

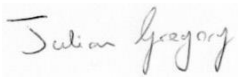
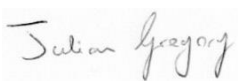
2022

Loughor Section A - E

Otter & Watervole Survey Report





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1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 As part of ecological walkovers to inform a Band 2 Marine License for the Loughor Sections A to E sea defence maintenance project. EcoVigour undertook desk-based assessments which highlighted records within proximity to the project. Previous walkovers indicated potential otter prints within intertidal mud, but could not be safely accessed to confirm.
- 1.1.2 Otter are an Annex II feature designation and habitat suitability that may support otters (habitat for foraging, commuting, and establishing holts, in the form of the river corridor and woodland further afield).
- 1.1.3 A follow up survey was undertaken to assess the potential level of Otter activity with the wider area of the project.
- 1.1.4 Watervole have been recorded within connected waterbodies and will be considered in this assessment.

1.2 LEGISLATION AND RELEVANT BIODIVERSITY CONTEXT

- 1.2.1 Otters are afforded protection in the United Kingdom under the Wildlife & Countryside Act 1981 (as amended) and as a European Protected Species (EPS) under The Conservation of Habitats and Species Regulations 2017 (as amended).
- 1.2.2 It is an offence to:
 - ◆ deliberately capture, injure or kill an otter;
 - ◆ deliberately disturb an otter; and
 - ◆ damage or destroy a breeding site (holt) or resting place (couch) of an otter.
- 1.2.3 Otters were also identified as a species that is a priority for nature conservation (priority species) within the UK Biodiversity Action Plan (UKBAP), which has now been superseded by the 'UK Post-2010 Biodiversity Framework' but is still an important reference source and has been used to help draw up statutory lists of priority species in each country in the UK.
- 1.2.4 The Environment (Wales) Act 2016 includes a duty on all public authorities to have regard to the conservation of biodiversity in the exercise of their functions.
- 1.2.5 This duty applies to government bodies, local authorities and statutory undertakers. The Act also requires lists to be published of Habitats and Species considered to be of Principal Importance for the Conservation of Biological Diversity.
- 1.2.6 These are referred to as Section 7 habitats and species after the sections of the Act which require the publication of lists in each devolved area. Otters are listed as a Section 7 Species.



2 METHODOLOGY

2.1 KNOWN DESK BASED DATA

- 2.1.1 The figure below illustrates records within proximity to the project area, south of the rail corridor and dual carriageway. There are additional records of Watervole further north and an Otter license return record further west. However, these are a significant range from the proposed works with more limited connectivity to the proposed working area at the defences facing the estuary.



Figure 1: WWBIC Records.

The table below provides further information on the types of records the above location represents.

Table 1: Description of local records.

Location Number	Species	Date	Description
1	Eurasian Otter (Lutra lutra)	20/11/2009	Otter casualty: Male; Sub-adult; Cause of death: RTA
2	Eurasian Otter (Lutra lutra)	20/11/2009	Sub-adult male. Dead on road
3	Eurasian Otter (Lutra lutra)	06/02/2010	Male. Dead on road
4	Eurasian Otter (Lutra lutra)	06/02/2010	First reported By Mark Newton and later picked up by Simon Allen (GBH)Record Type: Dead on road
1	European Water Vole (Arvicola amphibius) & Eurasian Otter (Lutra lutra)	10/08/2016	Sedge and reedbeds; normally without free-standing water; Likely; Feeding signs and latrines; Note that lizards were found along the boundary fence to the north of the area; water vole signs were present throughout and possible otter prints at the watercourse.



2.2 SURVEY AREA

- 2.2.1 The survey was focused on areas of habitat directly connected to the proposed working areas and in which previous recorded instances could be linked via connected habitat corridors.



Figure 2: Survey Area

- 2.2.2 The surveys were carried out in line with best practice survey guidelines. Surveys were conducted along the river and within the adjacent habitats, where the area was searched for further signs of otter.

- 2.2.3 Signs of otter that were searched for included:

- ◆ spraints (droppings) and anal jelly;
- ◆ footprints;
- ◆ feeding remains;
- ◆ slides (into water);
- ◆ holts (breeding places); and
- ◆ couches/lay-ups (resting places).

