

Ecological Appraisal and Impact Assessment at
4, Sunnyacre, Gwersyllt,
Wrexham
LL11 4RH
Grid Ref. SJ 3196 5294

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1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development at 4, Sunnycastle, Gwersyllt and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme entails the construction of a dwelling and garage on an area of domestic garden.

The site and adjacent land were examined to establish the presence of or evidence of use by protected species of animals.

Impacts during the development should be low provided that no bird nests are constructed or occupied while work is taking place. If birds are building nests or any are occupied at any stage of the development work in that area must stop until the young have left the nest. Lighting should not be directed at the nearby trees.

There is not considered to be any threat to the conservation status of bats. If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.

Since the site may be used by foraging and commuting bats a lighting plan should be designed in accordance with Bat Conservation Trust guidelines: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

Reasonable avoidance measures should be taken with regard to great crested newts as given on page 7. A bat box, bird box and tree planting are recommended as described on page 8

There should not be any significant impact on any protected species or habitat as long as the recommended mitigation and enhancement measures are followed.

2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat and great crested newt worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2) (Natural England) and S089569-1 (Natural Resources Wales);

Great crested newt licence registration number 2016-19947-CLS-CLS (NE) and S089570-1 (NRW)

This report was commissioned by Spender Cullis of Cullis Architectural Design, Wrexham for the clients.

The site, at 4, Sunnyacre, Gwersyllt, Wrexham, is a 0.1 ha area of domestic garden.

The proposed scheme involves the construction of a new dwelling.

The purpose of the report is to identify and address any significant ecological effects which are likely to occur as a result of the proposed development. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

3. Methodology

3.1. Scope of the Assessment

The report incorporates an extended phase 1 habitat survey, searching for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:

The Conservation of Habitats and Species Regulations 2017 and listed in:

Schedule 2. European protected species of animals

Schedule 5. European protected species of plants

The protection of Badgers Act 1992

Protected species which might be associated with such a site include bats, owls and other breeding birds.

The area around the site might be used by badgers, dormice, amphibians and reptiles, and might contain protected plant species.

3.2. Desk Study

Wrexham Planning Portal was consulted for a review of previous ecological surveys carried out in the area. Magic Maps was consulted for the presence of designated sites and protected habitats.

3.3. Field Survey

The site was examined to establish the presence of any protected species or habitats, and for evidence of use by protected species of animals. Trees were assessed for suitability for use by bats. The site and surrounding habitat was examined for signs of use by other protected species. Maps of the site and surrounding environment were examined to identify any nearby waterbodies suitable for use by great crested newts within an influencing distance of the site. The variety of plant species was mapped according to the convention of Phase 1 habitat surveys as described by the JNCC (2010). Photographs were taken of all relevant areas.

The visual assessment of the site was carried out in accordance with CIEEM guidelines (CIEEM 2017) on 26th February 2021 by Susan Worsfold BSc (Hons) ACIEEM.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is Gatewen Marsh, 1.3 km south west, (SSSI)

4.2 Habitats

Site: Residential area, predominantly short lawn adjacent to an existing occupied dwelling. The approximate area of the site is 0.1 ha. The northern boundary was predominantly laurel hedge with a small section of wood fence and gate. The west boundary was a wood fence and the east boundary was formed by a mature hedge of hawthorn, ash and sycamore.

Adjacent land: There is a road adjacent, to the east. There are no ponds within 250 m. There is one pond within 500 m. There are no rivers within 500 m. There are three small areas of woodland within 500 m. Hedgerows within 500 m are mainly domestic and managed.

4.3 Species and Species Groups

Plants

The only ground flora vegetation to be affected is almost entirely closely mown lawn, i.e. grasses (*Lolium perenne*) with some creeping thistle (*Cirsium arvense*), lesser celandine (*Ficaria verna*), cow parsley (*Anthriscus sylvestris*), cleavers (*Galium aparine*), cat's ear (*Hypochaeris radicata*), clover (*Trifolium* sp.), Dandelion (*Taraxacum* sp.), Plantain (*Plantago* sp.), common nettle (*Urtica dioica*), yarrow (*Achillea millefolium*), common vetch (*Vicia sativa*), primula, speedwell (*Veronica* sp.), Cranesbill (*Geranium* sp), daffodil (*Narcissus* sp.), sedge, mouse ear hawkweed (*Pilosella officinarum*), dock (*Rumex* sp.), mosses, bramble (*Rubus fruticosus*) and creeping buttercup (*Ranunculus repens*). There were also three small cherry trees and a small ornamental willow.

