

Clwydian Ecology

Arosfa, Rhes y Cae, Holywell, Flintshire, CH8 8JG

T: 01352 780787 M: 07891 802 653 E:

ecology@clwydianecology.co.uk

www.clwydianecology.co.uk

**PHASE 1 ASSESSMENT FOR
LAND ADJACENT TO - THE COTTAGE
GARTH ROAD
LLANGOLLEN
DENBIGHSHIRE, LL20 7UR**

For Bronwyn Roberts

11th January 2023

Summary

- A Preliminary Ecological Appraisal was carried out for an area of land located adjacent to The Cottage, Garth Road, Llangollen.
- The survey was required to assess the site in respect of a proposed planning application for a residential development of a single dwelling.
- The land is located within an established residential area with open fields below and other properties to the sides and rear.
- The proposed development area will be within the existing curtilage of the property.
- The existing access may need to be altered to facilitate the proposed development. This would result in the loss of a small section of stone wall, a few small shrubs and possibly two small birch trees.
- A small section of conifer/laurel hedge may require removal to facilitate the development.
- There are no statutory site designations within or adjacent to the proposed development area.
- The site lies outside the boundary of the Clwydian Range and Dee Valley AONB.
- Bat and bird boxes will be built into the structure of the new house, any trees requiring removal for access will be replaced.

1. Introduction

Background

An ecological survey was undertaken on the 9th January 2023 in respect of an area of land located adjacent to The Cottage, Garth Road, Llangollen. The brief was to carry out a walkover survey and assess the ecological value of the site. The current proposals for the land are for a single dwelling with alterations to the existing access. Recommendations for mitigation, ecological enhancement and further surveys will be made as required.

Ecological context

The site is located along a minor road running through Garth, near Acrefair in North Wales within the County of Wrexham. The development site is an area of hardstanding/wood-chippings to the side of the existing house with a partial hedgerow boundary and scrub/fruit-trees below. There is a dry-stone wall at road level and another dry-stone wall along the existing access drive towards the existing house (one side only with the laurel hedge on the other).

Personnel

The survey was carried out by David Bennett who has over 20 years experience of conservation work, ecological surveys and species licensing.

2. Methods

Background data search

A background data search was undertaken for designated sites and species records within 1 Km of the site (COFNOD North Wales Environmental Information Service).

The search did not reveal any records of protected species for the site or any areas of land adjacent to the property.

Preliminary Ecological Appraisal

A Phase 1 habitat survey was carried out following standard methodology. This involved walking over the site classifying areas of land into a habitat type. Target notes were made (where required) in respect of any habitats or features of interest and any sightings of protected or rare species.

The suitability of the habitat for protected species (or other species of ecological interest) were also assessed at the same time. Those additional species (site dependent) can include bats, badgers, great crested newt, otters and water voles. This is generally undertaken by looking for field signs such as footprints, droppings, feeding remains, latrines, worn paths, vegetation structure, shelter availability, foraging resources etc.

Constraints

There were no constraints (apart from a winter survey with few plants growing), the site was open, all areas are easily accessible.

5. Results

General

The exact site size is unknown but the area where the house will be constructed is probably no more than 0.5 acre. The majority of the development area comprises hardstanding/loose stone with wood chippings which have started to grass over in some areas. The existing site access may need to be altered in line with Highway requirements. This would require the removal of a small section of stone-wall at road level and also part of the stone-wall along the existing access driveway. It may also be necessary to remove a few small shrubs and possibly the two small silver birch trees.

Background data search

Data was obtained from COFNOD. The data records do not show any specific records for protected species in respect of this site or any adjacent land.

Relevant protected and notable species records are shown in the attached document provided by COFNOD.

Habitats

Hardstanding/wood-chippings/mown grass

The majority of the site is hardstanding or wood chippings/crushed stone with a light covering of grass. Typical species include perennial rye grass *Lolium perenne*, ragwort *Senecio jacobea*, annual meadow grass *Poa annua*, Yorkshire fog *Holcus lanatus*, cocks foot *Dactylis glomerate*, white clover *Trifolium repens*, broad leaved dock *Rumex obtusifolius*, common chickweed *Stellaria media*, daisy *Bellis perennis* and dandelion *Taraxacum officinale*.