- 2.2.4 Water vole survey included:

- ◆ Assessment of the water feature banks up to 5m from the water's edge or 3m from the bank top, whichever is the greater.
- ◆ Assessment field signs; field
 - signs include latrines,
 - burrows,
 - tracks,
 - prints
 - and feeding signs.



2.3 LIMITATIONS

- 2.3.1 Note, some sections of habitat form part of an active rail corridor and consequently, could not be fully surveyed safely.
- 2.3.2 The findings presented in this report represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys can be limited by factors affecting the presence animals, such as animal behaviour.
- 2.3.3 The absence of definitive evidence of otters or watervole during the survey should not be taken as conclusive proof that the species is no longer present or that it will not be present again in the future



3 SURVEY FIGURES AND RESULTS

- 3.1.1 The first was undertaken on during August 2022 by ecologists Owain Waters (EcoVigour Ltd). During this visit, the estuary to the south of the of the structure (rail embankment or masonry embankment depending on section) was assessed.

Table 2: Weather conditions during surveys.

Date	Temperature	Precipitation	Cloud Cover	Wind	Conditions
04/08/22	16C-18C	0-1	3-6	1	Mild

- 3.1.2 The images below were taken on the first survey up and down stream of the structure during low tide conditions.



Figure 3: Watercourse south of rail embankment flowing towards estuary (wader prints noted along length).



Figure 4: Upstream reedbed (100m+ west) of the works area.



Figure 5: Reed beds further west of project area (picture from pedestrian bridge over road and rail).



Figure 6: Section of wall on the eastern shore of the project.



Figure 7: Potential Otter print amongst other prints south.



Figure 8: Potential juvenile hind print close to public footpath.



Figure 9: Distinct mammal path into reedbed.



Figure 10: Potential Mink spraint.



3.2 FIELD SURVEY RECORD

3.2.1 The table below highlights the findings found during the survey and has also been transposed onto a map figure on the following page.

Reference No:	Field Sign	Descriptions
01	Potential Otter print	Potential hind print observed 50m south of rail embankment within exposed intertidal mud/watercourse.
02	Potential Otter print	Potential juvenile otter hint print found within narrow watercourse connected to reedbed further west (inland of the project area).
03	Distinct Mammal path	Distinct mammal path noted entering reedbed further west.
04	Potential Mink spraint	Potential mink spraint observed. Sample was slimy, containing hair, although it did not exhibit the normally distinct aroma of either mink or the more pleasant aroma of Otter spraint.

