

Terry Davies

Otter Survey

28th October 2016



Land to the north of Glanmyddyfi, Pentrefelin, Carmarthenshire.

Llecology

Environmental Consultant

Disclosure and limitations

The results of this survey and assessment work undertaken by *Llecology* are representative at the time of surveying.

Every effort has been made to identify the presence of protected species on site, where this falls within the agreed scope of works (*Lutra lutra*, European Otter).

The flora and fauna detailed in this report are those noted during the field survey (28th October 2016), records obtained from local record centres (where available). This report should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Only up to date standard methodologies have been used to undertake the survey and complete this report, which are accepted by Natural Resources Wales and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on site.

Llecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

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1 Summary

1.1 The Proposed Development

1.1.1 Terry Davies is seeking planning permission for the installation of a free range poultry unit at land to the north of Glanmyddyfi, Pentrefelin, Carmarthenshire.

1.2 Report Study and Survey

1.2.1 To supplement a planning requirement by the Carmarthenshire planning authority an Otter (*Lutra lutra*) presence/ absence survey was undertaken adjacent to the proposed development in Pentrefelin, Carmarthenshire. The banks of the Afon Myddyfi were searched for signs of otter in line with the accepted survey methodology.

After an extensive search no field signs of otter were found within the search area adjacent to the proposed site.

1.3 Previous Ecological Appraisals

1.3.1 Previously an ecological appraisal was undertaken by Baker consultants where a phase 1 habitat survey (assessment of potential for protected/otherwise notable species) and also a badger survey was completed at the site. The ecological appraisal identified a number of habitats and some limited potential for protected species on site or nearby. They include the following:

- One nationally designated conservation site within 1km of the site boundary.
- The Afon Myddyfi river, located some 20m from the southern site boundary.
- Potential habitat for foraging/roosting bats, breeding/foraging birds; dormice, common amphibian species and foraging/commuting badgers.

1.4 Required Actions

1.4.1 Communication with NRW and careful consideration for impacts on the above receptors are understood to be minimal within the scheme design. Extensive planting within and near the development boundary will only add to biodiversity gain. According to the plan of works, no external lighting will be used, no hedges will be removed within the red line boundary (with the exception of a small section to the south of the site near the A40, which will be replaced). The scheme details that no trees in areas close to the site will be removed or managed.

1.4.2 Although it would prove difficult for otters to scale such steep banks and navigate through hedgerows to access the development site, it is recommended that:

- The development area be securely fenced off during the construction process to prevent possible disturbance to otter

1.5 Conclusions

1.5.1 The applicant, through the process fully understands the requirement of the above recommended actions, along with previous recommendations by Baker consultants. The applicant has proven committed to completing the recommendations of previous studies. Planning conditions should be issued with regards to these recommendations providing further certainty that the proposals will have no ecological consequences, while upholding design elements to provide biodiversity gain.

1.5.2 Provided that the recommendations outlined in this report are fulfilled, it is concluded that this scheme will not adversely affect *lutra lutra* (European otter) and there is no reason why planning permission cannot be granted for this development.

Every effort has been made to identify the presence of the protected species, European Otter (*Lutra lutra*) on site, where this falls within the agreed scope of works.

2. Introduction

2.1 The Proposed Development

2.1.1 Llecology was commissioned by JCR Planning Ltd on behalf of Terry Davies (“the Applicant”) in October 2016 to complete an Otter *Lutra lutra* presence/absence survey on the river Afon Myddyfi adjacent to the land at Pentrefelin, Llandeilo, to fulfil a planning requirement. The site lies within the county of Carmarthenshire.

2.1.2 The surveyed site included the river Afon Myddyfi and the immediate surrounding area closest to the larger of the three sites where concern was voiced on potential negative impacts, centred on National Grid Reference SN598240 seen in [Figure 1](#) below.