Hedgerow

The hedgerow partially surrounding the side and rear of the development plot mainly comprises Lawson cypress *Chamaecyparis lawsoniana* conifers interspersed with cherry laurel *Prunus laurocerasus* and a few bay-laurel *Laurus nobilis* trees.

Scrub

The main area of scrub/young trees is located just below the development plot and this is due to be retained. Species include hawthorn *Crataegus monogyna*, bramble *Rubus agg.*, buddleia *Buddleia sp.*, elder *Sambucus nigra* and a few small apple *Malus domestica* trees.

Immediately below the roadside stone-wall there is an area of garden which supports two small silver-birch *Betula pendula* trees, two small English oak *Quercus robur* trees, a few small shrubs, one medium beech *Fagus sylvatica* tree and a couple of small beech trees.

Stone wall

The roadside boundary supports a dry-stone wall, the access drive leading into the property also supports a dry-stone wall (right side only going down the drive towards the house).

Faunal species

Badgers

No areas of digging, sett entrances, outliers or latrines were found anywhere within the accessible parts of the plot or the field at the rear.

Bats

There are no buildings within the development area that could be used by roosting bats. None of the smaller trees on the site have any features which bats would use and the small area of shrub/trees below the site will be retained.

Great crested newts and amphibians

There are no ponds or waterbodies on or near the site. The nearest known waterbodies are the two reservoirs which are at least 500 metres uphill and north of the site. Based upon the existing level of information it seems very unlikely that there would be any issues in respect of great crested newts although common frogs may be found in and around the site.

Reptiles

There was no evidence of reptiles which could be seen during the walk-over survey and the habitat is generally unsuitable.

Birds

Birds will use the boundary features (hedge/scrub, trees) for nesting and general shelter. The scrub area just below the site (which will be retained) will also provide suitable nesting habitat for a variety of birds. Small birds such as pied wagtail, robin and wren may also use any suitable gaps within the dry-stone wall located along the main road edge and along the access drive.

6. Evaluation and Legislation

All of the plants recorded during this survey are widespread at both national and county scales. The list of plant species is not definitive and only represents those recorded while walking around the site.

The presence of a species protected under European or UK legislation is a material consideration when a planning authority is considering a development proposal which, if carried out would be likely to result in disturbance or harm to the species or its habitat. Section 74 (2) of the CroW Act 2000 (now updated by Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 requires the publication of lists of habitats and species that are of principal importance for the purpose of conserving biological diversity. The list is regularly changed and updated and many bat species appear on it. NERC consolidates the requirements of the CROW Act in placing duties upon government agencies, including local authorities, to ensure the conservation of Biodiversity.

Habitats

The main area proposed for development is a relatively flat section of land covered with compacted wood-chippings/loose compacted stone and short grass which is mown occasionally. The overall ecological interest of the development plot is low, the main area of interest is the scrub/fruit trees just below the site, and this will be retained. Two sections of dry stone-wall may be affected by the alteration to the existing access (possibly two small silver birch trees as well) although overall the majority of the wall will be retained and/or rebuilt. If any trees require removal they can be replaced slightly further along the garden on the upper bank.

Badgers

Badgers are protected by the Protection of Badgers Act 1992. Under this Act it is illegal to destroy, damage or obstruct access to a sett or disturb a badger while it is using the sett. A sett is defined by the Act as any structure or place showing signs of current or recent occupation by a badger. Under the current interpretation of the Act a license is required for the following operations:

- a. Use of hand tools within 10 metres of a badger sett
- b. Use of light machinery within 20 metres of a badger sett
- c. Use of heavy machinery within 30 metres of a badger sett

Based upon the results of the site visit there are currently no known issues in respect of badgers or their setts at the present time. Because they are a mobile species the situation could change during the period of any extant planning permission.

