



**New Barn Farm, Sibford Gower,
Oxfordshire OX15 5RY**

**Great Crested Newt Habitat Assessment &
Mitigation Strategy**

April 2023

on behalf of Mr & Mrs Burnford

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Client	Mr & Mrs Burnford
Job name	New Barn Farm, Sibford Gower, Oxfordshire OX15 5RY
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	Signed	Name	Position	Date
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1 Introduction

1.1 Site Description

New Barn Farm is a dwelling located approximately 1km to the south-west of the village of Sibford Gower in Oxfordshire OX15 5RY. The approximate Ordnance Survey grid reference for the property is SP 3416 3708.

The property comprises a dwelling and several attached and detached outbuildings set within areas of gravelled and concrete hard-standing. To the south and east of the house are gardens of lawns (amenity grassland), shrubberies and patios.

Approximately 60m to the east of the house is a pond, within an area of improved grassland and separated from the house by a lawn and driveway.

1.2 Proposals

There is a proposal to demolish the existing dwelling and to erect a new dwelling on a slightly different footprint. Some outbuildings will also be removed, and some retained. The proposals also include realignment of the existing driveway.

A plan of the proposals is presented within Appendix 1.

1.3 Background

A Habitat Suitability Index assessment of the pond at New Barn Farm was undertaken in 2021, with the result of an index of 0.81 (4 Acre Ecology, 2021), which indicates that the pond may be 'excellent' habitat for breeding great crested newts *Triturus cristatus*.

It is understood that great crested newt eDNA has been detected in the pond following an eDNA survey in the spring of 2022. This confirms the presence of great crested newts within this pond.

1.4 Aims

The aims of this study are to assess the potential suitability of habitats that will be directly affected by the proposals for great crested newts whilst on land, and to assess whether the proposed development is likely to result in 'damage or destruction' of places that great crested newts may use for 'shelter and protection'. This assessment is undertaken in light of the legal protection that is afforded to the species under The Conservation of Habitats and Species Regulations 2017.

In addition, this report presents a great crested newt Mitigation Strategy to avoid any potential impacts of killing or injury of great crested newts during the proposed works.

1.5 Personnel

This report has been prepared by Edward Bodsworth MA (Cantab) PhD MCIEEM following a site visit on 25th April 2023.

1.6 Great Crested Newt Ecology

Great crested newts are the largest of the three species of newt that occur in the UK. They are distinctive due to their relatively large size, dark colour and yellow or orange-coloured undersides covered in large black blotches. Males can be distinguished from females by the presence of a blue/grey flash on the tail and a jagged crest during the breeding season.

Great crested newts tend to spend the majority of their time on land, moving to ponds and pools to breed during the spring and summer (March to July), although some individuals can spend considerably longer within aquatic habitats. The female lays two or three eggs a day between March

and mid-July, until a total of 200 to 300 eggs have been laid. The eggs are laid on submerged aquatic plants, each carefully wrapped in a leaf.

The larvae (or efts) hatch after about three weeks and live in the pond as aquatic predators until they metamorphose into adult newts. They are vulnerable to fish predation, and water bodies containing fish are rarely used for breeding (this means that they do not usually use running water or larger lakes or ponds where fish are present).

After metamorphosis into air-breathing juveniles at about four months old, they live a terrestrial life until old enough to breed, which is at about two or three years of age. Both the juvenile newts and the adults (outside the breeding season) live in terrestrial habitats with dense cover, such as scrub, rough grass and woodland, usually within about 200-300 metres of the breeding pond. They rest during the day beneath rocks, logs or other shelters.

Larval newts usually feed on tadpoles, worms, insects and insect larvae. Adults hunt in ponds for other newts, tadpoles, froglets, worms, insect larvae and water snails. They also hunt on land for insects, worms and other invertebrates. During the winter months the newts hibernate under logs and stones. The newts normally return to the same breeding site each year, and can live as much as 25 years, although up to about 10 years is more usual.

Although it is understood that great crested newts can disperse up to 500m from their breeding ponds, research (Cresswell & Whitworth, 2004) that the majority of adult newts tend to remain within close proximity (50m) of a pond, where suitable terrestrial habitat is present, and that there is a sharp drop-off in captures of adult great crested newts beyond 100m of a breeding pond.

