from the search area surrounding the site, with the closest record located approximately 1.1km to the south of the site and the other located 1.3km to the west of the site.
- 3.4. Survey information has also been reviewed for two previous planning applications within the immediately vicinity of the site, which examined some of the ponds discussed in this document. The first of these relates to the Bicester Exemplar Scheme (10/01780/HYBRID) and the second is for large-scale development to the north west of Bicester (14/01384/OUT).
- 3.5. For the Bicester Exemplar Scheme, four ponds were surveyed in 2010 including pond D relevant to the current application (identified at Plan 5903/GCN1). Pond D received a HSI score of 0.47 (poor) and was noted to have dried out early on in the summer and therefore does not support suitable breeding habitat. No Great Crested Newt were recorded during the survey. Consideration was also given to pond C within the grounds of Caverfield House, although it was not possible to gain survey access to these ponds. However, the previous survey noted that pond C is a large fish pond which is unsuitable for Great Crested Newt, whilst it is isolated from other ponds potentially supporting this species. The planning application has since been granted, and it is understood that there has been no requirement for Great Crested Newt mitigation (nor update Great Crested Newt surveys) as part of the scheme on the basis of these survey results.
- 3.6. For the wider North West Bicester application, numerous ponds were surveyed in 2010, the majority of which were located in or around the village of Bucknell, together with scattered ponds further to the south. Populations of Great Crested Newt were recorded at Bucknell (over 800m to the west of the current application boundary) and from the ponds to the south (approximately 2km to the south of the current application boundary). The survey also included pond E relevant to the current application, with no Great Crested Newt recorded at this pond. This application also scoped out the ponds located at Caversfield House (pond C) on the basis that these were unsuitable for Great Crested Newt.

#### 2020 Survey Work and Assessment

3.7. Based on the review of previous surveys and OS mapping, two ponds were identified for survey in 2020, identified as P1 and P2 on Plan 5903/GCN1. An initial appraisal of the ponds was made using the HSI assessment methodology in 2020 to identify suitability for Great Crested Newt. The HSI assessment calculated that pond P2 had a below average suitability to support Great Crested Newt and pond P1 was found to be dry at the time of survey. An eDNA assessment was subsequently undertaken at pond P2 which returned a negative result.

#### Review of Waterbodies within 500m of the Site

3.8. Following the 2020 survey work and submission of the application, queries have been raised by the Ecology Officer at Cherwell District Council and Newt Officer for Oxfordshire at Naturespace



regarding the scope of the Great Crested Newt survey (as detailed in Section 1 above). On this basis, a review of all ponds identified within 500m of the site and justification for the survey effort undertaken is set out below in Table 3.1.

Table 3.1. Review of waterbodies within 500m of the site

Pond	Justification of survey effort
1	Not surveyed – recorded to be dry during 2020 survey.
2	Subject to eDNA survey in 2020. Natural England guidance (set out in the licensing method statement spreadsheet) indicates that surveys 2-3 years in age are valid for licensing, whilst this should certainly be valid for planning. Natural England district licensing accepts data up to 4 years in age.
A	Not surveyed – comprises a newly constructed ornamental pond (post 2018 based on historic aerial photography), and as such is suboptimal for Great Crested Newt whilst is unlikely to have been colonised.
В	Not surveyed – comprises a septic tank with a cover and as such is unsuitable for Great Crested Newts.
С	Not surveyed – comprises a large on-line waterbody which is understood to be an ornamental fishing lake and therefore unlikely to be suitable for Great Crested Newt. Scoped out of previous 2010 surveys, whilst barriers are present to dispersal including a road and stone wall.
D	Not surveyed – outside of 250m from site boundary (approximately 370 metres from the site). No evidence of Great Crested Newt during previous 2010 survey and considered unsuitable for breeding due to drying up early during season.
E	Not surveyed – outside of 250m from site boundary (approximately 300 metres from the site). No evidence of Great Crested Newt during previous 2010 survey.