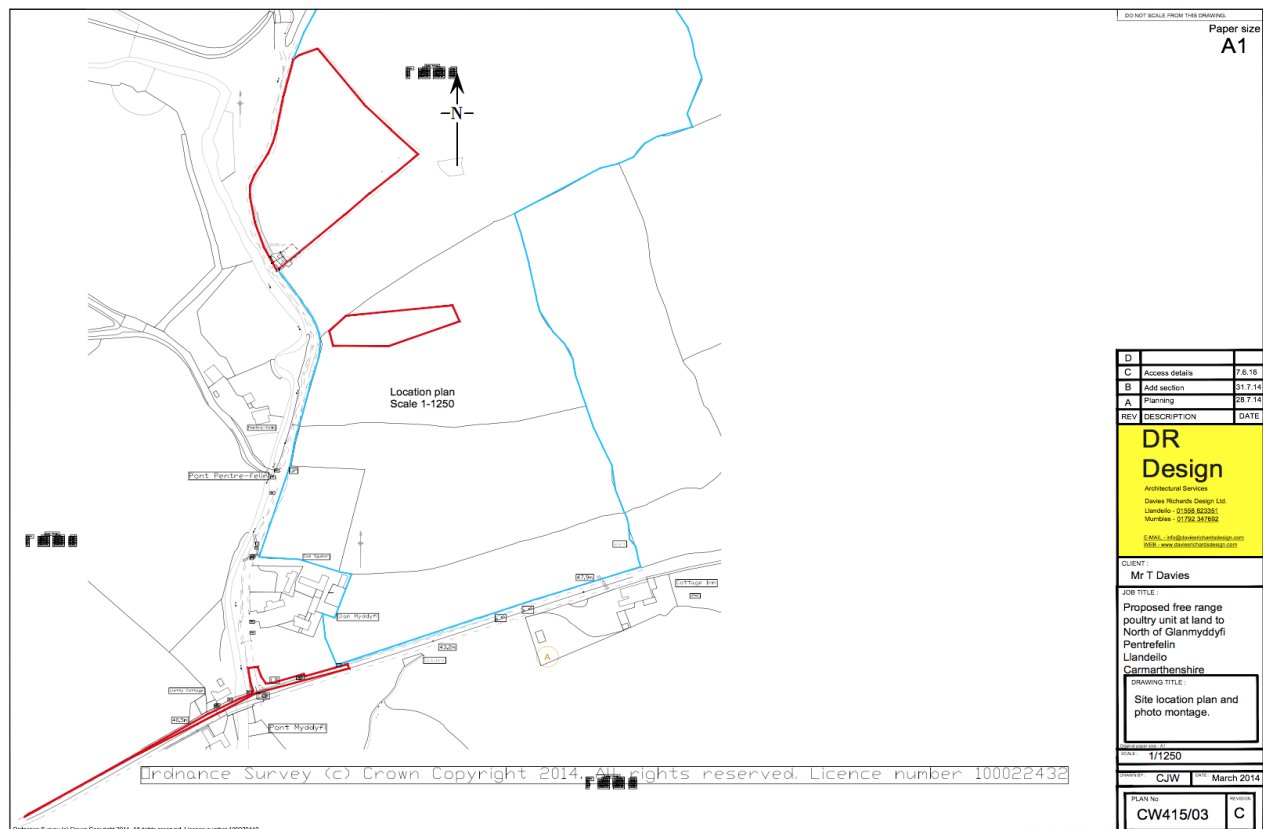


Figure 1. Ordinance survey showing three land parcels in red and the Afon Myddyfi in Blue.

2.1.3 This report has been prepared to accompany a detailed planning application to Carmarthen County Council (CCC), in conjunction with an Ecological appraisal by Baker consultants, for the installation of a free range poultry unit, together with associated new woodland planting and minor alterations to the road junction with the A40 to accommodate visual splay.

2.2 Study Aims

2.2.1 This report considers the potential impacts of the proposed development site on the European otter *lutra lutra*. The report details the methodology (Section 3) and results (Section 4) of the otter survey, describing features of ecological value if found to be present and the potential impacts that may occur (Section 5). The report also outlines actions, if needed, that will be undertaken by the Applicant to help minimise development impacts on otters and their habitat.

