

Quaker's Yard, Treharris Update Otter Survey Report

July 2023

Englobe



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Version	Date	Author	Checked	Approved
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Contents

1.0	Introduction	1
	Background	1
	Aims and Objectives	1
	Site Characteristics	1
	Legislation, Planning Context and Status	2
2.0	Methodology	4
	Desk Study	4
	Field Survey and Assessment	4
	Remote Camera Monitoring	4
	Limitations of Survey Methodology	5
	Nomenclature	5
3.0	Results and Assessment	6
	Desk Study	6
	Field Survey	6
	Remote Camera Monitoring	6
	Evaluation	6
4.0	Impacts	8
5.0	Mitigation	9
	Further Survey	9
	Legal Compliance - Licensing	9
	Care and Vigilance during Works	9
	Opportunities for Biodiversity Enhancement	10
6.0	References	11

Plans

Drawing Number: 223340/16/dwg1

Figure 1: Otter Survey Results

Appendices

Appendix 1

Remote camera sample screenshot

Appendix 2

Artificial Holt Specification

Contact details can be found at the end of this document.

1.0 Introduction

Background

- 1.1 Keystone Ecology was instructed by Englobe on behalf of Wales and West Utilities to undertake an otter survey of land at a former gas works located at Quaker's Yard, in Treharris, South Wales (central grid reference ST 098 966).
- 1.2 The survey is required to ensure legal compliance and inform a planning application for remediation works, which will require vegetation of the works site and works to the riverbanks.
- 1.3 The survey is an update of the survey undertaken in August 2022 (Keystone Ecology, 2022a), which itself was recommended as part of a suite of surveys alongside a Preliminary Ecological Appraisal (Keystone Ecology, 2022b). The results of the 2022 otter survey reported no signs of otter in the survey area.

Aims and Objectives

- 1.4 The aim of the otter survey was to:
 - Determine presence or likely absence of otter;
 - If present, obtain an indication of the level of site usage;
 - Inform an assessment of likely impacts of the proposed development on otter;
 - Identify measures required to avoid or reduce impacts on otter; and
 - Advise on any potential requirement to attain a licence from Natural England to proceed with the works.

Site Characteristics

- 1.5 The 0.57 hectare site comprises entirely of deciduous woodland. The River Taff Bargoed delineates the southern boundary of the site, whilst the northern, eastern and western boundaries are contiguous with adjacent areas of broad-leaved woodland. A public footpath bisects the site and connects the small residential town of Treharris in the north, with Mill Street in the south. Stone walls, overgrown with vegetation and small structural remains of the former gas works are scattered throughout the site. All other features of the gas works have been demolished.
- 1.6 The site is located on the southern outskirts of Treharris. The wider landscape is characterised by residential villages including Nelson, Abercynon and Trelewis, surrounded by areas of pasture and woodland.
- 1.7 The River Taff Bargoed flows north-east to south-west and converges with the River Taff approximately 300 metres to the south of the site.

Legislation, Planning Context and Status¹

- 1.8 Otter is listed under Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations) and as such receive protection under Regulation 42 of these Regulations. Otter is also listed under Schedule 5 of The Wildlife and Countryside Act 1981 and therefore, receive protection under Section 9 of this Act (as amended by the Countryside and Rights of Way Act 2000).
- 1.9 This legislation makes it an offence to:
- Deliberately capture or kill an otter;
 - Deliberately disturb² an otter;
 - Intentionally or recklessly disturb³ an otter;
 - Intentionally or recklessly obstruct access to any structure or place an otter uses for shelter or protection; and
 - Damage or destroy a breeding site or resting place of an otter.
- 1.10 In the case of *Vivienne Morge vs. Hampshire County Council* (2010), the Supreme Court has defined deliberate disturbance as 'an intentional act knowing that it will or may have a particular consequence, namely disturbance of the relevant protected species.'
- 1.11 Since 2007 it is no longer a valid defence to show that the killing, capture or disturbance of a species covered by the Habitats Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of an otherwise lawful activity.
- 1.12 EPS licences can be granted by Natural Resources Wales in respect of development to permit activities that would otherwise be unlawful under the Habitats Regulations, providing that the following three tests (set out in the EC Habitats Directive) are passed:
- The development is for reasons of overriding public interest;
 - There is no satisfactory alternative; and
 - The favourable conservation status of the species concerned will be maintained and/or enhanced.