1.7 Legal Protection

Great crested newts and their habitat are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and under The Conservation of Habitats and Species Regulations 2017. Taken together, these make it an offence to:

- Deliberately capture or intentionally take a great crested newt
- Deliberately or intentionally kill or injure a great crested newt
- To be in possession or control of any live or dead wild great crested newt or any part of, or anything derived from a wild newt
- Damage or destroy a breeding site or resting place of such an animal or intentionally or recklessly damage, destroy or obstruct access to any place that a wild great crested newt uses for shelter or protection
- Intentionally or recklessly disturb any wild great crested newt while it is occupying a structure or place that it uses for shelter or protection
- Deliberately disturb great crested newts, in particular any disturbance which is likely
 - to impair their ability;
 - (i) to survive, breed, reproduce or to rear or nurture their young;
 - (ii) to hibernate;
 - to affect significantly the local distribution or abundance of the species to which they belong

Although the law provides strict protection to great crested newts, it also allows this protection to be set aside (derogation) under The Conservation of Habitats and Species Regulations 2017 through the issuing of licences (referred to as European Protected Species Licences or EPSL). Where a lawful operation is required to be carried out but which is likely to result in one of the above offences, a licence may be obtained from Natural England (the statutory body in England with responsibility for nature conservation) to allow the operation to proceed.

However, in accordance with the requirements of The Conservation of Habitats and Species Regulations 2017, a licence can only be issued where the following requirements are satisfied:

- The proposal is necessary 'to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- There is no satisfactory alternative';
- The proposals 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'.

These three criteria are often referred to as the 'three tests' of the Regulations. All three must be satisfied in order for a licence to be granted.

2 Habitat Assessment

2.1 Pond

The pond within the grounds of New Barn Farm is located within an area of agriculturally improved grassland approximately 60m to the east of the house. The pond is approximately 20m in diameter, and has a central island of approximately 7m diameter.

The pond is separated from the house by an area of lawn that appears to be regularly maintained through mowing to a short sward. Through the lawned area runs an existing gravelled driveway.

An eDNA survey undertaken in the spring of 2022 indicated that great crested newts are using this pond as a breeding habitat.

2.2 Terrestrial Habitat

Located between the pond and the house, and on either side of the existing driveway, are areas of well-maintained lawn. The lawn is species-poor and dominated by grasses, with herbs only present in low abundance and limited to daisy, dandelion, creeping buttercup and white clover; species typical of fertile and well-maintained lawns.

Areas of close-mown lawn are not considered to offer 'shelter and protection' to great crested newts whilst on land. This is due to the fact that the lawns are regularly maintained through mowing, and do not have a diverse sward structure or 'thatch' that might provide cover for great crested newts; please refer to Figure 2, Figure 3 and Figure 4 below.

Other habitats within the property include gravelled and concrete hard-standing, areas of which are located to the north of the house and between the house and its outbuildings. Areas of patio are also present within the garden to the south of the house, immediately outside the patio doors. The patio areas are solid and intact. Areas of gravelled and concrete hard-standing, as well as intact and solid patios, do not offer any potential shelter or protection to great crested newts whilst on land.

The only other habitat type that is present within the garden of the property, and that will be affected by the proposals, are some limited areas of shrub planting. Beneath the shrubs are areas of bare ground and some herbaceous garden planting. These limited areas of shrub and garden planting are not considered to offer potential shelter or protection to great crested newts whilst on land.

There are no specific features, such as log piles or garden rubbish piles, within the areas that will be affected by the proposals.

Whilst dispersing great crested newts may be moving through the lawns and gardens of the property, these habitats are not considered to offer suitable terrestrial habitat to the species whilst on land.

To the east of the pond is a field of improved grassland that appears to be less intensively managed than the lawns and garden of New Farm Barn. It is considered that this field may offer some shelter to amphibians whilst on land and that any newts that breed within the pond are likely to disperse to the east.



Figure 1. The pond at New Barn Farm.



Figure 2. Existing driveway to the east of the house, through areas of lawn.



Figure 3. Area of lawn between the house and the pond.



Figure 4. Area of lawn to the south of the house within a more formal area of garden.

