

Ecological Impact Assessment for
Land Adjacent to The Old Black Horse
Rhostyllen
Wrexham

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1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development at land to the south of the Old Black Horse, Rhostyllen and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme involves the construction of five new dwellings with associated parking, gardens and amenity space.

The land was examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use by bats and birds, of the exterior and interior of the outbuilding. No nesting birds or bat roosts were identified. No evidence of any protected species was found. A method statement was followed with regard to great crested newts (GCN).

If any birds should gain access to the building and begin constructing nests during the development, then the work in that area must stop until the young have left the nests.

There is not considered to be any threat to the conservation status of bats or harm to individuals but 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.

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/>

Bat and bird boxes should be installed as enhancement, a new hedgerow is also proposed.

If the recommended mitigation and enhancement measures are taken there should be a net gain in biodiversity and no net loss of roosting or nesting sites, nor any danger of harm to any species.

2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat 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 S086005/1 (Natural Resources Wales);
Licensed great crested newt worker, registration number 2016-19947-CLS-CLS (NE) and S086057/1 (NRW)

This report was commissioned by Paul Bignell of GAROB.

The site, at land to the south of The Old Black Horse, Rhostyllen comprises an area of scrub and a smaller area of hard standing.

The proposed scheme involves the construction of five dwellings with associated parking and gardens.

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.

Two dusk emergence surveys were carried out in accordance with *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)* (Collins 2016).

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. A data search was commissioned from Cofnod to identify any protected species nearby. This is attached separately. It showed that the nearest record of a protected species was a common pipistrelle 107 m north. The nearest great crested newt record is 871 m south east.

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.

Adjacent 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 12th July 2022 by Susan Worsfold BSc (Hons) ACIEEM.

Due to the reported discovery of a great crested newt on adjacent land a search for (GCN) was carried out and a tool box talk given to all contractors immediately before work started on the site in accordance with a method statement, already published: '*Method Statement with Regard to Great Crested Newts at Land Adjacent to the Old Black Horse, Rhostyllen*' (Susan Worsfold 11th July 2022). This involved lifting of potential refuges such as planks of wood, household items and masonry which had been dumped on site.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is Johnstown Newt Sites (SAC) and Stryt Las a'r Hafod (SSSI) 1.5 km south.

4.2 Habitats

Site: The area of the site is approximately 1 ha of scrub. It is fairly central in the village of Rhostyllen which is less than a kilometre from the nearest town. Approximately 20% of this is hard standing. There were several piles of debris which had been dumped there at various times. There was a small outbuilding constructed of concrete and asbestos.

Adjacent land: Nearby hedgerows are mainly domestic and closely managed. The river Clywedog is 315 m north. Glanyrafon Brook is 430 m south. The nearest pond appears to be 380 m north west, on the other side of the river. There are no other ponds apparent within 500 m. There are no several significant areas of woodland within 500 m, although there are trees along both sides of the river.

4.3 Species and Species Groups

Plants

The ground flora is dominated by grasses including meadow foxtail (*Alopecurus pratensis*), crested dogtail (*Cynosurus cristatus*) and annual meadow grass (*Poa annua*), with common nettle (*Urtica dioica*), rosebay willowherb, (*Chamaenerion angustifolium*) bramble (*Rubus fruticosus*), hazel (*Coryllus avellana*), cleavers (*Galium aparine*), bindweed (*Convolvulus arvensis*), dock (*Rumex* sp.), Dandelion (*Taraxacum* sp.), sow thistle (*Sonchus asper* and *oleraceus*), creeping buttercup (*Ranunculus repens*), common vetch (*Vicia sativa*), spear thistle (*Cirsium vulgare*) elder (*Sambucus nigra*), ragwort (*Senecio* sp.), ribwort plantain (*Plantago lanceolata*), white clover (*Trifolium repens*) and an oak sapling (*Quercus* sp.). The boundaries are wood, wire or metal fence on all sides. There are no hedgerows.

Birds

No bird nests were found in the site or the building. The adjacent trees are suitable for nesting birds.

Bats

There was no suitable habitat for use as roosts by bats. The building had no roost potential. The site is suitable for foraging and commuting bats.