¹ Please note that this legal information is a summary and intended for general guidance only. The original legal documents should be consulted for definitive information. Web addresses providing access to the full text of these documents are given in the References Section.

² Affect its ability to survive, breed or rear young, impair its ability to migrate or hibernate, affect its local distribution or abundance.

³ Whilst occupying a structure or place used for shelter or protection.

Protection Afforded by the Planning System

- 1.13 Under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, public bodies, including Local and Regional Planning Authorities have a duty to *'from time to time consider what action the authority can properly take, consistently with the proper exercise of its functions, to further the general biodiversity objective'* (section 40(1)). The 'general biodiversity objective' is defined as *'the conservation and enhancement of biodiversity in England through the exercise of functions in relation to England'*. Section 40(2A) also requires that public bodies *'have regard to – (a) any relevant local nature recovery strategy, and (b) any relevant species conservation strategy or protected site strategy prepared by Natural England'*.
- 1.14 In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England under the UK Post-2010 Biodiversity Framework. This is referred to as the list of Habitats of Principal Importance (HPI) and Species of Principal Importance (SPI). The list is used to guide planning authorities in implementing their duty under the NERC Act.
- 1.15 Otter is an SPI.
- 1.16 Otter is also recognised as a priority species for conservation measures, through its inclusion in the Local Biodiversity Action Plan (Merthyr Tydfil County Council 2019).

2.0 Methodology

Desk Study

- 2.1 As part of the Preliminary Ecological Appraisal carried out by Keystone Ecology in 2022 (Keystone Ecology, 2022), the South-east Wales Biodiversity Records Centre (SEWBRc) was contacted for records of otter within 500 metres from the site. Website resources were also reviewed for any sites designated for otter within a 2 kilometres radius from the site boundary.

Field Survey and Assessment

- 2.2 The survey was undertaken with reference to Chanin, P., 2003 and advice provided by Nature Scotland (available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-otters>), as described below.
- 2.3 The survey area, shown on Figure 1, comprised both banks of the River Bargoed Taff within the proposed working area and extending 200 metres up and downstream of the area, plus adjacent bankside habitat, to taking into account the maximum anticipated disturbance distance which could impact otter based on the urbanised nature of the site and its surroundings.
- 2.4 The survey was undertaken on 5th July 2023 by an Ecologist from Keystone Ecology (Jack Howell BSc (Hons) ACIEEM), trained in the identification of otter field signs, who satisfies all necessary field survey competencies as set out by the Chartered Institute for Ecology and Environmental Management (CIEEM).
- 2.5 The survey was undertaken at a time that avoided periods following prolonged or heavy rainfall, and high water-levels, when spraints and other field signs of otter may be washed away.
- 2.6 During the survey visit, the watercourse, the banks and bankside habitat within the survey area, where accessible was available, were thoroughly searched for signs of otter activity, including otter feeding remains, spraints, prints, tracks, lay-ups and holts. Potential mammal slides into the watercourse were investigated for signs of otter presence, and associated mammal trails leading towards the slides were followed in search of potential resting and breeding sites.

Remote Camera Monitoring

- 2.7 Potential lay-ups or holts used by otter were then monitored for signs of otter activity using a remote monitoring camera (reo-link keen ranger PT), deployed for a period of 5 weeks between the 19th August and 23rd September. The camera was deployed on the opposite bank to the potential layup, slightly downstream at approximately 10 metres distance, and 4 metres above water-level. See Appendix 1 for a screenshot from camera footage.
- 2.8 The benefit of a remote monitoring camera, rather than a trail camera, is that any recordings taken by the camera can be reviewed remotely, without the need to visit site, thereby

minimising the number of site visits required to just those required to replace batteries and collect memory cards, which in turn reduces the potential disturbance impact.

Limitations of Survey Methodology

- 2.9 Up to date standard methodologies were used. No responsibility will be accepted where these methodologies fail to identify all species on site. Keystone Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.
- 2.10 The results of the survey and assessment work undertaken by Keystone Ecology are representative at the time of surveying. However, it should be noted that due to the limited extent of the survey area, and considerable size of otter territories, an absence of field signs recorded during a single visit is not sufficient to confirm that otter do not utilise the site; however, the results provide an indication of the level of activity expected on site at the time of the survey. This limitation has been taken into account in the analysis of the survey results and any recommendations for further measures required (chapters 3-5).