3. Otter Ecology

3.1 The European Otter, *Lutra lutra* is a member of the Mustelidae family which includes weasel, stoat, badger, polecat, pine marten and mink. There are 13 species of otter worldwide although only the Eurasian Otter is native to Britain.

3.2 History

3.2.1 Formerly widespread throughout the UK, the otter underwent a rapid decline in numbers from the 1950s to 1970s. Reasons for this include increased pollution incidents, the intensification of agricultural practices, habitat loss and fragmentation and persecution. More recently, however otter sightings and numbers have been reported to be increasing as populations have begun to re-establish and expand territories once lost.

3.3 Behaviour

3.3.1 Otters are relatively rare and elusive animals so otter presence is generally determined by recording spraint (faeces), which is generally deposited in prominent places such as under bridges and on rocks in or along a watercourse. Otters are wide ranging, nomadic and mainly nocturnal amphibious mammals. They occupy large home ranges and utilise a wide range of habitats including rivers, streams, ditches and wetlands.

Otters use resting sites usually termed 'holts' or 'couches' in which to sleep. These may be holes or covered areas found under roots of bank side trees or within log or stone piles. The word couch is used where they use an above-ground nest-like structure in reeds or other vegetation.

3.4 Distribution

3.4.1 Otters have been recorded exploiting a variety of different types of waterways and wetlands in Britain. In England and Wales, they are mainly restricted to fresh water habitats but in Scotland (and South and West Wales) have been recorded in coastal habitats. Otters will cross land away from waterways using features as dry ditches with good vegetation cover.

4. Law and Legislation

4.1 It is an offence under the Wildlife and Countryside Act 1981 (sections 9.1 and 9.4, schedule 5) to kill, injure or take an Otter from the wild without a licence; to damage or obstruct a Holt; or disturb an Otter in its resting place. Licences are also required for checking out known Holts or for carrying out work that may disturb Otters; this includes tree management of any trees that are used as resting places by Otters.

The Eurasian Otter (*Lutra lutra*) is listed in the Bern convention on international trade as an endangered species (CITES). It requires special protection measures under the European habitats directive (92/43/EEC). Its listing in Annex 2 requires the designation Special Areas of Conservation (SACs) for known sites.

4.1.1 Designation status

Annex II species that are a primary reason for selection of this site;

- 1355 Otter, *Lutra lutra*

The Afon Tywi is one of the best rivers in Wales for otters, *Lutra lutra*. There are abundant signs of otters and they are regularly seen on the river. The water quality is generally good and ample supply of food. There are suitable lying-up areas along the river bank, but there few known breeding sites on the main river, although cubs have been seen. (JNCC, 2016).

5. Methodology

5.1 Study Scope

5.1.1 Llecology was commissioned by the Applicant to complete an Otter (*lutra lutra*) survey of the site.

- Desk based study

Online databases and other sources were used to identify nearby designated sites of ecological conservation importance. It was considered relevant to obtain protected species records for the European otter (*Lutra lutra*).

- Otter survey

A survey for otters was completed in accordance with standard surveying methods.

5.2 Surveyor Qualifications

5.2.1 Laurence Lewis BSc (Hons), Graduate MCIEEM completed the Otter survey and wrote this report. Laurence graduated from Swansea Metropolitan Trinity Saint Davids in Environmental Conservation and is currently a graduate member of MCIEEM.

5.3 Otter Survey

5.3.1 Due to the rarity and elusive nature of otter, an actual sighting would prove unlikely. Because of this, the survey area was searched for field signs and evidence identifying the positive presence of otters as described below.

Spraints

A territorial marker usually left in a prominent position on the riverbank or on a rock mid- river. These are found in varying degrees of freshness from fresh when they are almost transparent and liquid, to old when they are grey, solid and dry through to disintegrated when they are a loose collection of prey remains. As well as spraints, tar spots are black marks left on rocks without any prey remains within them, and there is also anal jelly, which can be left in similar areas.

