

TECHNICAL APPENDIX .92: OTTER AND BADGER SURVEY BASELINE REPORT

1 INTRODUCTION

- 1.1.1 In November 2015, Atmos Consulting Ltd (Atmos) was commissioned by Richards, Moorehead and Laing (RML), on behalf of Jones Brothers, to carry out an otter *Lutra lutra* and badger *Meles meles* walkover survey of the Seiont Quarry site. This Site is proposed for use as a construction compound for the proposed A487 Caernarfon and Bontnewydd Bypass scheme.
- 1.1.2 This report presents the findings of those surveys and provides the technical appendix to Chapter 8 of the Environmental Statement for the proposed works at the Site.

2 METHODOLOGY

2.1 Badger Walkover Survey

- 2.1.1 A badger walkover survey of the Quarry Site was undertaken by Atmos surveyors on the 25th November 2015. The badger survey was carried out as a thorough walkover of the Site, with visual checks for any signs of badger presence made by two suitably experienced ecologists. The survey recorded any signs of badger activity (e.g. latrines, badger runs) as well as searching for setts which would represent a statutory constraint, if present.
- 2.1.2 This survey was carried out during the optimal survey period. Whilst the survey covered the Site as thoroughly as was practically possible, there were some areas of the site which could not be accessed for safety reasons (e.g the steep and unstable eastern side of the quarry sump).

2.1 Otter Walkover Survey

- 2.2.1 An otter survey of the Site was also undertaken by Atmos surveyors on the 25th November 2015. Otter survey methods were based on the principles of guidance set out in Otters and Development (SNH, 2007) with the aim of identifying any sensitive features and establishing the presence or absence of otter activity. The survey comprised walking along the whole length of the River Seiont (where possible and safe to do so) that flows adjacent to Seiont Quarry. The boundaries of the onsite quarry lake were also surveyed (where safe access was possible) along with the small ditch running between the river and the quarry lake. Signs of otter were searched for through close visual inspection of features near the waterline where otter spraints are likely to be found (e.g. larger rocks or fallen trees), and the banksides were examined for signs of otter holts.
- 2.2.2 During the survey, notes were also made of any signs of water vole *Arvicola amphibious* presence.

2.2.3 This survey was carried out during the optimal survey period. Periods of heavy rain in the weeks prior to the survey resulted in high water levels in the River Seiont, meaning that older evidence of otter presence at the usual water line was likely to have been removed. However, there were still sufficient features above the water level available for use by otters, and therefore the conditions were not considered to significantly affect the results of a presence / absence survey.

3 SURVEY RESULTS

3.1 Badger Walkover Survey

3.1.1 No signs of badger activity were observed on the Site, and no badger setts were located. Whilst the occasional presence of badger on site cannot be ruled out, there were no setts identified and therefore badgers do not present a constraint on the proposed development activities.

3.2 Otter Walkover Survey

3.2.1 Otter spraints were recorded in four locations along the River Seiont (survey photographs are provided at Appendix A and results are mapped on Figure 8.2).

- Firstly, a very fresh otter spraint was found on a large, moss covered rock on the river bank west of the former brickyard (grid reference SH 48886 61261). It was located approximately 1m above the water level and at the base of a steep brick wall which forms the river bank at that point. It is likely that this indicates otter activity along the river during the previous night.
- A second, much older, otter spraint was found on a large, mossy rock approximately 30cm above the water level underneath the bridge between the former brickyard and the main quarry site (grid reference SH 48926 61322). This spraint indicates otter activity along the river much less recently.
- Further upstream (SH 48836 61663), a large boulder within the river was found to have another old spraint.
- Finally, further upstream again an old otter spraint was found about 0.5m above the water level on a large rock on the western bank of the river (SH 48991 61756). Another sign of otter presence, 'anal jelly' was also present on the same rock.

3.2.2 It can be concluded that this section of the river is regularly used by otter, however, no holts were found. No signs of otter were found within the Seiont Quarry boundary, either along the lake edge or along the ditch which connects the river to the lake.

3.2.3 No signs of the presence of water vole were observed.

4 SUMMARY AND CONCLUSIONS

- 4.1.1 In November 2015 Atmos surveyors carried out an otter and badger walkover survey of Seiont Quarry and the adjacent River Seiont.
- 4.1.2 Signs of otter were found in four locations on the River Seiont where it runs adjacent to the Seiont Quarry site. One of these indicated very recent otter presence on the river (likely the previous night), whilst the other three signs were older, indicating otter presence within the last few weeks. It can be concluded that this section of the river is regularly used by otter, however, no holts were found. No signs of otter were found within the Seiont Quarry boundary, either along the lake edge or along the ditch which connects the river to the lake.
- 4.1.3 No signs of badger activity were observed on the site, and no badger setts were located. Whilst the occasional presence of badger on site cannot be ruled out, there were no setts identified and therefore badgers do not present a constraint on the proposed development activities.

APPENDIX A: Otter Survey Target Notes

<p>Photograph 1: fresh otter spraint found on a mossy rock on the river bank to the west of the former brickyard</p>	<p>Photograph 2: as photograph 1, with context</p>
 <p>A close-up photograph of a fresh otter spraint (droppings) resting on a mossy rock. The spraint is light-colored and has a distinct shape. The surrounding moss is green and dense.</p>	 <p>A photograph showing the same mossy rock with the spraint, but from a wider perspective. The rock is situated on a riverbank, and the water of the river is visible in the background.</p>
<p>Photograph 3: older otter spraint found on a large rock beneath the bridge between the former brickyard and the main site</p>	<p>Photograph 4: old otter spraint observed on a large rock within the river further upstream.</p>
 <p>A photograph of an older, more weathered otter spraint on a large, mossy rock. The rock is partially submerged in the river, and the water is turbulent around it.</p>	 <p>A photograph showing a large rock in the middle of a river. The water is flowing rapidly around the rock, creating white foam. The spraint is visible on the rock.</p>
<p>Photograph 5: otter 'anal jelly' found near an older spraint further upstream.</p>	
 <p>A photograph of a small, dark, gelatinous substance (anal jelly) on a rock. The rock is covered in moss and lichen, and the surrounding area is rocky and mossy.</p>	

Photograph 6: the River Seiont adjacent to the site



Photograph 7: the River Seiont adjacent to the site



Photograph 8: the River Seiont adjacent to the site



Photograph 9: the River Seiont adjacent to the site

