

Ecological Impact Assessment at
Bryn Hyfryd, Clayton Road,
Pentre Broughton,
Wrexham, LL11 6BL
Grid Ref. SJ 2998 5367
On 2nd December 2023

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Contents

Section	Title	Page
1	Summary	3
2	Introduction	4
3	Methodology	4
3.1	Scope	4
3.2	Desk Study	5
3.3	Field Survey	5
4	Baseline Ecological Conditions/Results	6
4.1	Designated Sites	6
4.2	Habitats	6
4.3	Species and Species Groups	6
5	Description of the Development	7
6	Assessment of Effects and Mitigation Measures	7
7	Compensation	8
8	Net Biodiversity Benefit	8
9	Ecological Constraints	9
10	Monitoring	9
11	Conclusions	9
12	Bibliography	10
13	Appendices	11
13.1	Aerial Photograph	11
13.2	Map Showing Designated Sites and Zones of Influence	11
13.3	Photographs	12
13.4	Survey Diagram	13
13.5	Proposed Plans	14
13.6	Legislation Relating to Birds	15

1. Summary

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

The proposed scheme involves the construction of a dwelling with associated parking and access.

The site and adjacent land were examined to establish the presence of or evidence of use by protected species of animals. None was found, however the trees on site and adjacent provided potential for nesting birds. The site is suitable for 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/>

Bat and bird boxes as well as a semi mature native tree are required to ensure Net Biodiversity Benefit in accordance with legislation. (pages 8 and 14)

Trees or hedges should not be pruned or trimmed between May and September to avoid disturbance to any nesting birds.

If the recommended mitigation and enhancement measures are taken there will 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 Jack Felgate for the client.

The site, at Bryn Hyfryd, Pentre Broughton comprises a small area of former garden.

The proposed scheme involves construction of a new dwelling with associated parking and access.

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.

The visual assessment of the site was carried out in accordance with CIEEM guidelines (CIEEM 2017) on 2nd December 2023 by Susan Worsfold BSc (Hons) ACIEEM.

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. 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.

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 and birds. The site and surrounding habitat was examined for signs of use by badgers and dormice. 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 2nd December 2023 by Susan Worsfold BSc (Hons) ACIEEM. Photographs were taken of all areas and those of relevance are shown in the appendices.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is Brymbo Fossil Forest (SSSI) 450 m south west.

4.2 Habitats

Site: The area of the site to be affected is approximately 260 m². It is in a former industrial village. The land is currently not in use. The south east and south west boundaries were fenced, the northwest boundary was a privet hedge. The land was a former garden which was unmanaged. Adjacent land: There were several small areas of woodland within 500 m. Hedgerow connectivity was poor. There are no waterbodies or rivers shown on maps within 500 m.

4.3 Species and Species Groups

Invertebrates

The site has some limited value for use by invertebrates and none were seen at the time of the survey.

Amphibians and Reptiles

None seen. There were no ponds within 500 m. The site had limited value for use by reptiles and amphibians.

Birds

The hedges and trees on site could provide food and shelter for birds and also nesting potential. No birds or nests were seen at the time of the survey.

Bats

The site is suitable for use by foraging and commuting bats. None of the trees had any potential bat roost features.

Badgers

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

Plants

Bittercress (*Cardamine* sp.) creeping buttercup (*Ranunculus repens*), sow thistle, ragwort (*Jacobaea vulgaris*), grasses, rosebay willowherb (*Chamaenerion angustifolium*), blackthorn (*Prunus spinosa*), broadleaf plantain (*Plantago major*), spurge (*Euphorbia* sp.), spear thistle (*Cirsium vulgare*), bittercress, dock (*Rumex* sp.), campanula, bramble (*Rubus fruticosus*), silver birch (*Betula pendula*), eucalyptus (*Eucalyptus* sp.)

No species of conservation value or Schedule 9 species were seen on site. No rare or threatened species of plants were found on site or near the site.

5. Description of the Development

The proposed scheme involves the construction of a single dwelling with associated parking and access. This will involve the removal of some short vegetation.

6. Assessment of Effects and Mitigation Measures

Designated Sites:

It is not considered that the proposal will have any significant impact on any designated sites due to the low impact of the project and distance from the sites.