- 3.9. The scoping out of pond C is consistent with the previous applications within the immediate site surrounds, whilst it is unlikely that survey access could be gained in any case based on the previous survey information.
- 3.10. In regard to ponds D and E, these were not surveyed in 2020 as they are located over 250m from the site boundary. This is supported by Natural England guidance (set out in the licensing method statement spreadsheet) which states:

"In keeping with a proportionate and risk-based approach, surveys need reasonable boundaries. [...] For developments resulting in permanent or temporary habitat loss at distances over 250m from the nearest pond, carefully consider whether a survey is appropriate. Surveys of land at this distance from ponds are normally appropriate when <u>all</u> of the following conditions are met [emphasis added]: (a) maps, aerial photos, walkover surveys or other data indicate that the pond(s) has potential to support a large great crested newt population, (b) the footprint contains particularly favourable habitat, especially if it constitutes the majority available locally, (c) the development would have a substantial negative effect on that habitat, and (d) there is an absence of dispersal barriers."

3.11. In the case of ponds D and E, previous survey data indicates that these ponds are unlikely to support a large Great Crested Newt population, barriers to movement are present in the form of a minor road and arable land, whilst more favourable terrestrial habitat is present in the form of woodland within the immediate surrounds of the ponds. Accordingly, a 250m survey boundary is considered appropriate in this instance. This is also in accordance with the Natural England boundary for district licensing, which only considers ponds up to 250m.



3.12. On this basis, the scope of the survey work is considered appropriate and in accordance with previous applications.

#### Assessment of Likely Status of Great Crested Newt at the Site

- 3.13. Due to the absence of records of Great Crested Newt from within or adjacent to the site, and the absence of the species during previous survey work, it is considered that this species is unlikely to form a constraint at the site. Accordingly, no mitigation is currently proposed for this species.
- 3.14. However, it is noted that the previous survey work is several years old, and given the queries raised by the Ecology Officer at the Council, it may be prudent to undertake update surveys at the post-consent stage to confirm continued absence of the species and whether any specific mitigation or licensing is required. It is considered that this could be conditioned, in accordance with the exceptional circumstances set out under Section 9.2.4 of BS42020<sup>1</sup>, namely *"to confirm the continued absence of a protected species"*.
- 3.15. Accordingly, to satisfy the Council in regard to the current application that Great Crested Newt, if present, could be fully safeguarded under the proposals, and the three 'licensing tests' could be met, a precautionary mitigation strategy is set out at Section 4 below, to be implemented in the event that Great Crested Newt is identified during update pre-commencement surveys. If required, this would be detailed as part of a European Protected Species (EPS) development licence.
- 3.16. In regard to pond C, it is noted that survey access was not obtained by previous surveyors, and it may not be possible to carry out update surveys at this pond. Survey access will be sought, although in event that this is not secured, it will be necessary to make an assessment regarding likely presence based on other available survey data together with the characteristics of the pond and surrounding habitats.

#### 4. Great Crested Newt Mitigation Strategy

#### Introduction

- 4.1. Great Crested Newts are considered unlikely to be present at the site. However, given the queries raised by the Ecology Officer at the Council, update surveys could be undertaken at an appropriate stage (pre-commencement on-site) to confirm the continued absence of the species. In the unlikely event that Great Crested Newt are recorded, in accordance with best practice guidelines, and to ensure compliance with relevant legislation, a mitigation strategy will be put in place to take reasonable steps to minimise any potential impact on Great Crested Newts. An overview of this mitigation strategy is set out below.
- 4.2. The proposed further survey work would provide the necessary information to satisfy Cherwell District Council in regard to the current application that Great Crested Newt, if present, could be fully safeguarded under the proposals, and the three 'licensing tests' could be met. If required, the mitigation strategy set out below would be further detailed as part of an EPS development licence.