Nomenclature

- 2.11 The English names of flora and fauna species are given in the main text of this report. Scientific names are used only in the absence of English names. Vascular plants and Charophytes follow the nomenclature of The Botanical Society for the British Isles database (2007) with all other flora and fauna following the UK Species Inventory (Natural History Museum, 2016).

3.0 Results and Assessment

Desk Study

- 3.1 The results of the desk study undertaken as part of the Preliminary Ecological Appraisal completed in 2022 (Keystone Ecology, 2022B) reported three historic records of otter within 176 metres from the site.
- 3.2 In the county and wider within the region, records of otter have been reported for the River Taff catchment up and downstream of the proposed works site (e.g., NBN Atlas, 2022).
- 3.3 There are no statutory sites designated for otter within 2 kilometres from the site.

Field Survey

- 3.4 The section of the River Taff Bargoed within the survey area comprises a free-stone lined channel with heavily modified banks ranging between 2 and 3 metres in height.
- 3.5 The left bank (from the perspective of looking downstream, i.e., in a south-west direction) is lined by vertical stone and concrete revetments. The stonework had numerous gaps leading into small voids. A stone structure was located along the bank, opposite the proposed works site, and appeared to extend approximately 1.5 metres into the bank (see Appendix 1); refer to Figure 1 for location). The remaining section of the bank is lined by an unbroken concrete wall. Bankside trees and scrub overhung the bank, and some fallen timber was recorded in the channel. The right bank is lined by old stone revetment which had collapsed in several places.
- 3.6 The voids recorded amongst the stonework on the left bank offered potential opportunities for an otter to establish a lay-up; however, no field signs to confirm use by otter were recorded during the survey. A small concentration of five otter spraints, none of which were fresh, were recorded on the outer ledge of the brick/stone feature recorded along the left bank. There were no further otter field signs recorded inside the feature.
- 3.7 The right bank old stone revetment which had collapsed in several places provides opportunities for resting otter, however no field signs to confirm use were recorded.

Remote Camera Monitoring

- 3.8 No otter was recorded on camera utilising the banks, bankside habitat or commuting along the section of the River Bargoed Taff adjacent to the proposed works site during the camera monitoring period.

Evaluation

- 3.9 The recording of old spraints during the field survey, and historic records of otter reported within 176 metres from the site, confirm that otter utilise the section of the river within the survey area for commuting and foraging, and sporadically utilise the terrestrial habitat on site.

- 3.10 Considering the number and age of the spraints recorded at the entrance to the structure in the left bank of the river, and the absence of otter activity recorded on the camera during the camera monitoring period, it is considered likely that the structure is used occasionally, as a feeding site and/or for territorial marking. However, there is the potential that otter could utilise the feature in the future as a rest site.

4.0 Impacts

- 4.1 The proposed site remediation work requires the clearance of all vegetation from the right bank (from the perspective of looking downstream, in a south-west direction). The bank is to be regraded to provide a shallower sloping bank and 'soft' revetment, using timber obtained from the site clearance work.
- 4.2 Based on the results of the otter survey, the site is considered unlikely to be currently utilised by otter as a breeding or resting place and, therefore, no loss of a current otter breeding or resting site is predicted to result from the works, either as a result of direct physical clearance or damage, or disturbance/displacement during the works.
- 4.3 However, it is considered that otter could utilise the survey area as a resting or breeding site in the future. Therefore, there is a risk that the proposed works could result in the loss of a future holt/resting site and/or disturbance and/or displacement of breeding or resting otter due to the movement of plant and/or people, noise and/or potential light spill, if present at the time of the works.
- 4.4 The presence of old spraints and historic desk study records of otter confirm that the section of the river within the survey area is of value to commuting and foraging otter. Therefore, the works could result in impacts on commuting and foraging otter in the form of injury/trapping due to the inappropriate storage of plant and/or materials, disturbance/displacement due to movement on site, noise and/or potential light spill, and reduction in prey availability for otter due to potential fuel spills and sediment run-off into the river, which could degrade the condition of the water and riverbed leading to a reduction in brown trout.
- 4.5 No physical obstruction of the channel that would prevent otter from commuting along the river section within the survey area will occur, both during and after the works.

5.0 Mitigation

Further Survey

- 5.1 Due to the potential risk of impacts on otter, prior to the commencement of works on site, a repeat survey of the works site and surrounding suitable habitat up to 200 metres from the site, should be undertaken by a suitably experienced ecologist, with a particular focus on otter holts and resting sites that could present a licensable constraint.
- 5.2 The remote camera will remain deployed and monitoring will continue until to commencement of works on site, so that any occupation of the structure can be dealt with as soon as practicable and necessary to prevent a significant impact on otter.