Habitats:

No priority habitat is affected by the proposal. A small amount of vegetation will be removed.

Species:

Birds

Trees and hedges should not be pruned or trimmed between March and September, to avoid harm to any nesting birds.

Bats

There is not considered to be any threat to the conservation status of bats or danger of harm to individuals. The site is suitable for foraging and commuting bats. None of the trees on site had any potential bat roost features.

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/>

Reptiles and Amphibians

There should not be any significant impact on reptile or amphibian populations, but there may be some danger of harm to individuals foraging or sheltering in the southern section. Reasonable care should be taken while brash and log piles are removed to avoid harm to any sheltering animals.

Residual Effects

No significant residual effects anticipated.

7. Compensation

n/a

8. Net Biodiversity Benefit

A integrated woodcrete bat box will be incorporated into the new dwelling at the south west gable end. An integrated woodcrete bird box will be incorporated into the new dwelling at the north east gable end. 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>.

Bat and bird boxes are available from NHBS <https://www.nhbs.com/> and Wildcare <https://www.wildcare.co.uk/> as well as other suppliers.

A semi-mature native tree such as field maple, rowan, crab apple or cherry will be planted in the garden as shown on page 14.

9. Ecological Constraints

The survey was undertaken at a sub-optimum time of year, however it is unlikely that any significant features or flora would have been missed due to this.

10. Monitoring

Not considered necessary.

11. Conclusions

If the recommended mitigation and enhancement measures are taken there will 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

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/>

Collins J. (Ed) (2016) *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London

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

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

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

Langton, T., Beckett, C., Foster, J. (2001) *Great Crested Newt Conservation Handbook*. Halesworth: Froglife

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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 (4), 143-155.

Shields S., (2003) *Arboricultural Impact Assessment Ref: AIA/HCM/09/23*

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

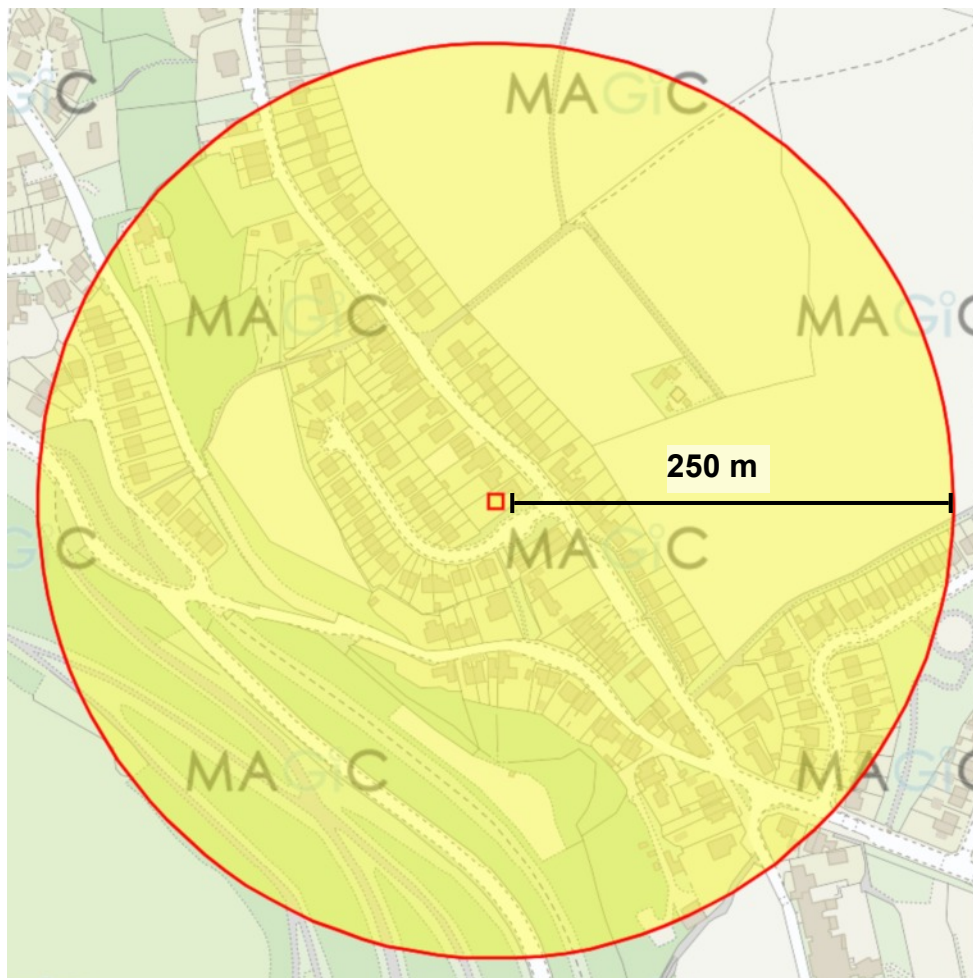
Wildlife and Habitat Conservation available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