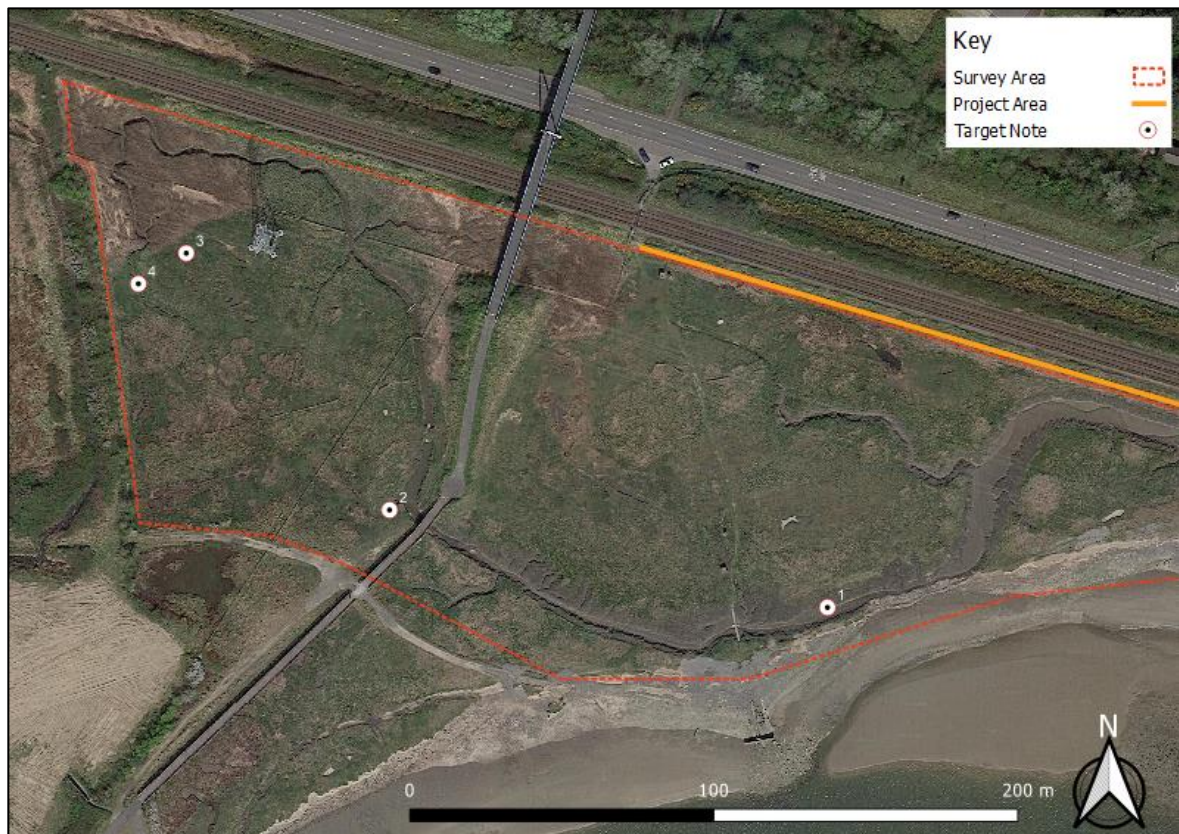


Figure 11: Target Note Locations.

3.2.2 Multiple other prints not pertaining to otters or Watervole were identified, with dog, human (footwear), fox and multiple wader species noted along the exposed mud foreshore and watercourse connected to the wider estuary.

3.2.3 In terms of habitat, there is definitive connectivity to the habitat further west of the project site. No evidence of Watervole was observed within the survey area. However, this is likely due to the reedbeds, and watercourses in proximity to the project are very much within the tidal reach and therefore does not provide a stable habitat for viable burrows.



4 RECOMMENDATIONS AND CONCLUSION

- 3.2.4 Otter presence should be assumed for the duration of the works. Consequently, best practice mitigation measures should be implemented to reduce potential disturbance to Otters travelling up and downstream of the structure during the maintenance works.
- 3.2.5 No features such as holt or layup areas have been observed within the survey area. Although the assessment has not surveyed locations north of the project. As works are focused on the sea defences facing the tidal reach and both a rail corridor and active dual carriageway are present between habitat to the north and project area, this assessment is considered appropriate for the scale of works proposed.
- 3.2.6 The following precautionary measures will be implemented:
- ◆ Works should be carried out during daylight hours (up to 30 minutes after sunrise and 30 minutes before sunset) where possible, to avoid disturbance to commuting or foraging otters.
 - ◆ Access for otter along up and down stream of the waterbodies will be maintained during the project.
 - ◆ The principal contractor will nominate a member of the site team to act as a warden. Should an otter been seen within proximity to the works, the warden will request works to be temporarily ceased if safe to do so and allow the animal to move in its preferred position and disperse from the area of its own volition.
 - ◆ Any sightings of otter will be reported to the project environmental coordinator.
 - ◆ The principal contractor must ensure any equipment (such as ropes or securing ties) are well secured and not in a fashion that could ensnare or trap otter (or any other animal).
 - ◆ Toolbox talks must be provided to the project team ahead of the works.
 - ◆ The principal contractor must adhere to the Biosecurity Measures outlined within the Marine License documentation and all relevant GPP's.
- 3.2.7 The above mitigation measures of assessed a sufficient to ensure local otter populations will not be detrimentally impacted by the project.
- 3.2.8 In relation to Watervole, although there are records within 200m of the project, the onsite conditions of the tidal reach and proposed works footprint are highly unlikely to impact features pertaining to Watervole (e.g., burrows and foraging areas).
- 3.2.9 No features pertaining to this species was observed during the survey. This assessment does acknowledge that Watervole can tolerate brackish waters, however habitat within close proximity to the project is directly exposed to the tidal reach and are therefore unsuitable for this species. Consequently, the main vector of risk to this species would be via pollution vectors, which will be addressed by strict adherence to GPP's.
- 3.2.10 Any changes to approach or works duration should be discussed with an ecologist as further mitigative measures or additional surveys may be required to quantify potential impacts to local otter or watervole populations.