

PEN MARCH WIND FARM

**Appendix 7.4 to Ecological Impact Assessment
Otter and Water Vole Survey Report**
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1.0 Introduction

This report has been prepared by SLR Consulting Limited (SLR) on behalf of RWE Renewables Ltd, and summarises the findings of otter (*Lutra lutra*) and water vole (*Arvicola amphibius*) surveys conducted at a proposed wind farm, referred to herein as the Site, north-east of Merthyr Tydfil in Mid Glamorgan (approximate centre site Grid Reference: SO 08654 10182).

1.1 Site Description

The Site centre is located approximately 1km north-east of the suburb of Dowlais Top on the north-eastern fringe of Merthyr Tydfil and 2km north-west of the centre of Rhymney village. The southern boundary of the survey area lies approximately 90m north of the A465 Heads of the Valleys Road.

The survey area comprises a broadly sloping area of purple moor grass (*Molinia caerulea*) dominated grassland, with small, scattered areas of dense scrub, exposed rock, and dry heath. The survey area rises from approximately 370m above sea level at the southern extent of the survey area (adjacent to the A465 road) up to approximately 530m in the north of the survey area. There are standing open water habitats within and in close proximity to the Site, and several streams cross the upland terrain. The wider landscape around the survey area is typified by grazed moorland habitats, with frequent scattered areas of industrial and residential development to the south, south-east and south-west of the survey area and the Bannau Brycheiniog National Park lying to the north of the survey area.

1.2 Scope of Study

The aims of the survey was to:

- establish the presence, or likely absence, of water vole and otter in proximity to the watercourses and ponds on Site;
- determine, if present, the distribution and habitats associated with water voles in the context of the site;
- establish the use of watercourses on Site by otter for foraging and/or commuting pathways between foraging sites; and
- identify, if present, features that could be potentially used as otter holts.

This report presents the findings of the water vole and otter surveys. The assessment of impacts resulting from the proposed wind farm and the development of mitigation, compensation, and enhancement measures (if required) is beyond the scope of this report and will be presented within a separate Environmental Statement.

1.3 Legislative Context

Otters are protected under The Conservation of Habitats and Species Regulations 2017 (as amended) and are also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), making it an offence to: recklessly or deliberately capture, kill, disturb or injure an otter; damage or destroy a breeding site or resting place; obstruct access to a place of rest or shelter; and to possess, sell control or transport live or dead otters, or parts of otters.

Water voles are protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence to intentionally kill, capture or injure a water vole, and/or intentionally or recklessly disturb, obstruct, damage or destroy their burrows.

Otters and water voles are also a Species of Principal Importance (as listed in Section 41 of the Natural Environment and Rural Communities Act (NERC) 2005). There is a requirement that adverse effects of development on a Species of Principal Importance should be avoided through planning conditions or obligations

and that planning permission should be refused where harm to these species, or their habitats, may result, unless the need for, and benefits of, the development clearly outweigh the harm.

2.0 Methodology

2.1 Desk-based Study

A desk-based study was undertaken and involved collating data from several organisations and examining published data relating to water vole and otter found within the Site and within a 2km radius. Data sources used included ecological records supplied by the South-East Wales Biodiversity Records Centre (SEWBReC) in June 2019.¹

2.2 Field survey

The water vole survey comprised of two field surveys conducted in June and August 2020. The otter survey was conducted alongside this, and a further two more surveys were carried out in December 2020 and February 2021. The watercourses and adjoining habitats shown on **Figure 7-4** were searched for field signs of both species.

Field signs searched for included:

2.2.1 Otter

- holts;
- other resting places (couches);
- slides;
- spraint; and
- feeding remains

2.2.2 Water vole

- burrows;
- runs;
- feeding stations
- lawns; and
- latrines.

An assessment of the quality of habitat for both species was also made during the survey.

2.3 Limitations

Desk study data is unlikely to be exhaustive, especially in respect of species, and is intended mainly to set a context for the study. Interpretation of maps and aerial photography has been conducted in good faith, using recent imagery, but it has not been possible to verify the accuracy of any statements regarding habitats outside of the survey area.

Both field surveys for water vole took place inside the active season (late April to early October). A further two surveys were conducted in winter for otter to check for any differing use of the habitats at this time of year. The survey was not therefore subject to any constraints or limitations regarding timings.

¹ This data was updated in September 2022 due to the time that had elapsed since the original data search.