Legal Compliance - Licensing

- 5.3 Based on the results of the survey, which confirm the absence of holts or resting sites, an EPS mitigation licence is currently not required for the proposed works to proceed. However, the results of the pre-commencement survey should be taken into account in the final assessment of licence requirements.
- 5.4 Should the pre-commencement survey and ongoing camera monitoring confirm the presence of a holt or resting site, advice on the potential requirement for a mitigation licence, or measures to prevent an offence being committed, should be sought from a suitably experienced ecologist before the works commence. If a licence is required to permit the works, this should be obtained prior to the commencement of licensable works.

Care and Vigilance during Works

- 5.5 Site investigations and main works must be conducted in accordance with up-to-date best practice pollution control guidance, i.e., Guidance for Pollution Prevention (GPP) 5 - Pollution Prevention Guidelines for works and maintenance in or near water (or any potential subsequent update). The following measures must be adhered to:
- Production of a risk assessment and method statement prior to works commencing;
 - Inclusion within the above, preventative measures inclusive of designated re-fuelling stations and a site specific 'spill-drill' in the event of accidental spillage during works;
 - Direct works to the riverbank must be carried out within a dammed section of the river channel, to prevent silt deposition into the wider channel;
 - Direct works within the river channel must be conducted when brown trout reds are not present (i.e., Works to be completed between June - September inclusive); and
 - Depending on the nature of the pollutants present on site, either silt fencing or a non-permeable membrane must be installed to prevent silt deposition during ground works on the remainder of site. Membrane specifications should be determined by a suitably qualified specialist.

Opportunities for Biodiversity Enhancement

- 5.6 In accordance with national and local planning policy, opportunities for biodiversity enhancement (above and beyond those required to mitigate for the identified impacts) are set out below:
- As soon as practicable after the completion of works, an artificial otter holt should be constructed along the restored right bank of the river, at the site's northern most boundary, and at a location pre-agreed on site with an appropriately experienced ecologist. The site should be a suitable distance from area of any potential sources of significant disturbance, to maximise chance of use. The holt should be constructed using site won logs and root balls. The holt should be constructed in accordance with a detailed method statement, approved by an ecologist. For a specification of a suitable holt design, refer to Appendix 2.

6.0 References

Botanical Society for the British Isles (2007). *BSBI 2007 List*. Available at: <http://www.bsbi.org.uk/taxonomy.html> [Accessed on 28th September 2022].

Chanin, P. (2003). *Ecology of the European Otter. Conserving Natura 2000 Rivers Ecology Series No. 10*. English Nature, Peterborough.

Chartered Institute of Ecology and Environmental Management (2018). *Guidelines for Ecological Impact Assessment in the United Kingdom. Terrestrial, Freshwater and Coastal*. Available at: <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-Sept-2019.pdf> [Accessed on 28th September 2022].

Dean, M and Chanin, P. (no date). *Otters and Development (Northern Ireland Environment Agency)*. Available at: Otters and Development (Northern Ireland Environment Agency) | CIEEM. [Accessed on 28th September 2022].

Keystone Ecology (2022a) *Quakers Yard, Treharris – Otter Survey Report*. Keystone Ecology, Tetbury.

Keystone Ecology (2022b) *Quakers Yard, Treharris - Preliminary Ecological Appraisal*. Keystone Ecology: Tetbury

Merthyr Tydfil County Council (2019). *Merthyr Tydfil Nature Recovery Action Plan 2019-2024*. Available at: <https://www.merthyr.gov.uk/media/5685/merthyr-tydfil-nature-recovery-action-plan-2019.pdf> [Accessed 28th September 2022]

National Biodiversity Network Atlas (2022) *Eurasian Otter (Lutra lutra)*. Available at: <https://species.nbnatlas.org/species/NBNSYS0000005133> [Accessed on 28th September 2022].

Natural History Museum. (2016). *UK Species Inventory*. Available at: <http://www.nhm.ac.uk/research-curation/scientific-resources/biodiversity/uk-biodiversity/uk-species/index.html> [Accessed on 28th September 2022].