2.3 Impact Assessment

The proposals will include the demolition of the existing house and some of its outbuildings, and the erection of a new dwelling on a slightly different footprint. With regard to habitat loss, this is likely to result in the loss of some lawn, patio, shrub planting and gravelled hard-standing. Please refer to Figures 5 to 8 for examples of habitats that may be lost/affected by the proposals.

The proposed realignment of the driveway will result in the loss of areas of lawn (Figure 3), but the existing route of the driveway will be re-instated as lawn and so there will be no permanent loss of amenity grassland in the long-term.

Given the above, it is considered that the proposals will not result in the 'damage or destruction' of places that great crested newts use for 'shelter and protection'. In addition, it is considered that with a suitable Mitigation Strategy in place (Section 3), inadvertent impacts of killing or injury of great crested newts can be avoided. In light of this, it is considered that there will be no significant impacts on great crested newts under The Conservation of Habitats and Species Regulations 2017.

Since no significant impacts are predicted, a European Protected Species (great crested newt) Licence will not be required for the proposed works to proceed, as long as the recommended Mitigation Strategy is followed. Since there are no predicted impacts on great crested newts or their habitats, it is not necessary to consider the 'three tests' of The Conservation of Habitats and Species Regulations 2017 in this instance.



Figure 5. The house at New Barn Farm, with lawns and shrub planting in the foreground.



Figure 6. Gravelled hard-standing to the north of the dwelling.



Figure 7. Patio area to the south of the dwelling.



Figure 8. Shrubs and gravelled hard-standing to the north side of the dwelling.

3 Mitigation Strategy

The owner will ensure that anyone undertaking construction works on the site (including sub-contractors) is made aware of the protected status of great crested newts and the procedure to follow in the unlikely event that great crested newts are discovered during works. The owner will ensure that all personnel on site are aware of the location of the pond and the fact that great crested newts are known to breed within the pond.

The following methods of working will be adopted:

- A 'no-go' zone will be established around the pond. This zone will be demarcated by fencing and no personnel will be allowed into the zone, unless in an emergency.
- The lawns will be maintained as a short sward (2-3cm) through regular mowing prior to the commencement of works, as well as during the construction period. The lawns will not be left unmown and will not be allowed to grow tall.
- Clearance of shrubs or other tall garden vegetation will be undertaken by hand or using a strimmer or brush cutter with all cuttings removed the same day. Cut garden vegetation will not be piled.

- Following removal of taller vegetation, remaining vegetation will be maintained at a height of approximately 2-3cm through regular mowing or strimming to discourage any newts moving into the area.
- Ground clearance of any remaining low vegetation and any ground works will only be undertaken following the works above.
- Any trenches or excavations left overnight will be covered or provided with ramps to prevent great crested newts from becoming trapped. Trenches/footings/foundations during construction will be checked regularly by site staff/owner for trapped newts.
- Any demolition materials will be stored in skips or similar containers rather than in piles on ground.
- During construction works, all machinery, equipment and materials will be stored on areas of hard-standing or on other areas identified as unsuitable for great crested newts of which there are many within the property (see Figures 9 & 10). Building materials will be stored on pallets to discourage amphibians from using them as shelter.
- No equipment, machinery, materials or waste will be stored within areas of lawn or garden.
- If at any point during construction works a great crested newt is encountered, works will stop immediately, and advice sought from a suitably qualified ecologist.



Figure 9. Area of concrete hard-standing to the north-west of the house.



Figure 10. Areas of concrete and gravelled hard-standing to the north-west of the house.

4 Conclusion

With the above Mitigation Strategy in place it is considered that there will be no significant impacts on great crested newts under The Conservation of Habitats and Species Regulations 2017.

Since no significant impacts are predicted, a European Protected Species (great crested newt) Licence will not be required for the proposed works to proceed, as long as the recommended Mitigation Strategy is followed.

Once the proposed works are complete, there are no foreseeable impacts on great crested newts or their habitats in the longer-term.