Great Crested Newts (GCN)

None were found on site but a method statement was followed as explained on page 5.

Other Species

No badger setts were found on site or within 30 m of the site. No signs of dormouse or water vole were found and the site is not suitable for use by them. No evidence of use by amphibians or reptiles was seen.

No Schedule 9 species were found.

5. Description of the Development

The proposed scheme involves the construction of five dwellings with associated gardens and parking, and an amenity area. This will involve clearance of all vegetation.

6. Assessment of Effects and Mitigation Measures

Designated Sites:

It is not considered that the proposal will have any significant impact on any nearby designated site due to the small scale of the development and distance from the sites.

Habitats:

No priority habitat is affected by the proposal. A small area of vegetation is to be lost.

Species:

Birds

If any birds should gain access to any buildings and begin constructing nests during the development, then the work in that area must stop until the young have left the nests. Adjacent trees should not be pruned between the beginning of March and the end of August to avoid potential damage to nests.

Bats

There is not considered to be any threat to the conservation status of bats or danger of harm to individuals. However, the site may be used by foraging and commuting bats, therefore 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/>

Great Crested Newts

None were found on site but a method statement was followed during ground clearance as explained on page 5.

Residual Effects

No significant residual effects anticipated.

7. Compensation

None considered appropriate.

8. Enhancement Recommendations

An integrated bat box to be fitted to two of the new dwellings on the south west or south east sides e.g. Vivara Pro Build-in WoodStone Bat Box. Further information is given in the bat box information pack available at <https://www.bats.org.uk/our-work/buildings-planning-and-development/bat-boxes>.

One woodcrete nest suitable for small birds such as robin, blackbird, tit species and sparrow to be fitted to two of the new dwellings at the north east or north west sides.

House Sparrow Terrace - Wooden (or woodcrete) nest box with 3 sub-divisions to support 3 nesting pairs. To be placed under the eaves. Entrance holes: 32mm diameter. Dimensions: H310 x W370 x D185mm. Also suitable for tits, redstarts and spotted flycatchers. Place at least 2 m from the ground.

Two artificial swallow nests to be fitted inside the bike/bin store.

An approximately 20 m length of hedgerow is to be planted at the eastern end of the site. This should comprise at least three native species, e.g. hawthorn, hazel, blackthorn, oak, holly, field maple, ash.

9. Ecological Constraints

None identified.

10. Monitoring

Not considered necessary.

11. Conclusions

If the recommended mitigation and enhancement measures are taken there should be a net gain in biodiversity and no net loss of roosting or nesting sites, nor any danger of harm to any species.

12. Bibliography

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

English Nature (2001) *Great Crested Newt Mitigation Guidelines* Peterborough: English Nature

Gent A.H, Gibson S.D (eds) (1998) *Herpetofauna Workers' Manual*. Peterborough: Joint Nature Conservation Committee

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

Great crested newts: surveys and mitigation for development projects available at:
<https://www.gov.uk/great-crested-newts-surveys-and-mitigation-for-development-projects>

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>

Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual*, Peterborough: Joint Nature Conservation Committee