2.4 Survey Personnel

The otter and water vole surveys were conducted by Robert Williams, Associate Ecologist at SLR Consulting with assistance from Emma Clarke, BSc and Project Ecologists at SLR Consulting. The further otter surveys were undertaken by Emma Clarke and Roisin Jones, BSc, MSc, Project Ecologist at SLR and member of CIEEM.

3.0 Results

3.1 Desk-based Study

The data search records supplied by SEWBReC provided a total of 15 records of otter within 2km of the Site. Two of these were mortality records, the first from October 2008, detailed the remains of a sub-adult male, dead on the A470, Pengarnddu to the west of Site and another is from the Heads of the Valleys Road to the south of Site. Another record was from 2001, described as south of Esgairdraenllwyn Bridge, approximately 150m away from Site. There are several records associated with Cwm Taf Fechan, to the west of Site, including spraints found on rocks within the river and on a ledge under the Glais Bridge, there is also a record detailing the sighting of young otters in this area. One record is from Taf Fechan Gorge to the north west of Site. The most recent record was from 2018, it was a spraint recorded at Twynau Gwynion, north of site by approximately 1.2km.

SEWBReC returned no records of water vole within a 2km radius of the Site.

3.2 Field Survey

Table 1 details the dates of each of the two surveys for water vole and four surveys for otter.

Table 1- Field Survey Timings

Date	Survey For	Survey Personnel
10 th June 2020	Otter & Water Vole	Robert Williams & Emma Clarke
12 th August 2020	Otter & Water Vole	Robert Williams & Emma Clarke
2 nd December 2020	Otter	Emma Clarke & Roisin Jones
16 th February 2021	Otter	Emma Clarke & Roisin Jones

The ponds and streams, together with banks and areas in close proximity to the watercourses shown in **Figure 7-4** were extensively searched for evidence of either water vole or otter. No evidence was found of either species during the surveys.

Many of the stream banks in the northern reaches of the Site were vertical banks of rock rather than sediment, making them unsuitable for an otter holts or water vole burrows (Photograph 1). Some areas of exposed sediment did occur, and these were checked for holts and slides, but no evidence was found.



Photograph 1- Stream banks typical of the upper section of the Site.

Marginal vegetation on the banks of the streams (Photograph 2) consisted of acid grasses and rushes, the habitats here are broadly suitable for water vole, with vegetation providing cover from predators and a food source. Fluctuating water levels throughout the year however do occur which would leave burrows vulnerable to flooding. Grassy areas of the banks were searched for runs, feeding stations, lawns and droppings however none were found.



Photograph 2- Typical stream banks in the southern reaches of the Site.

Whilst the streams themselves, particularly in summer when the water levels are low, are unlikely to support enough food for otter, there are ponds (PM1 & PM2) in the survey area which have potential to provide foraging opportunities. Evidence of otter using the streams on site for commuting purposes between possible foraging sites (such as PM1 & PM2) was searched for. Flat rocks within the streams were checked for spraints, together with man-made areas such as outlets to PM2 and a culvert under the small road to the south of site (Photograph 3) where evidence may be persevered for longer amounts of time. No evidence was found.



Photograph 3- Culverted stream at the southeast boundary of the Site.

There are two ponds within the survey area, PM1 is a small (10x5m) upland pond with a sloping bank containing some bare sediment and marginal vegetation mainly consisting of soft rush (*Juncus effusus*), purple moor grass and cotton grass (*Eriophorum angustifolium*). No evidence of otter or water vole was found. PM2 is a large waterbody or reservoir with man-made embankments of boulders to the south. Limited vegetation provides unsuitable habitat for water vole. The northern banks are more natural, gently sloping, with marginal vegetation in-keeping with the marshy/acid grassland habitats, no water vole evidence was found. Prey remains and otter spraints were searched for however no evidence of otter using the ponds was found.