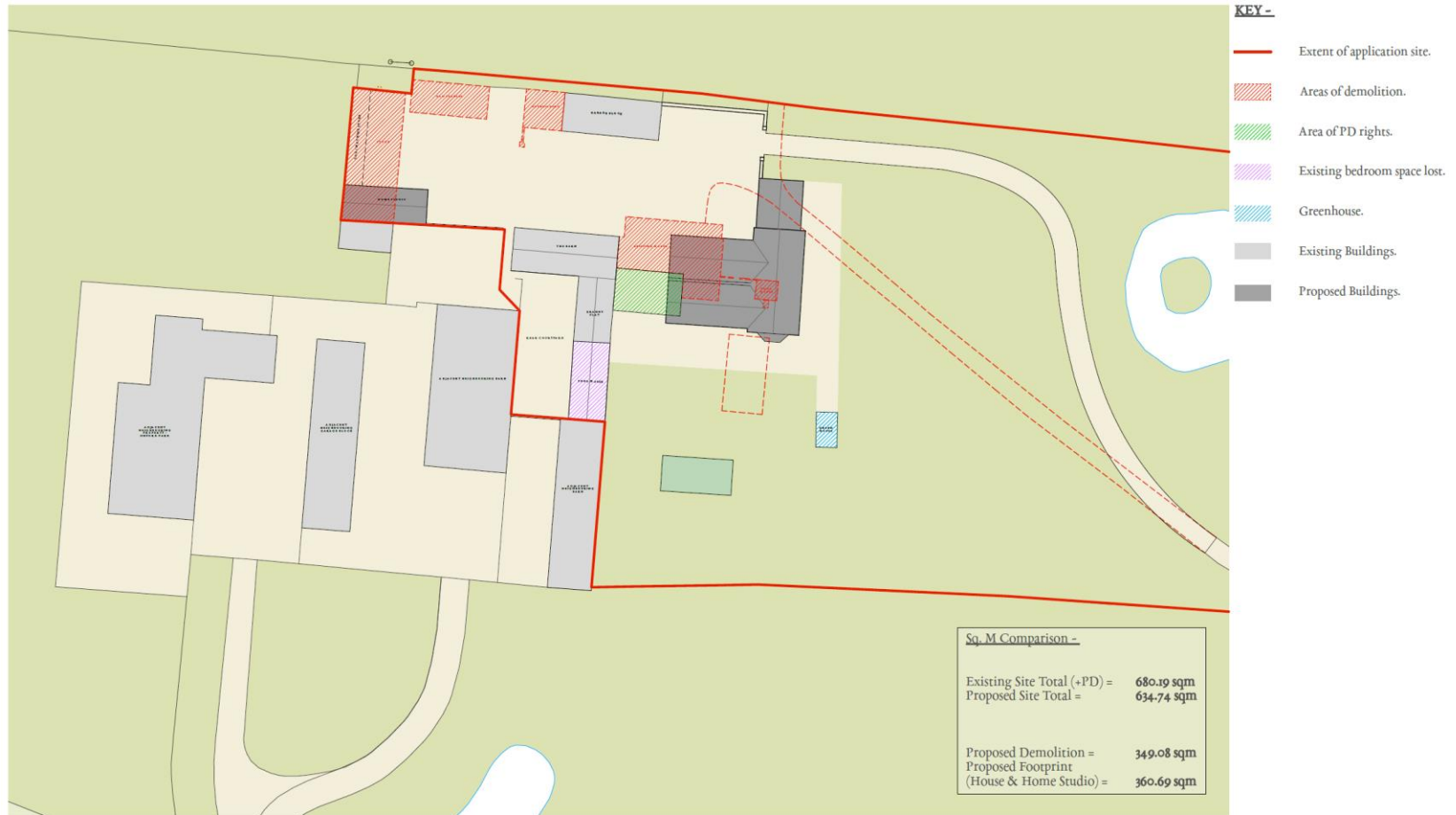
5 References

Cresswell W. and Whitworth R., 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. English Nature, Peterborough.

Gent, T. & Gibson, S., 2003. *Herpetofauna Workers Manual*. JNCC

Oldham R. S., Keeble J., Swan M. J. S. & Jeffcote M. 2000. *Evaluating the suitability of habitat for the great crested newt (Triturus cristatus)*. Herpetological Journal 10: 143-155.

6 Appendix 1. Proposal Plan



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