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

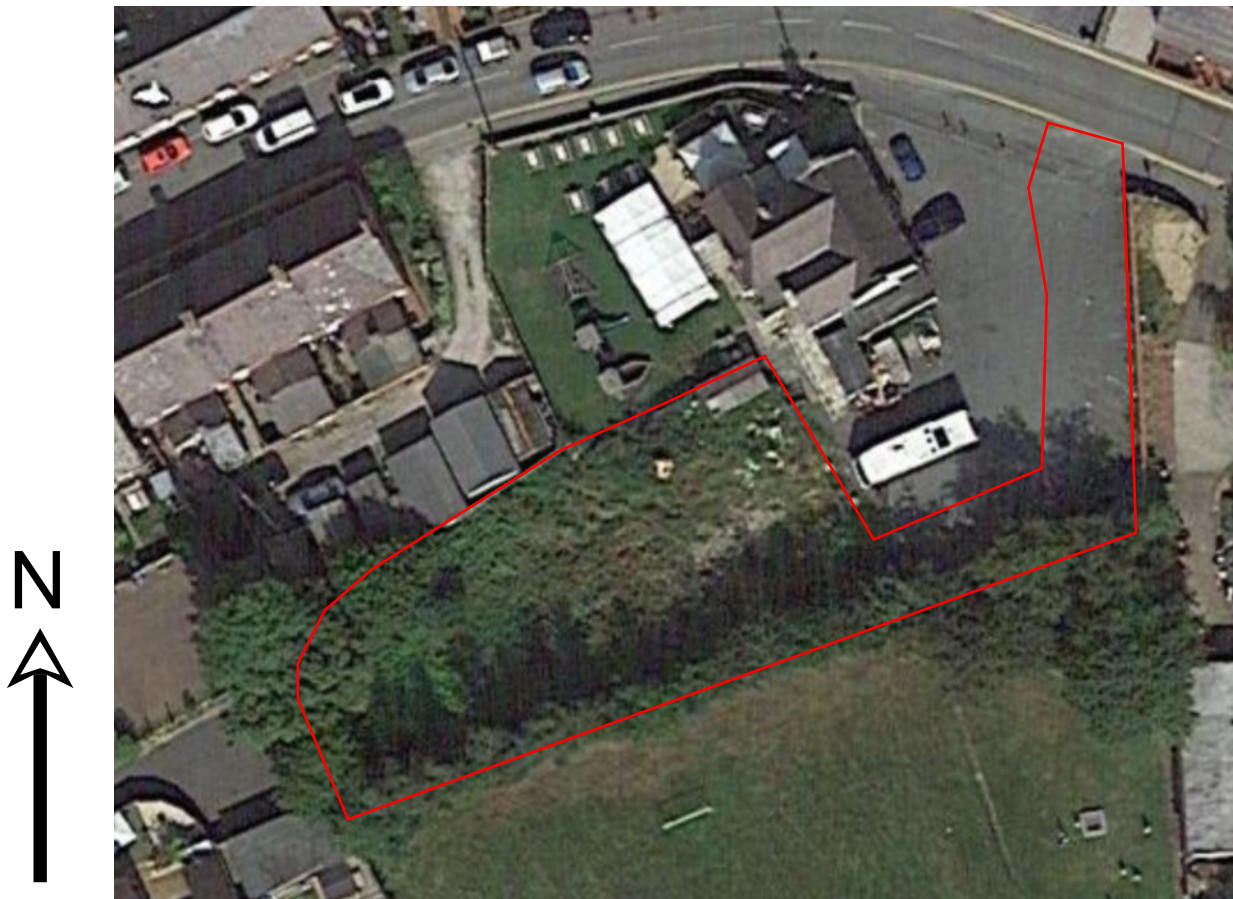
Rapid Risk Assessment Tool available at: <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>

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

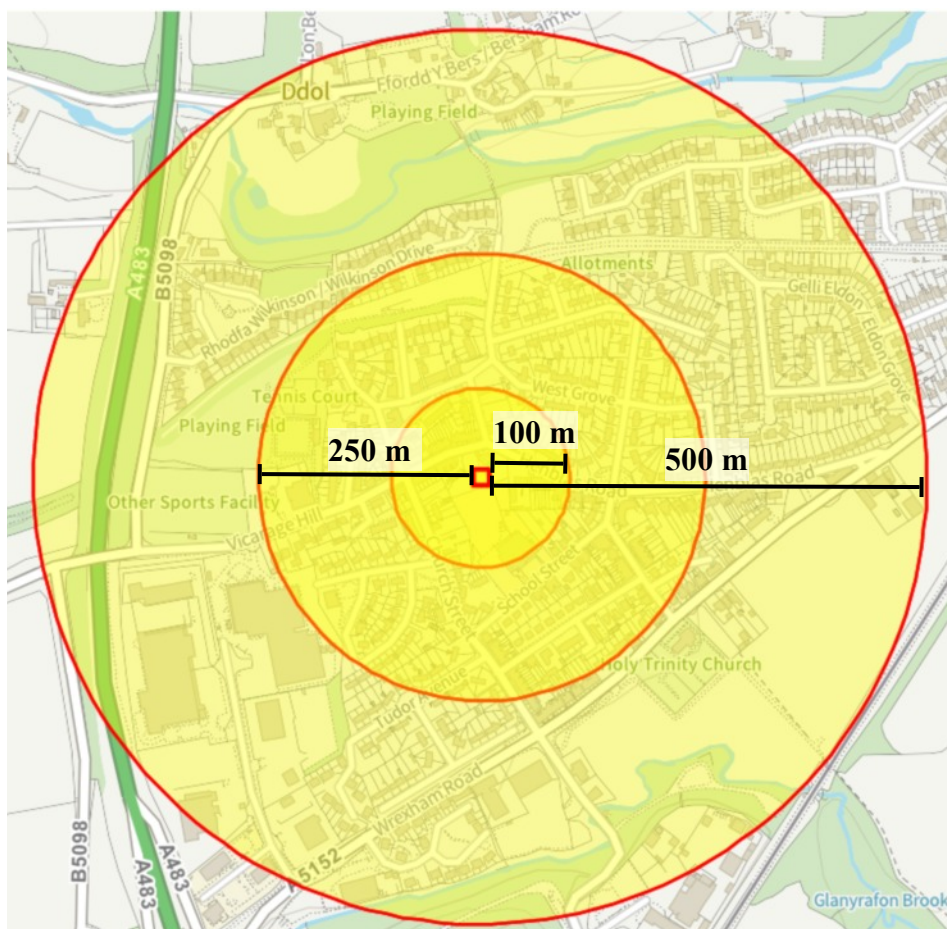
Wildlife and Habitat Conservation available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