<sup>&</sup>lt;sup>1</sup> British Standards Institution (2013) 'Biodiversity – Code of practice for planning and development', BS 42020:2013



#### Assessment of Impact on Great Crested Newt (If Present)

- 4.3. The site itself is predominantly long sward grassland with areas of uncultivated arable land and woodland, with associated hedgerows, scrub and other smaller features. Only pond P2 is located within the site boundary while ponds A-E and P1 are offsite. None of the ponds are considered to provide optimum breeding habitat for Great Crested Newt, such that in the unlikely event this species has colonised any waterbodies, populations are likely to be low at most.
- 4.4. Other than P2, which was previously recorded to be dry, all other ponds are located offsite, and would therefore not be directly affected by the proposals. Ponds P1 and P2 (in close proximity to the site) may be at risk of runoff of pollutants from construction works and during operations, whilst large areas of terrestrial habitat are to be impacted, which could result in injury or disturbance to newts if present. Accordingly, if Great Crested Newt was recorded as present, the proposed development would likely result in a low-medium scale impact at the local level without mitigation.

#### **Consideration of Licensing**

- 4.5. In the unlikely event that Great Crested Newt are identified to be present within ponds surrounding the site, an EPS licence would be required to fully adhere to domestic and European legislation. When determining whether to grant a licence, Natural England would need to give consideration to the three derogation tests under Article 16 of the Habitats Directive (1992), namely whether the development is for imperative reasons of overriding public interest, no satisfactory alternative, and maintenance of favourable conservation status.
- 4.6. The need for the development is set out by the planning documents associated with the application. In summary, the scheme will meet a local need for new housing on a site which is identified for development within the adopted Local Plan (and the subject of a Supplementary Planning Document), whilst providing social and economic benefits in the form of new jobs. It would not be possible to develop the site without potentially affecting newt habitats, and no development would not provide a satisfactory outcome in terms of meeting the housing need. In terms of maintenance of favourable conservation status, this would be achieved through implementation of safeguarding measures and provision of habitat opportunities within the proposed development as set out below.
- 4.7. On the basis of the above, it is therefore considered that, subject to planning permission being granted and confirmation of the detailed measures in line with those set out below, there is no reason to suggest that any associated licence would be unlikely to be granted by Natural England. An outline of the proposed mitigation strategy to be implemented if Great Crested Newt are recorded is set out below.

#### **Construction Safeguards**

4.8. *Translocation Exercise*. Prior to development works commencing, it will be necessary to capture and exclude newts from affected areas. This will involve the erection of amphibian exclusion fencing around the development areas, subdivided by drift fencing. Pitfall traps and refugia (comprising buried buckets which newts will fall into, and squares of carpet that newts will shelter under) will be placed throughout the fenced area in order to catch any newts that may be present. A period of translocation will follow this, likely comprising at least 30 consecutive days of trapping (based on an expected low population of newts at most) between March and October, until 5 consecutive days of no captures have been achieved. The traps will then be



closed and a destructive search will ensue, which involves a search of point features (e.g. brash or rubble piles) under the supervision of a suitably qualified ecologist.

- 4.9. Any newts caught during this exercise will be relocated to retained habitats within the site, outside of the amphibian exclusion fencing. There is a suitable area of woodland within the site which is to be retained under the proposals which could act as a receptor site for these translocations, see plan 5903/GCN2. This could be enhanced through creation of additional hibernacula features.
- 4.10. *Maintenance and removal of exclusion fencing*. The exclusion fencing will be maintained for the duration of the construction works to prevent newts re-entering the construction area. This will include maintenance of habitats either side of the fence through cutting or herbicide treatment to prevent tall vegetation developing which could assist newts in climbing the fence. Once construction works are complete, the fence will be removed, allowing for dispersal of newts into areas of open space within the completed development.
- 4.11. *Engineering safeguards*. Appropriate safeguards will be implemented during construction works to minimise the risk to surrounding waterbodies from surface runoff of pollutants. This will include careful storage of chemicals, fuels, etc., provision of spill kits and management of site drainage.