Web Addresses for Access to Full Legislation and Policy Text:

Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019:
<https://www.legislation.gov.uk/ukxi/2019/579/contents/made>

Countryside and Rights of Way Act 2000:
<http://www.legislation.gov.uk/ukpga/2000/37/contents>

Habitats Directive:
http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

National Planning Policy Framework:
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/2116950.pdf>

Natural Environment and Rural Communities Act 2006:
<http://www.legislation.gov.uk/ukpga/2006/16/contents>

UK Post-2010 Biodiversity Framework:
<http://jncc.defra.gov.uk/page-6189>

Wildlife and Countryside Act 1981:
<http://www.legislation.gov.uk/ukpga/1981/69>

Plans

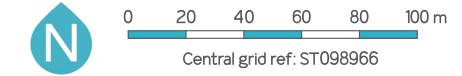


- Key
- Site boundary
 - Length of watercourse surveyed for Otter
 - 200m buffer from watercourse subject to search if mammal slides/trails found
- Otter camera survey
- Spraints adjacent feature with the potential to be used as a layup in future
 - Camera location



Englobe
Quakers Yard, Treharris
Drawing Number: 223340/3/dwg1
Otter Survey Plan

Revision	Date	Drawn	Approved
rev1	19/10/2023	MM	RT



No dimensions to be scaled from this drawing
All dimensions are to be checked on site
Measurements displayed are for indicative purposes only

Appendices

Appendix 1

Remote Camera Sample Screenshot

Daylight



Night (Infra-red)

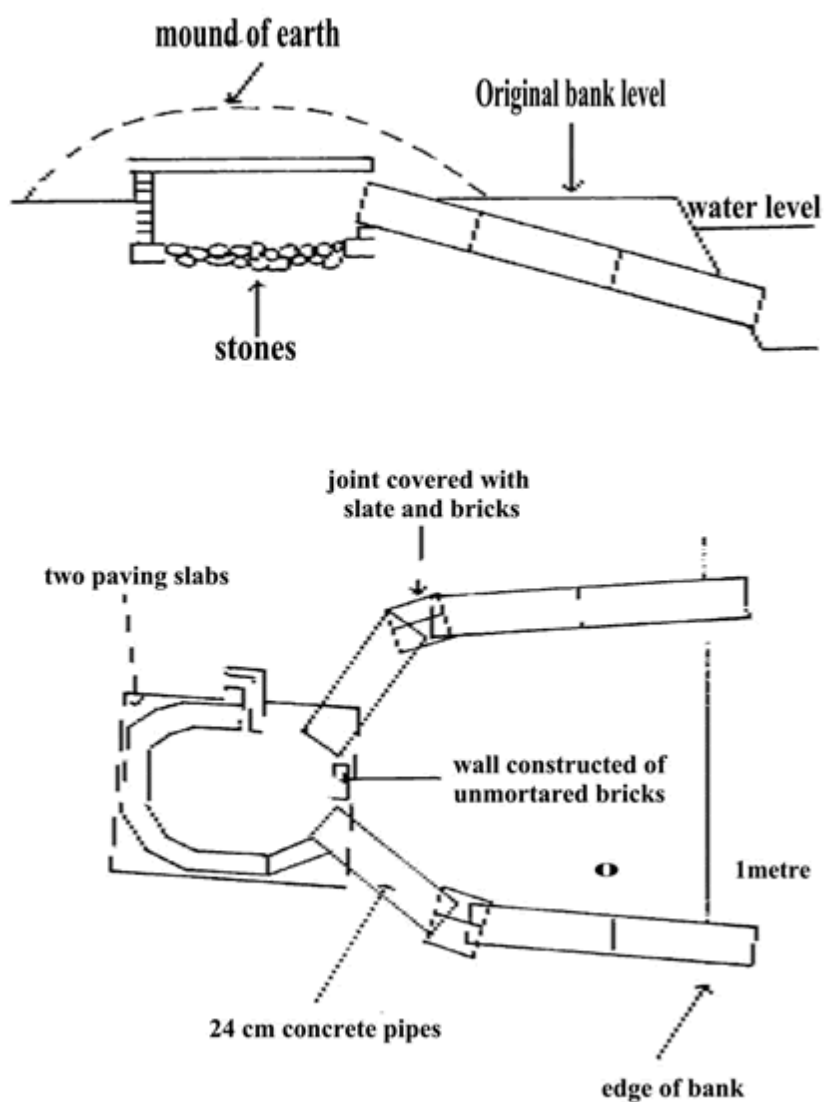


Appendix 2

Artificial Holt Specification

Ref: International Otter Survival Fund (2022)

Construction of artificial holt



Keystone Contact Details

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