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

Appendix 13.1: Aerial Photograph



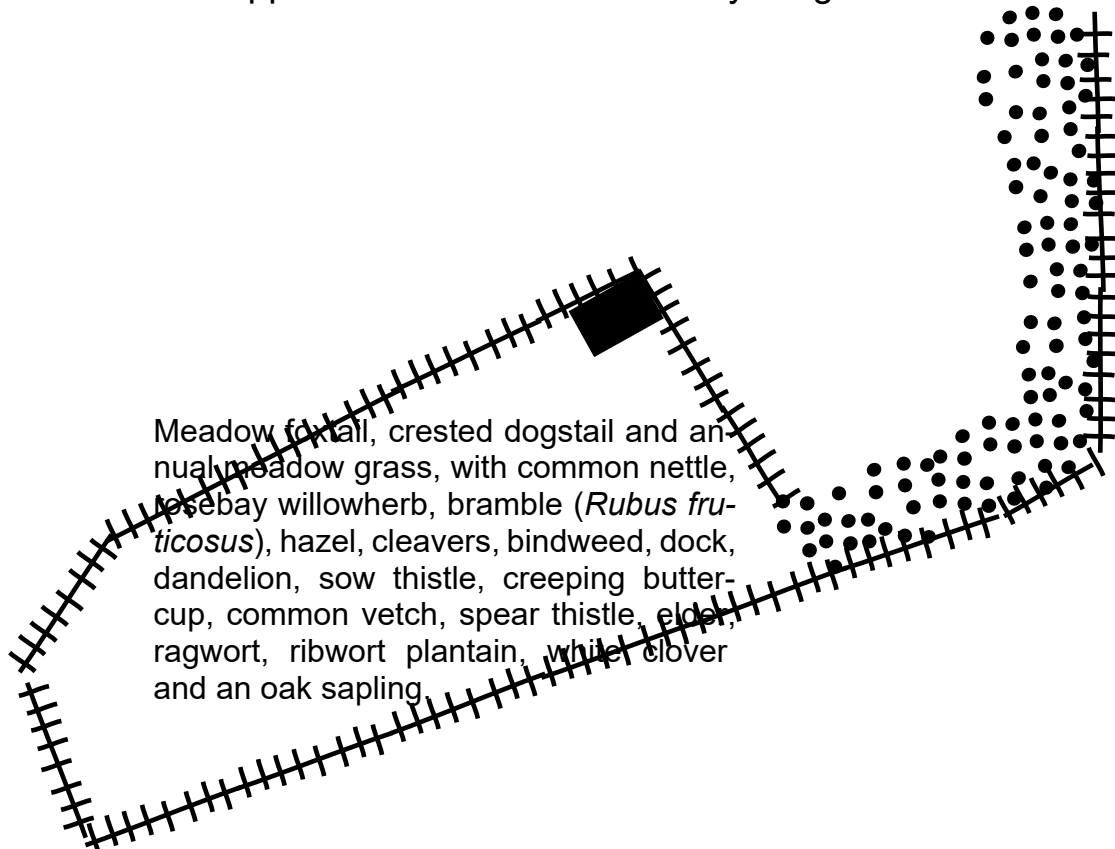
Appendix 13.2: Designated Sites and Zones of Influence