Feeding remains

These can be half-eaten fish or amphibians with their skins stripped - usually they require a spraint to be adjacent to ensure that the remains belong to otters.

Prints/Tracks

Otter paw-prints (also known as seals) can sometimes be seen left in areas of mud or silt. With 5 digits and a rounded pad, in very soft sand/silt the webbing between the digits may be visible. They can also tell you the age and sex of an animal, with large prints belonging to adult males, medium prints belonging to females and subadult males, and small prints to juveniles.

Runways, slides, haul-out places

After prolonged use of the same routes and locations, otters will create runways or pathways across fields, usually at bends in streams or rivers. In addition, distinctive well-worn and shiny slides and haul-out points where they enter and exit the water can also be visible.

Holts

Holts are the cavities in a river bank, often a hollow tree, between roots, rocky clefts, rabbit burrows or tunnels in peat where otters live, rear their young and shelter on a permanent basis. The entrance may be underwater with an air vent into the chamber, which is lined with dry vegetation. They can be used by a breeding female or a single adult. A holt will usually have sprinting sites around it. An otter may have many holts or resting sites within its home range.

Resting up site/Couch

These structures are of a temporary nature and can be used by a resting otter for several hours in between feeding bouts or whilst an individual is travelling over long distances.

5.3.2 Weather conditions can affect the outcome of surveys. Therefore, surveys undertaken during periods of high water or peak leaf fall are unlikely to be productive.

5.4 Desk Based study

5.4.1 One nationally designated site was highlighted within the search area, this being Birdshill Quarry Site of Scientific interest (SSSI), designated for geological interest.

5.4.2 There are no SINC's defined within the Carmarthenshire LDP area. Non statutory designated sites are therefore not considered further here.

6. Survey Results

6.1 Habitats

The survey was conducted at low river water level, on an overcast, mild day with a light breeze.

6.1.1 The habitat types recorded during the otter survey were as follows;

- Afon Myddyfi corridor with mature /semi-mature trees and scrub land,
- Partly bordered by intact hedgerows,
- Steep rocky banks in areas, vertical embankments,
- Limited areas for 'couches',
- A number of trees close to the river had exposed roots but were seen as unsuitable for holts due to the rivers high water level and the geological nature of the rivers corridor/channel.
- Some deep pools were recorded within the surveyed,
- Exposed boulders due to low water level, submerged during periods of high rainfall and water level.

Evaluating the rivers topography indicated that the surveyed area would prove an unsuitable habitat for breeding otters. The steep and in areas vertical banks as seen in [Figure 2](#) and [Figure 3](#), would prove difficult for otters to access and exit the river. The geology of the channel would suggest that the river has a high velocity during periods of rainfall with little sheltered areas or couches on which to enter and exit the river freely. With otters having large individual territories, it is possible that the surveyed area is no more than a commuting highway and

foraging area which would be used for short periods of time before moving to calmer breeding and foraging areas of the river.



Figure 2. Example of banks and channel.



Figure 3. Example of river topography

7.0 Interpretation

7.1 Taking into account the form of the river channel (steep vertical sides) and the intervening topography between the proposed development and this channel (woodland strip, tarmacadam road, hedgerow and semi-improved grassland), seen in [Figure 4](#) and [Figure 5](#), it is considered that the possibility of the otter exiting close to the development would be highly unlikely and most difficult.



Figure 4. Photo presenting obstacles (vertical banks, tree line, hedgerows and tarmacadam road) otters would need to overcome to access the development.



Figure 5. Photo presenting obstacles (heavily managed hedgerows and tarmacadam road) otters would need to overcome to access the development.

8. Recommendations

The site was assessed and is understood to be primarily used for commuting and foraging by otters. It is believed that the otters would suffer minimal impact from the proposed development due to the agreed mitigation expressed in the Ecological appraisal by Baker consultants.

This report recommends that;

- The development area be securely fenced off during the construction process to prevent possible disturbance to otter

9 References

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