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

Appendix 13.1: Aerial Photograph



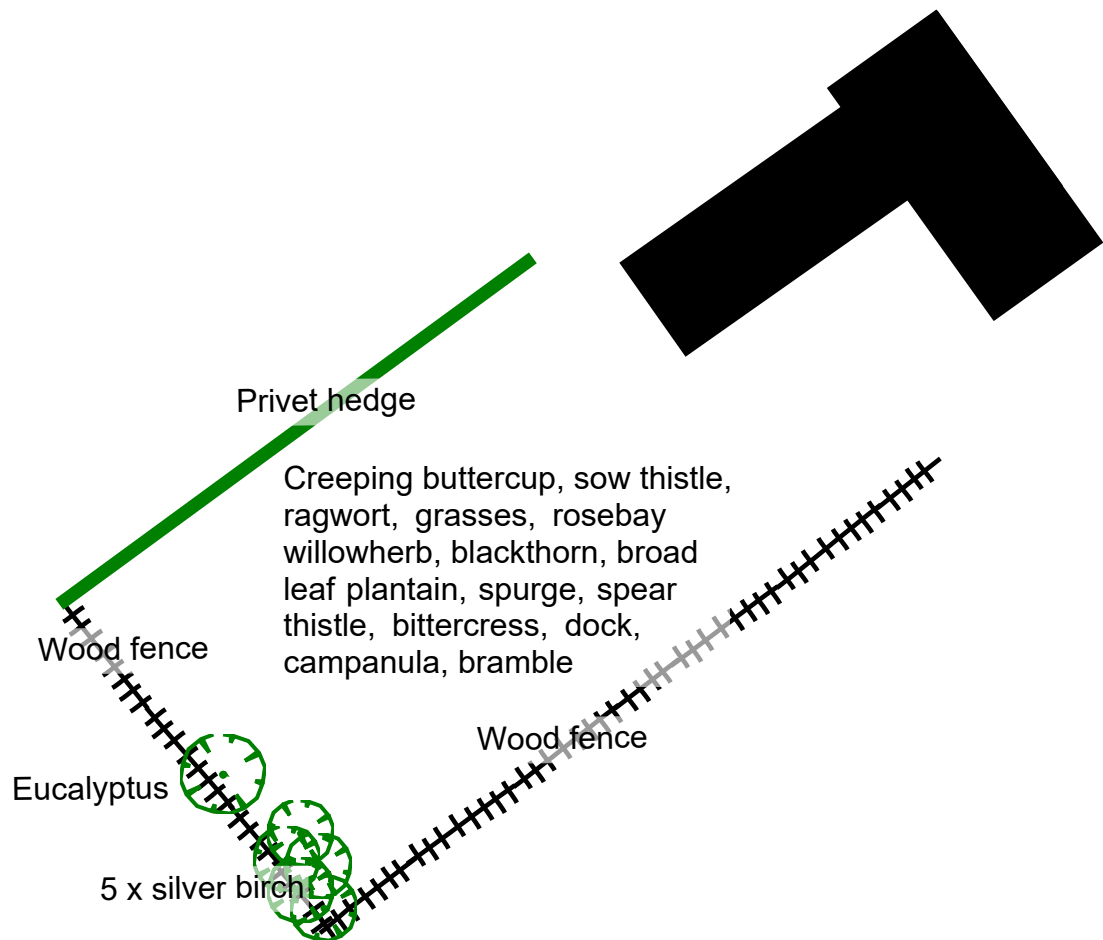
Appendix 13.2: Designated Sites and Zones of Influence