Amphibians and Reptiles

None seen during the survey. There were no ponds apparent on maps within 250 m. There is negligible shelter or foraging potential on site for use by reptiles and amphibians.

Birds

There were trees at the eastern site boundary which were suitable for use by nesting birds. No nests were seen at the time of the visit but it was early in the year for nesting birds. Two house sparrows (*Passer domesticus*) were seen in the small ornamental willow but it did not appear suitable for nesting.

Bats

The site is suitable for use by foraging and commuting bats. No evidence of use of the trees as roosts or resting place by bats was found

Badgers

There were no badger setts, tracks or latrines found on the site or within 30 m of the site.

Dormice

No hazelnuts were found which indicated gnawing by dormice and the site was not favourable for use by them.

5. Description of the Development

The proposed scheme involves the construction of a dwelling with associated garage and parking area. The existing track will be used to allow access. Boundaries will be unaffected.

6. Assessment of Effects and Mitigation Measures

Designated Sites:

It is not considered that the development will have any significant impact on Gatewen Marsh due to the small scale of the development and distance from the site.

Habitats:

No priority habitat is affected by the proposal and no loss of potential roosting or nesting sites will occur.

Species:

Birds

The impacts which the proposed work might have on birds will be small, providing that no nests are occupied or being built in the new buildings at the time the work is done. If birds should gain access and begin building nests during the work, then the work in that area must stop until the young have left the nests. Lighting should not be directed at the nearby trees.

Bats

There is not considered to be any threat to the conservation status of bats. However, the site may be used by foraging and commuting bats a lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.

Reptiles and amphibians

It is considered unlikely that the development would harm any individual GCN, or affect their conservation status. However, there is a pond 320 m from the site and great crested newts have been recorded in the area. Therefore reasonable avoidance measures should be taken as follows:

Any vegetation on site should be kept below 10 cm. Vegetation removal should begin in the centre of the site and continue to the outer edges so that any animals present are able to move away.

Any trenches should be inspected carefully before infilling, and any animals carefully removed and removed from the area to a place of safety.

Building materials should be stored clear of the ground (say, on pallets) so as to avoid crushing any animals which might seek refuge under them, when the materials are lifted.

Any open pipework should be capped overnight. All open trenches and pipework should be inspected at the start of each working day to ensure no animal is trapped.

Residual Effects

No significant residual effects anticipated.

7. Compensation

None considered appropriate.

8. Enhancement Recommendations

A woodcrete bat box to be fitted externally to the new house. Further information is given in the bat box information pack available at <http://www.bats.org.uk/index.php>. Bat boxes should be placed in a south east to south west facing position if possible.

One woodcrete nest suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into the house or garage. To be placed in a north to north east position if possible.

Two wildlife friendly native trees/shrubs to be planted on site, e.g. bird cherry (*Prunus padus*), wild cherry (*Prunus avium*), crab apple (*Malus sylvestris*), rowan (*Sorbus aucuparia*), hazel (*Corylus avellana*) *Amelanchier laevis*, spindle (*Euonymus europaeus*), alder buckthorn (*Frangula alnus*), strawberry tree (*Arbutus unedo*) holly (*Ilex aquifolium*) or hawthorn (*Crataegus monogyna*). These would also be attractive and a fairly manageable size.

9. Ecological Constraints

Surveys of this type should ideally be carried out during the spring, summer or autumn to give the best chance of identifying all species present on site. However, it appeared clear that no significant vegetation, places of shelter or habitat would be affected and no animals should be harmed if all mitigation measures are taken.

10. Monitoring

None considered appropriate.

11. Conclusions

If the recommended mitigation and enhancement measures are taken the overall ecological impacts of the proposed development will be low due to its small scale and lack of evidence of any rare or threatened species or priority habitat.