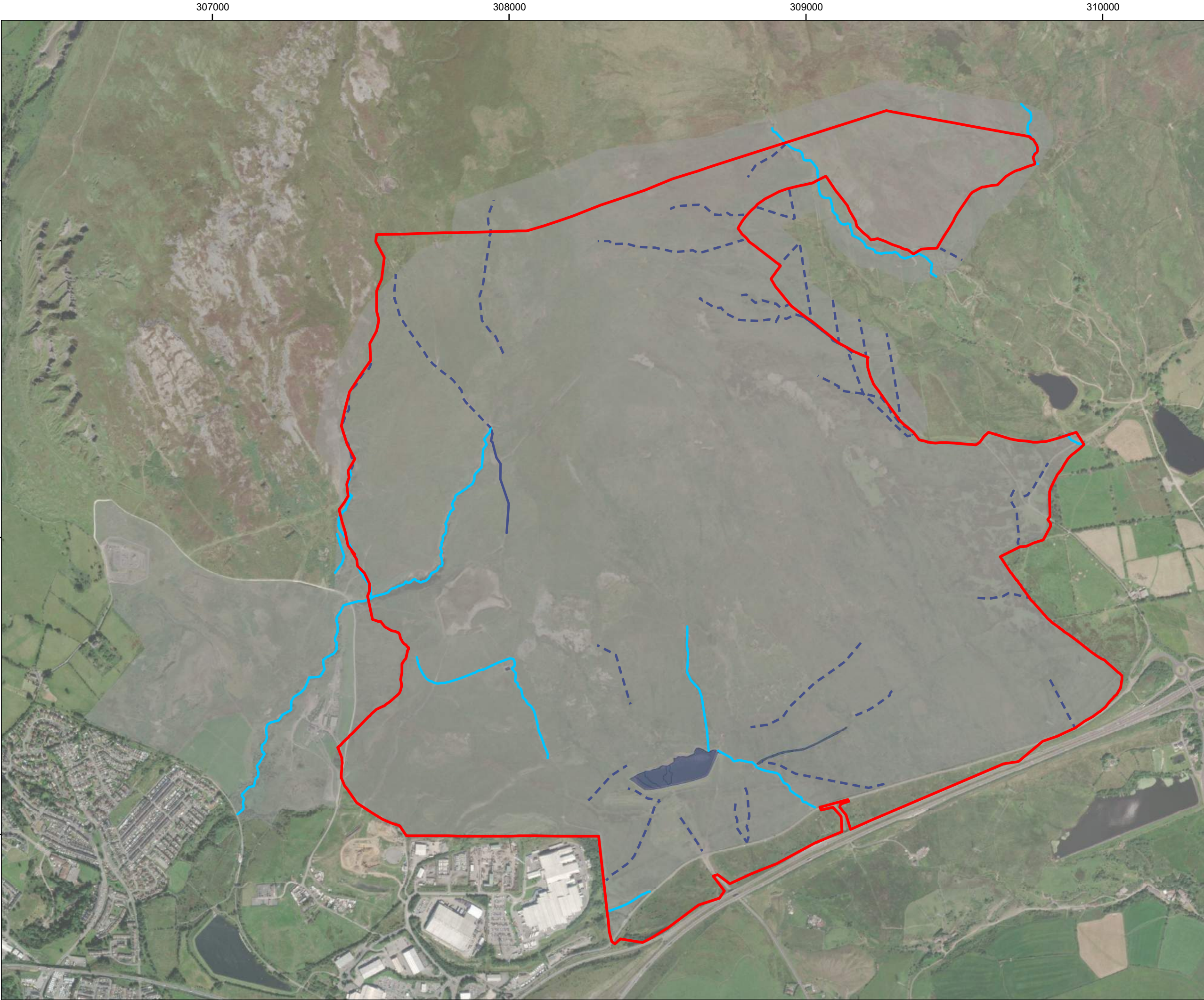
The only mammal evidence recorded during the surveys was that of a fox (*Vulpes vulpes*). Faeces containing small mammal bones and fur was found within vegetation above the banks of PM2 on several occasions and once in close proximity to the stream in the southeast corner of the Site survey area. Similar evidence of fox was found in areas away from the watercourses, towards the mast in the central zone of the Site.

4.0 Conclusion

No evidence of otter or water vole was found within the survey area. All watercourses within the Site were searched for evidence.

Although the desk-based study showed that there are several otter records in close proximity to Site, four surveys at differing times of year have found no evidence of otter using the habitats surveyed. The watercourses are generally unsuitable for an otter holt and the streams are unlikely to provide enough food to sustain an otter. Whilst there may still be a chance that otter could use the streams on site for commuting and ponds for opportunistic season foraging, no evidence was found.

Whilst there is some suitable habitat for water vole along the watercourses present, no previous records were found of water vole within the Site or surrounding 2km. No evidence was found of their presence during the field surveys.



Legend:

Pen March Site Boundary

Phase 1 Habitats

G1 - Standing Water

G2 - Running Water

J26 - Dry Ditch

G1 - Standing Water

Phase 1 Areas - Other

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter



1	09/16/2022	First Revision	JK	Chk	CM
Rev	Date	Description	Drn	Chk	App

Pen March Wind Farm



TITLE: Figure 7-4:
Otter and Water Vole Survey
Locations

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Meters

SCALE: 1:12,000 @ A3

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