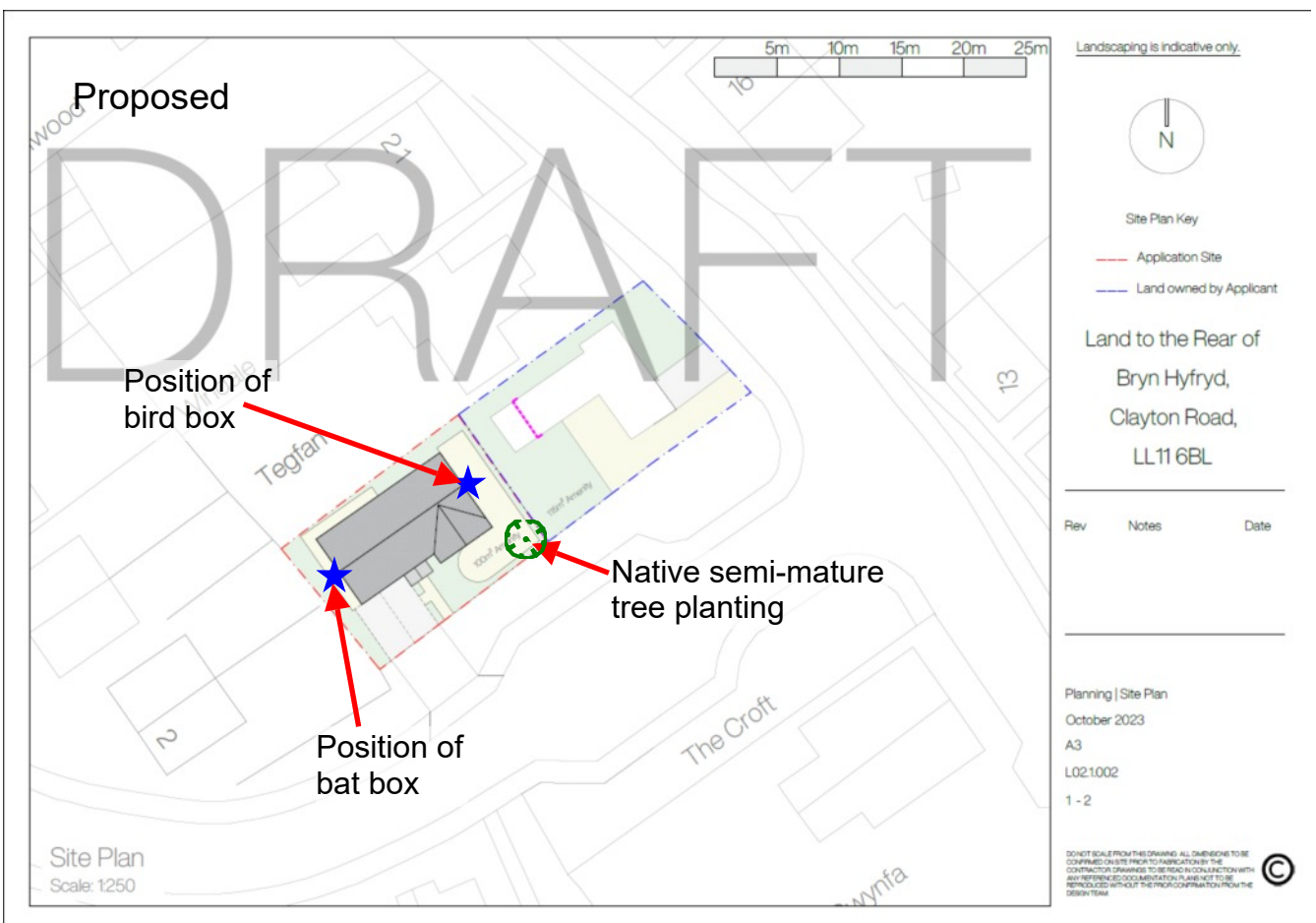
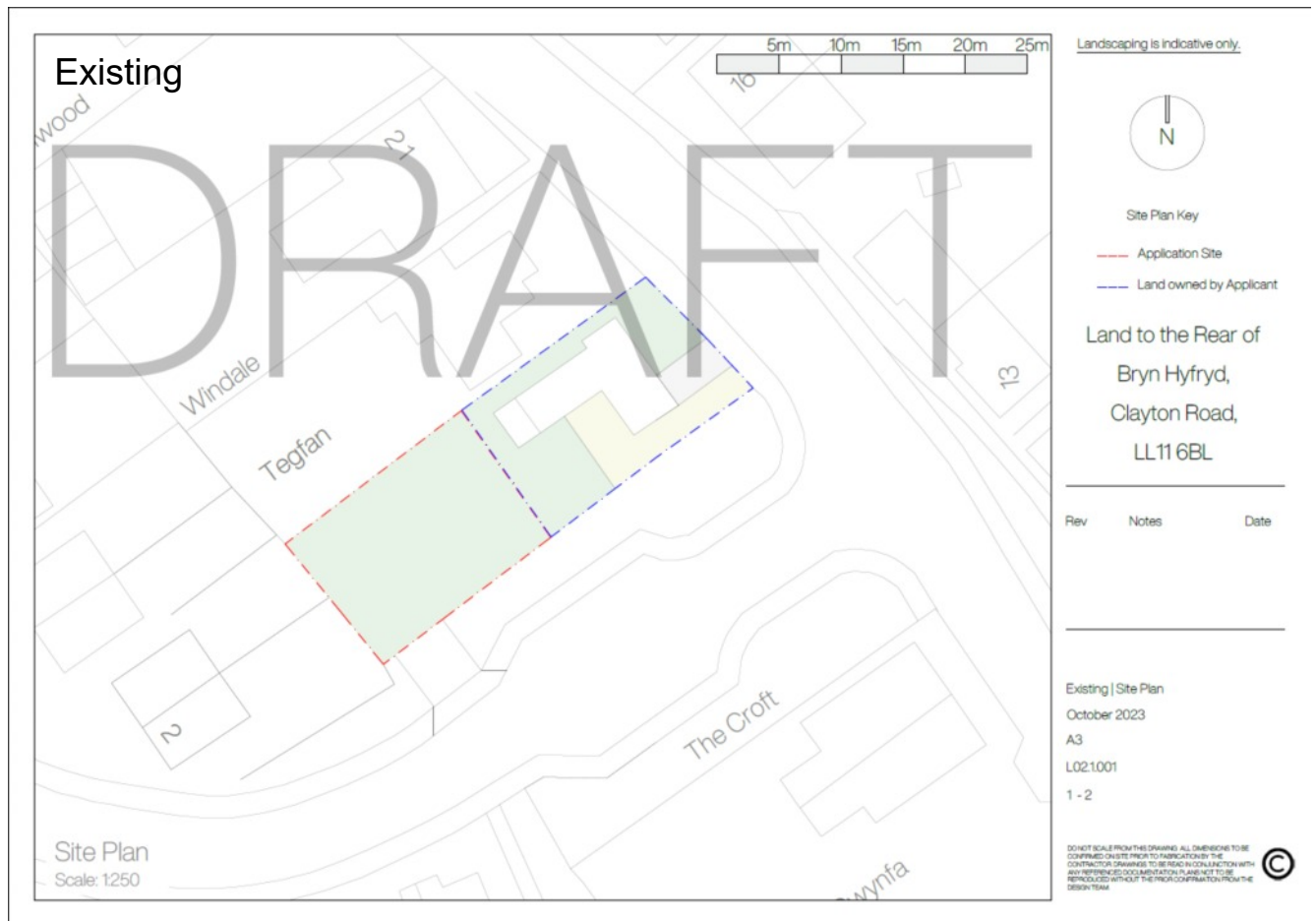
Appendix 13.3: Photographs



Appendix 13.4: Survey Diagram (tree positions approximate)



Appendix 13.5: Site Plans as Existing and Proposed



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.