12. Bibliography

Bat Conservation Trust available at: <http://www.bats.org.uk>

BCT and ILP Guidance Note 8 Bats and Artificial Lighting available at:
<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: jncc.defra.gov.uk

Google Maps available at: <https://maps.google.com/maps>

Hedgerows Regulations 1997 available at: <http://www.legislation.gov.uk/ukxi/1997/1160/contents/made>

JNCC, (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*, ISBN 0 86139 636 7

Magic Maps available at: <http://magic.defra.gov.uk>

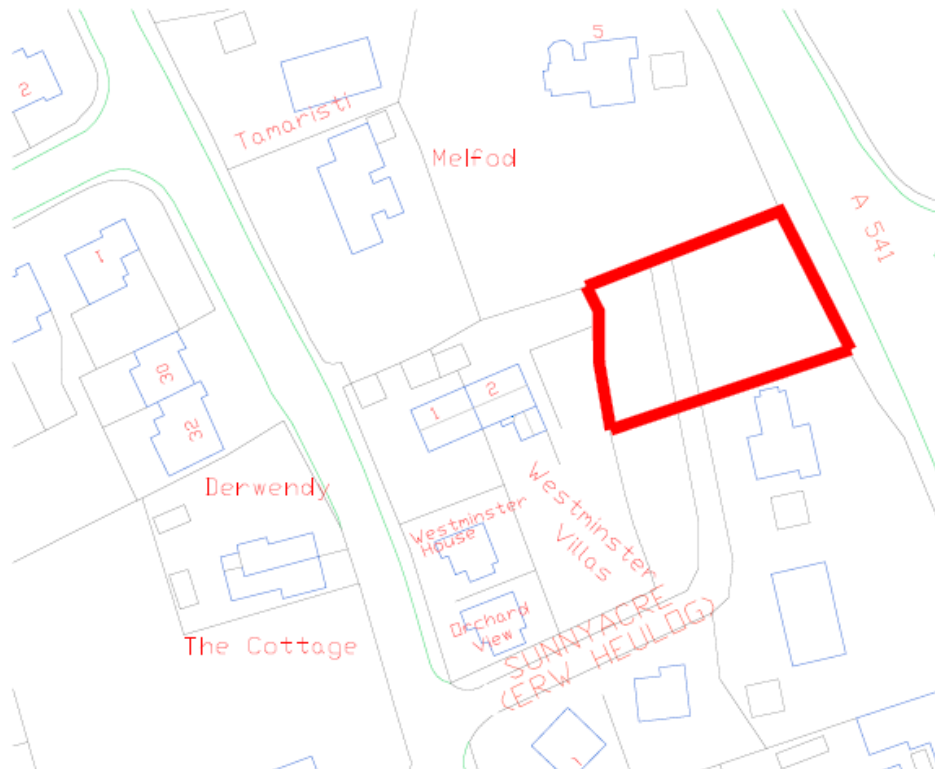
Natural Resources Wales available at: <https://naturalresources.wales/?lang=en>

UK BAP Priority Habitats available at: jncc.defra.gov.uk

Wildlife and Habitat Conservation available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

Wrexham Council Planning Portal available at:
<http://planning.wrexham.gov.uk/Planning/lg/GFPlanningSearch.page>