Bats

Bats and their roosts are protected by the Wildlife and Countryside Act (as amended) and the Conservation (Natural Habitats & c) Regulations 1994. The Habitats Directive has recently been superseded by The Conservation of Habitats and Species Regulations 2010 which came into force on the 1st April 2010. This makes it unlawful to harm, disturb, or destroy either bats or their roosts. Any work which may potentially disturb a roost (whether bats are present or not) may require a license.

To summarise it is illegal not only to intentionally kill, injure or take any bat but also too recklessly or intentionally damage, destroy or obstruct access to any place that a bat uses for shelter or protection, or to disturb a bat while it is occupying such a place. A roost is protected whether or not bats are present at the time. The reason for this is that bats have a tendency to remain loyal to certain roost sites, often over a long period of time.

There are no known issues in respect of bats although they may forage in and around the area.

Great crested newts

The great crested newt *Triturus cristatus* is listed on Schedule 5 of the Wildlife and Countryside Act (as amended), and is afforded full protection under the terms of Section 9. This makes it an offence if any person:

9(1) “... *intentionally kills, injures or takes* [a great crested newt]”;

9(2) “... *has in his possession or control any live or dead* [great crested newt] *or any part of, or anything derived from such an animal*”; 9(4) “... *intentionally or recklessly (a) damages or destroys, or obstructs access to, any structure or place which* [a great crested newt] *uses for shelter or protection; or (b) disturbs any such animal while it is occupying a structure or place which it uses for that purpose*”;

9(5) “... (a) sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead [great crested newt], or any part of, or anything derived from, such an animal; or (b) publishes or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things”.

Great crested newts are also afforded additional protection through inclusion on Schedule 2 (“European protected species”) of **The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)**, which transpose into British law the European Community’s **Habitats Directive (92/43/EEC)**. The Habitats Directive has recently been superseded by “**The Conservation of Habitats and Species Regulations 2010**”, this came into force on the 1st April 2010.

Considering the information currently available there does not appear to be any issues in respect of great crested newts.

Reptiles

All species of British reptile are protected against intentional killing, injury or sale under the Wildlife and Countryside Act 1981 (as amended). The Sand Lizard and the Smooth Snake are afforded a higher degree of protection under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 making it an offence to:

- Intentionally kill, take or injure these species of reptile.
- Damage, destroy or obstruct a place a these species use for breeding, resting, shelter or protection or to disturb these species in such a place.
- Possess or control these species alive or dead, or any part of them, or anything derived from them.
- Sell, offer for sale, advertise for sale or offer to these species, or a part of them or anything derived from them.
- Deliberately disturb or deliberately take or destroy the eggs of these species.

The distribution of Smooth Snakes and Sand Lizards is limited to heathland habitats in Surrey, Dorset, Hampshire and Sussex. The Sand Lizard is also known to occur on sand dune habitats in Merseyside and has recently been introduced to some areas of North Wales.

Licenses can be issued in order to allow activities that would constitute an offence under the legislation. Licenses can be issued for specific purposes including scientific study, photography, conservation management and development.

In England and Wales a development license must be obtained from Natural England or the Welsh Government before undertaking any works that will affect Sand Lizards or Smooth Snakes or their habitat. A license is not required to carry out surveys or mitigation for other reptile species.

It seems unlikely that the site will support reptile species and there do not appear to be any issues at the present time.

Nesting birds

All breeding birds are protected under Section 1(1) and 1(2) of the Wildlife and Countryside Act 1981, as amended. This makes it an offence to damage, disturb, or obstruct access to nests during the bird breeding season (generally March to August).

Birds will use the boundary/internal features (hedge/scrub/dry-stone wall) so any planned removal for access or otherwise will have to be undertaken between October and February inclusive (to avoid the nesting season).

7. Recommendations

Habitats

Protected Species

There do not appear to be any issues involving protected species based upon the existing level of information apart from the timing of works in respect of nesting birds as detailed above.

Ecological enhancement

Current planning policy requires that development projects minimise ecological damage, they should also include ecological enhancement.