Appendix 13.3: Proposed Plan



Appendix 13.4: Phase 1 Survey Diagram



Appendix 13.5: Photographs



Appendix 13.5: Photographs



Appendix 13.6: Legislation Relating to Bats

All bat species, their breeding sites and resting places are fully protected by law - they're European protected species.

You may be able to get a licence from Natural England if you can't avoid disturbing them or damaging their habitats, or if you want to survey or conserve them.

What you must not do

You're breaking the law if you do certain things including:

- deliberately capture, injure or kill bats
- damage or destroy a breeding or resting place
- obstruct access to their resting or sheltering places
- possess, sell, control or transport live or dead bats, or parts of them
- intentionally or recklessly disturb a bat while it's in a structure or place of shelter or protection

Either or both of the following could happen if you're found guilty of any offences:

- you could be sent to prison for up to 6 months
- you could get an unlimited fine

Activities that can harm bats

Activities that can affect bats include:

- renovating, converting or demolishing a building
- cutting down or removing branches from a mature tree
- repairing or replacing a roof
- repointing brickwork
- insulating or converting a loft
- installing lighting in a roost, or outside if it lights up the entrance to the roost
- removing 'commuting habitats' like hedgerows, watercourses or woodland
- changing or removing bats' foraging areas
- using insecticides or treating timber

In many cases you should be able to avoid harming the bats or damaging or blocking access to their habitats.

A bat survey will show what type, how many and how the bats are using the building or area so you can plan to avoid harming them.

If you can't avoid harming bats or their habitats, you can apply for a mitigation licence from Natural England.

Appendix 13.7: Legislation Relating to Birds

All wild bird species, their eggs and nests are protected by law. You must always try to avoid harming birds or to use measures which do not kill or injure them before considering taking harmful action.

In most cases you should be able to avoid harming wild birds by:

- timing your work to avoid the breeding season
- using a range of methods that deter but don't harm them

In exceptional cases the law allows certain exemptions to permit legal activities (such as a development with planning permission) and where avoiding harm isn't possible.

What you must not do:

You're breaking the law if you:

- intentionally kill, injure or take wild birds
- intentionally take, damage or destroy a wild bird's nest while it's being used or built
- intentionally take or destroy a wild bird's egg
- possess, control or transport live or dead wild birds, or parts of them, or their eggs
- sell wild birds or put them on display for sale
- use prohibited methods to kill or take wild birds

Some birds, known as 'schedule 1 birds', e.g. barn owls, have extra legal protection. For these bird species it's also an offence to do the following, either intentionally or by not taking enough care:

- disturb them while they're nesting, building a nest, in or near a nest that contains their young
- disturb their dependent young

You could get an unlimited fine and up to 6 months in prison for each offence if you're found guilty.

Activities that can harm birds

These activities can affect wild birds, particularly during breeding season:

- trimming or cutting trees, bushes, hedges and rough vegetation
- renovating, converting or demolishing a building
- creating disturbance, e.g. noise, lighting and vibration
- taking actions to prevent problems, e.g. shooting birds or removing nests

When you can get a licence

There are no licensing purposes to permit development or construction but there are ways you can continue development or construction when birds are present. These activities should rely upon the legal exemptions. You must make sure that you can comply fully with the terms of the exemption so that you don't break the law.

You can apply for a licence from Natural England in certain circumstances and for certain problems.

Licences are available for disturbing or harming birds for a limited number of reasons that include:

- preserve public health and safety
- preserve air safety
- do work for science, education or research
- prevent damage to crops or animal feed
- conserve plants and animals (including other wild birds)
- prevent damage to fisheries
- take part in photography, falconry, keeping or breeding birds

Appendix 13.8: 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.