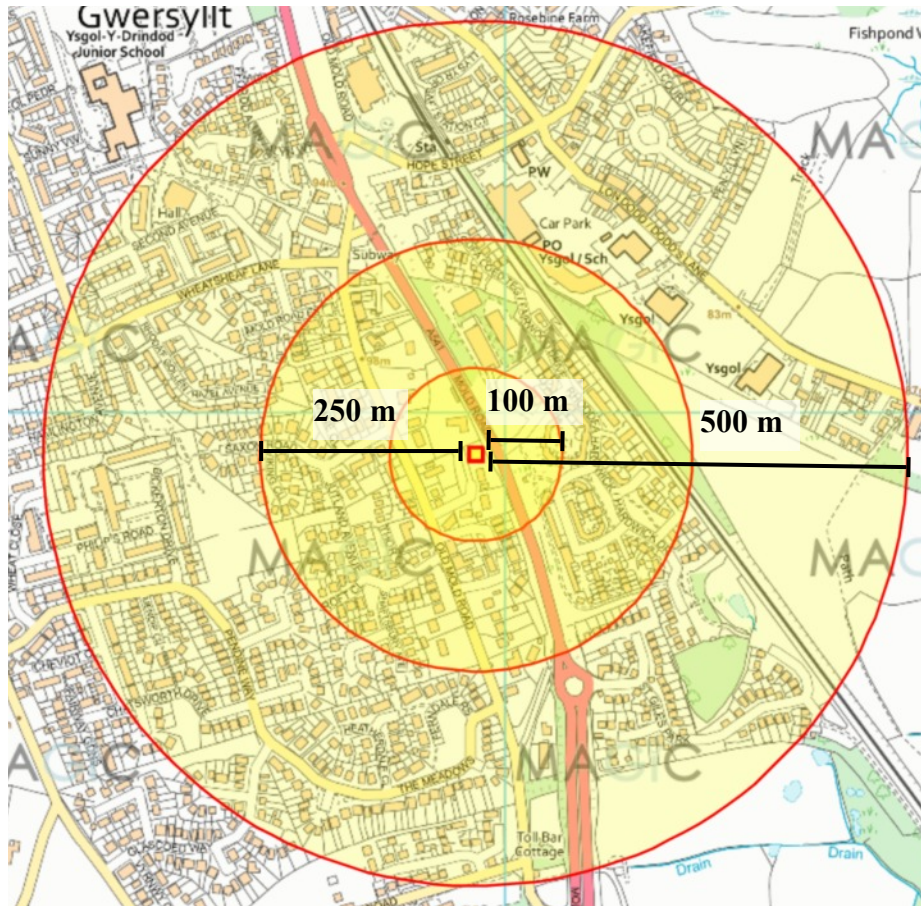
Appendix 13.1: Location Plan



Appendix 13.1: Plan as Proposed



Appendix 13.2: Location Map, Designated Sites and Zones of Influence



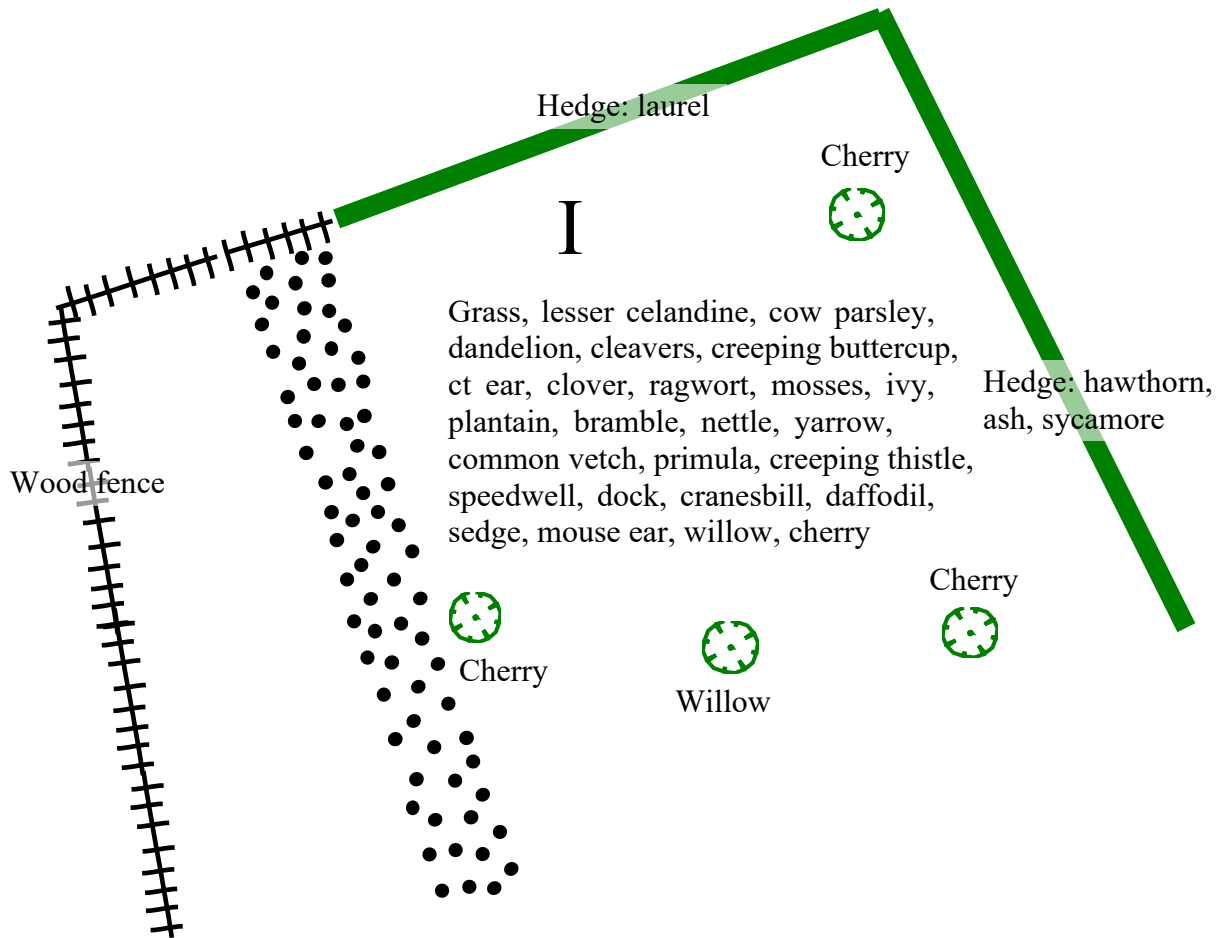
Appendix 13.3: Aerial Photograph



Appendix 13.4: Photographs of the Site



Appendix 13.5: Survey Diagram



Appendix 13.6: Legislation Relating to Birds

All wild birds, their nests and eggs are protected. It is an offence to intentionally:

kill, injure or take any wild bird,
take, damage or destroy the nest of a Golden Eagle, White-tailed Eagle or Osprey (even if disused),
take, damage or destroy the nest of any wild bird whilst it is in use or being built,
take, damage or destroy an egg or any wild bird,
possess any live or dead wild bird or the egg of any wild bird, or any derivative
Many rare birds are listed on Schedule 1, which makes it an offence to intentionally or recklessly:

disturb a Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; or
disturb dependent young of such a bird

Natural Resources Wales (NRW) issues licences for specific purposes, so that you can undertake legitimate work without breaking the law. See 'Bird licensing' for more information.

Appendix 13.7: Legislation Relating to Great Crested Newts

Wales is home to six amphibian species. They need fresh water in which to lay their eggs or spawn and enough suitable habitat nearby to spend the rest of their year. They have declined in recent decades as ponds have disappeared or become polluted or acidified. Pond restoration and creation (even in gardens) is a great help to amphibian conservation.

All amphibian species spend a large part of their year foraging on dry land, and they need sheltered places to hibernate. Hedgerows and other areas of semi-natural habitat are vital for their survival.

UK legislation:

The most common species are protected from sale under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are:

Common frog, *Rana temporaria*

Common toad, *Bufo bufo*

Palmate newt, *Triturus helveticus*

Smooth / common newt, *Triturus vulgaris*

The legislation protects them from being sold or offered for sale to protect them from exploitation in the pet trade or laboratory use.

European legislation:

Our rarest amphibians are protected under the Conservation of Habitats and Species Regulations 2017 (known as 'the Habitats Regulations'). The Habitats Regulations lists the following amphibian European Protected Species (EPS):

great crested (or warty) newt, *Triturus cristatus*

natterjack toad, *Bufo calamita*

Under the Habitats Regulations, it is an offence if you:

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 is defined as that which is likely to impair the ability to survive, breed, reproduce, or nurture young, or to hibernate or migrate.

There are other offences relating to possession, transport and sale. See 'Possession and Sale of Protected Species' for more information.

The great crested newt and natterjack toad also receive protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) from the following:

disturbing whilst occupying a place of shelter or protection,

obstructing access to a place of shelter or protection,

sale / offering for sale

Licensing for activities involving European Protected Species:

In certain circumstances Natural Resources Wales may issue licences for activities involving European protected species, that would otherwise be offences.