In this case some planting of native hedge/tree species should be included using native species to compensate for any loss of hedgerow/wall removal. Any proposed planting should be detailed on the submitted plans. If the silver birch trees require removal then suitable replacements should be marked on the submitted plans.

Two Vivara Pro build in woodstone bat tubes will be built into to the new south facing stonework. The number and location of these boxes will be clearly marked on the submitted elevation plans.

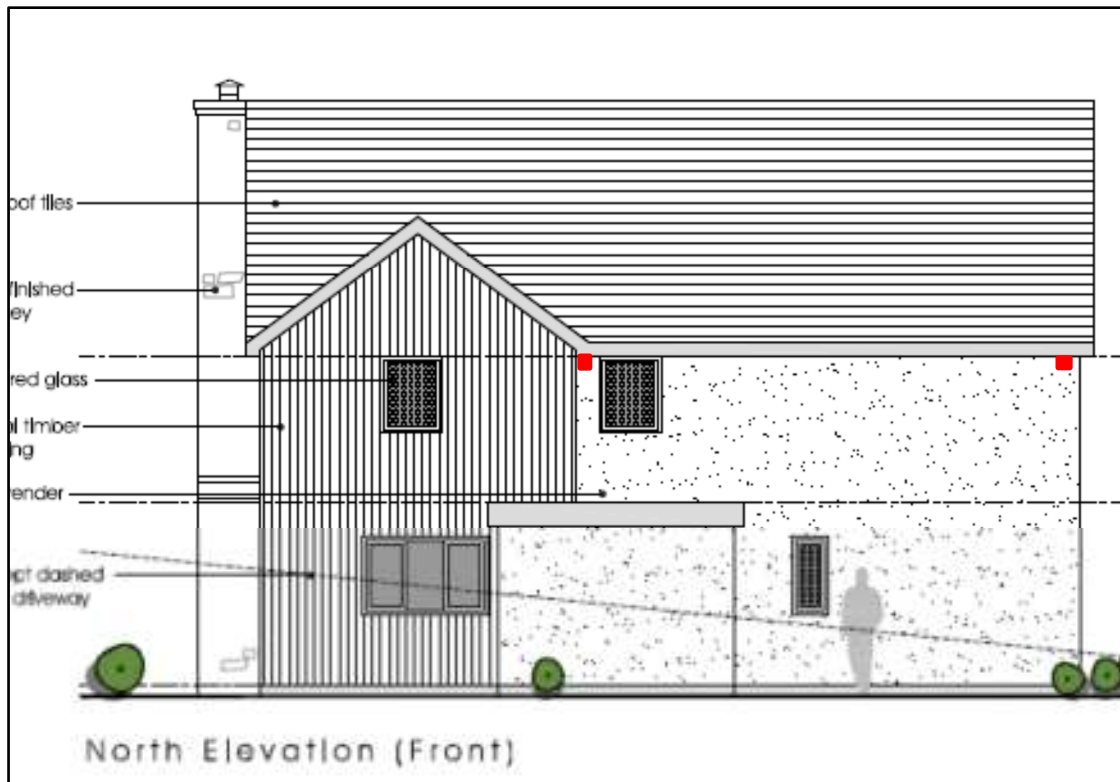


All external lighting for the new dwelling will be of a low luminance and directional towards the ground (lighting type example shown below). There will be no high-level illumination or halogen lighting which will discourage bats and there will be no external lighting on the south elevation near where the bat boxes will be located. All external lighting will include a motion sensor and a one-minute timer to avoid them being left on continually.

A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component. Lights should feature peak wave lengths higher than 550nm to avoid the component of light most disturbing to bats. This will be achieved by using LED light bulbs.

Any external lighting should be on a short timer with a cowling to prevent any up-lighting or light spread. All external lighting will be clearly marked on the submitted elevation plans.

Two Schwegler Type 24 swift bricks (32 mm hole) will be built into the wall on the north elevation. These boxes are multi-purpose and can be used by house sparrows, blue tits etc as well as other small birds. The type, number and location of the boxes will be clearly marked on the submitted elevation plans.