#### New Habitat Provision

- 4.12. No ponds are lost to the proposals, and therefore there is no requirement for new pond creation. Additionally, no terrestrial habitat of elevated value to newts is likely to be impacted under the proposals. Nevertheless, the site proposals incorporate numerous areas of public open space and associated planting, providing a substantial network of suitable foraging habitat for newts and other species. The focus of habitat creation to the open space areas proposed under the scheme also ensures the long-term management of these areas as part of the open space management arrangements.
- 4.13. An overview of the proposals is provided at Plan 5903/GCN2. As this indicates, the existing woodland onsite is retained and the hedgerows between parcel 2 and 3 are largely maintained. Linear areas of open space are to be provided between development areas and around the boundaries of the site, incorporating a range of grassland, scrub and wetland features and forming potential corridors for movement of Great Crested Newts, ensuring connectivity is maintained. In addition, numerous drainage features are proposed as part of the Sustainable Drainage System (SuDS) which could incorporate areas of permanent water to provide additional breeding opportunities for this species.
- 4.14. On this basis, it is considered that suitable habitat provision for Great Crested Newt could readily be incorporated under the existing proposals for the site.

#### **Population Monitoring**

4.15. Based on the likely low scale impact and small population (if present), it is not considered necessary to undertake population monitoring following the completion of the development (in accordance with English Nature guidelines<sup>2</sup>). However, should a significant number of Great Crested Newt be encountered during the update survey, a monitoring effort will be implemented to reflect the population and impacts present.

<sup>&</sup>lt;sup>2</sup> English Nature (2001) 'Great Crested Newt Mitigation Guidelines'



#### 5. Conclusion

- 5.1. Aspect Ecology is acting on behalf of Firethorn Developments Ltd. in respect of land at North West Bicester, proposed for residential development.
- 5.2. Ecological survey work has been undertaken to inform the application, including a Great Crested Newt survey undertaken in 2020. However, queries have been raised by the Ecology Officer at the Council regarding the age of the survey data and scope of the survey work undertaken.
- 5.3. This note provides further justification of the survey work undertaken, demonstrating that the scope of the survey work is appropriate and in accordance with previous applications in the immediate vicinity of the site.
- 5.4. Nevertheless given the queries raised, specific update survey work could be undertaken at an appropriate stage prior to commencement of development to confirm the continued absence of the species from the site. To satisfy the Council that Great Crested Newt, if present, would be fully safeguarded under the proposals and the three licensing tests can be met, a precautionary mitigation strategy is therefore set out in Section 4 above.
- 5.5. In conclusion, the measures outlined in this report will ensure that Great Crested Newt, if present, will be fully safeguarded whilst allowing the appropriate progression of the proposed development works. If the proposed surveys confirm the continued absence of Great Crested Newt as expected then the proposed mitigation will not be necessary.



Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

Key:			
	Site Boundary		
	250m Buffer Around Site Boundar	Ъ	
	Ponds		
Pond 1	Dry at time of 2020 survey work and so further survey or assessment undertak		
Pond 2	Subject to an eDNA survey in 2020 whi returned a negative result		
Pond A	Comprises a new, ornamental pond wh appears to have been recently constru- following a review of aerial mapping ar therefore been scoped out from furthe assessment	cted nd has	
Pond B	Comprises a septic tank and has theref been scoped out from requiring furthe assessment		
Pond C	A large on line waterbody, likely to com an ornamental fishing lake. On this bas additon to the presence of dispersal ba between the waterbody and the site in form of a road and stone wall, this waterbody is considered unlikely to su Great Crested Newt and has therefore scoped out from requiring further surv work	is, in arriers 1 the pport been	
Pond D	Located over 250m from the site boun and therefore has been scoped out fro further surveys being undertaken		
Pond E	Located over 250m from the site boun and therefore has been scoped out fro further surveys being undertaken		
as		ogy	
Aspect Ecology Limited - West Court - Hardwick Business Park Noral Way - Banbury - Oxfordshire - OX16 2AF 01295 279721 - info@aspect-ecology.com - www.aspect-ecology.com			
L	and at North West Bicester	PROJECT	
	Pond Location Plan	TITLE	
	5903/GCN1	DRAWING NO.	



Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262