Biodiversity offsetting

In some cases biodiversity offsetting may be required as part of the consenting process. This is a last resort option that should only be used if there are impacts which cannot be avoided, mitigated or compensated for. In this case that is not required.

8. Relevant literature

Institute for Ecology & Environmental Management (2012) *Guidelines for Ecological Appraisal* IEEM Winchester

Rose, F. (1989) *Grasses, Sedges and Ferns* Viking Press

Schofield, H.W & Mitchell Jones, A.J (2004) *The Bats of Britain & Ireland* The Vincent Wildlife Trust, Ledbury, England

Stace, C. (2005) *New Flora of the British Isles* Cambridge University Press, Cambridge.

Appendix 1 – Species list

Trees and shrubs	
Apple	<i>Malus domestika</i>
Bay laurel	<i>Laurus nobilis</i>
Beech	<i>Fagus sylvatica</i>
Blackthorn	<i>Prunus spinosa</i>
Box	<i>Buxus sempervirens</i>
Bramble	<i>Rubus agg.</i>
Butterfly bush	<i>Buddleia sp.</i>
Cherry laurel	<i>Prunus laurocerasus</i>
Dog Rose	<i>Rosa Canina</i>
Elder	<i>Sambucus nigra</i>
English oak	<i>Quercus robur</i>
Hawthorn	<i>Crataegus monogyna</i>
Holly	<i>Ilex aquifolium</i>
Lawson cypress	<i>Chamaecyparis lawsoniana</i>
Silver birch	<i>Betula pendula</i>

Herbs	
Annual meadow grass	<i>Poa annua</i>
Broad leaved plantain	<i>Plantago major</i>
Chickweed	<i>Stellaria media</i>
Cleavers	<i>Galium aparine</i>
Cocksfoot	<i>Dactylus glomerata</i>
Common bent	<i>Agrostis capillaris</i>
Creeping bent	<i>Agrostis stolonifera</i>
Common nettle	<i>Urtica dioica</i>
Creeping buttercup	<i>Ranunculus repens</i>
Creeping thistle	<i>Cirsium arvense</i>
Crested dogs tail	<i>Cynosaurus cristatus</i>
Curled dock	<i>Rumex crispus</i>
Daisy	<i>Bellis perennis</i>
Dandelion	<i>Taraxacum officinale</i>
Hogweed	<i>Heracleum sphondylium</i>
Ivy	<i>Hedera helix</i>
Perrenial rye grass	<i>Lolium perenne</i>
Ragwort	<i>Senecio jacobea</i>
Red clover	<i>Trifolium pratense</i>
Red fescue	<i>Festuca rubra</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Rosebay willowherb	<i>Chaemerion angustifolium</i>
Rough meadow grass	<i>Poa trivialis</i>
Spear thistle	<i>Cirsium vulgare</i>

Sweet vernal grass	<i>Anthoxanthum odoratum</i>
White clover	<i>Trifolium repens</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire fog	<i>Holcus lanatus</i>

Appendix 2 – Site photos

Entrance drive to the site



Looking back up the driveway to the road entrance



Stone wall boundary along the entrance drive



Two small birch trees on the higher bank



Cherry laurel on the left of the drive with the occasional bay laurel



Gaps in stone wall can be used by nesting birds



Gaps in wall and dense vegetation above may be used by nesting birds



House plot



Hardstanding, wood chippings and grassed over chippings



Bay laurel



Hardstanding and wood chippings



Proposed construction area vegetated chippings



Single beech tree just below the road will remain



Field below where the septic tank will go (there is already an old tank in this location)



The Cottage site plan

- Drive/hardstanding
- Scrub/fruit trees
- Woodchippings
- Trees
- Stone wall
- Hedgerow

NOTE: Entrance shown indicatively
Existing entrance altered as per
Woodtype Developments design &
drawings: 10-01-01 / 10-01-01

Improved field

GARTH ROAD

FOX, CRANWELL
as per design
engineering
ref: 10-01-01

FOLK CHAIRMAN
JAMES DUNN
Engineering Institute
Tel: 01464 8911

E-mapper COFNOD plan – Public version

