

Appendix 6.2 Reptile Surveys

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CONTENTS

CHAPTER 1	EXECUTIVE SUMMARY
CHAPTER 2	INTRODUCTION
CHAPTER 3	METHODOLOGY
CHAPTER 4	REPTILE SURVEY RESULTS AND POTENTIAL IMPACT
CHAPTER 5	RECOMMENDATIONS FOR FURTHER SURVEY AND MITIGATION
CHAPTER 6	REFERENCES

FIGURES

FIGURE 1 – SURVEY AREA AND REPTILE MAP LOCATIONS

1 EXECUTIVE SUMMARY

- 1.1.1 In September 2012, AECOM was commissioned by Tata Steel UK Limited (the Applicant) to undertake an initial ecological assessment of the site of the proposed development at Port Talbot site. The findings of the Phase 1 Habitat Survey along with that of a desk study were published in *Ecological Constraints Report (AECOM) September 2012*.
- 1.1.2 During the Extended Phase 1 survey, the proposed development site was assessed for its potential to support protected species. The survey identified the potential for reptiles within the Order Limits. A reptile survey of the site was recommended to identify the presence or absence of reptiles at the site.
- 1.1.3 The proposed development is described in Chapter 3 Project Description.
- 1.1.4 Reptile survey refugia were laid out across the proposed development site in suitable areas of habitat, including the access track leading onto the proposed development site. Approximately 190 mats were laid out on the 15th April 2013. Seven survey visits were made between 29th April and 15th May 2013. Surveys were based on the guidelines for undertaking reptile survey provided by Froglife (Froglife 1999. Advice Sheet 10 – Reptile Survey).
- 1.1.5 No reptiles were identified during these surveys.
- 1.1.6 Habitat management and a tool box talk are recommended to reduce any residual risks of killing or injuring reptiles during site works.
- 1.1.7 There is limited potential for breeding birds in the scrub and tree vegetation on site. The timings of vegetation clearance should avoid the breeding bird season (no clearance between 1st March and 1st September) as well as following recommendation for reptiles.
- 1.1.8 This Executive Summary is not a substitute for reading the report. Please refer to the full text for full details.

2 INTRODUCTION

2.1 Introduction

- 2.1.1 In September 2012, AECOM was commissioned by the Applicant to undertake an initial ecological assessment of the proposed development at the Port Talbot site. The findings of the Phase 1 Habitat Survey along with that of a desk study were published in *Ecological Constraints Report (AECOM) September 2012*.
- 2.1.2 The Tata Steel site is located between Margam and Port Talbot, OS grid reference SS772883. The land to the east and north comprises residential land use with areas of amenity green space, and the M4 motorway. To the west is the steel works' lake used for cooling. Further to the west is the coast.
- 2.1.3 The proposed development site is located at the north-east end of the Port Talbot site. The area within the Order Limits comprises scattered scrub, semi-improved grassland, pipe work, hardstanding, gravelled car park, buildings and a wet ditch.
- 2.1.4 The proposed development will require the removal some of the vegetation.
- 2.1.5 During the Extended Phase 1 survey, the proposed development site was assessed for its potential to support protected species. The survey identified the potential for reptiles within the proposed development Order Limits.
- 2.1.6 This report outlines the findings of the Phase II reptile surveys and outlines our recommendations and mitigation for the proposed works based on the evidence gathered.

2.2 Legislation

- 2.2.1 British reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

2.2.2 For, sand lizard and smooth snake all parts of Section 9 apply. This prohibits:

- Intentional killing;
- Injuring or taking (capture. etc);
- Possession;
- Intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places;
- Trade (i.e. sale, barter, exchange, transporting for sale and advertising to sell or to buy).

2.2.3 For the four widespread species of reptile, namely the common lizard, slow-worm, grass snake and adder, only part of sub-section 9(1) and all of sub-section 9(5) apply. These prohibit:

- Intentional killing;
- Injuring;
- Trade (i.e. sale, barter, exchange, transporting for sale and advertising to sell or to buy).

2.3 Quality Assurance

2.3.1 This project has been undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our accreditation to the international standards BS EN ISO 9001:2008 and 14001:2004 and BS OHSAS 18001:2007. In addition our IMS requires careful selection and monitoring of the performance of all sub consultants and contractors. All AECOM Ecologists are members of (at the appropriate level) the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct when undertaking ecological work.

3 METHODOLOGY

3.1 Methodology

- 3.1.1 The reptile survey methodology was based on the guidelines for undertaking reptile survey provided by Froglife (Froglife 1999. Advice Sheet 10 – Reptile Survey) and also the Herpetofauna Workers' Manual (Gent, T and Gibson, S 1998. Herpetofauna Workers' Manual. JNCC, Peterborough).
- 3.1.2 Artificial refugia (approximately 0.5m x 0.5m square sheets of heavy-duty mineral roofing felt) were placed in suitable locations within the survey areas (Figure 1) at a minimum density of 100 per hectare (190 refugia) and then remained undisturbed for a period of at least fourteen days. During each survey all refugia and surrounding habitat and naturally occurring habitat features likely to be used by reptiles were checked for the presence of reptiles.
- 3.1.3 Artificial refugia were placed in suitable habitat within the site on the 15th April 2013 and left for two weeks to bed-in. Refugia were checked on seven subsequent occasions on alternate days (at least 1 day in between checks). The results are summarised and discussed in Table 4.1 and Chapter 4. The weather conditions were considered suitable for undertaking reptile surveys. Weather conditions and survey dates are shown in Table 4.1 in Chapter 4.
- 3.1.4 During the first survey visit to check the mats AECOM staff were informed that several of the mats had been taken. Approximately a third of the mats had been removed from the habitat. This area had the lowest reptile potential of the areas included in the reptile survey. The missing mats were replaced. In the case that reptile were discovered on site additional surveys were to be undertaken to account for the disturbance to the survey mats.

Evaluation

- 3.1.5 In order to assess the value of any given reptile population two assessment methodologies may be applied. Nationally, the guidelines for the selection of

Sites of Special Scientific Interest (JNCC, 1989, Guidelines for selection of biological SSSI's, Peterborough) provide criteria for identifying nationally important populations of reptiles. The methodology developed by Froglife (1999) used in the identification of Key Reptile Sites can be used to evaluate reptile populations at a local or regional level. To qualify as a Key Reptile Site a site must meet at least one of the following criteria:

- Supports three or more reptile species;
- Supports two snake species;
- Supports an exceptional population (see Table 3.1 below) of one species;
- Supports an assemblage of species scoring at least 4 (see Table 3.1 below); or
- Does not meet any of the previous criteria, but is of particular regional importance due to local rarity.

Table 3.1: Key Reptile Site Criteria (Froglife Advice Sheet 10)

Species	Low Population (Score 1)	Good Population (Score 2)	Exceptional Population (Score 3)
Adder	<5	5 – 10	>10
Grass Snake	<5	5 - 10	>10
Common Lizard	<5	5- 20	>20
Slow Worm	<5	5 - 20	>20

4 REPTILE SURVEY RESULTS AND POTENTIAL IMPACT

4.1 Desk Study

- 4.1.1 The local records centre SEWBReC returned records of slow-worm (*Anguis fragilis*), grass snake (*Natrix natrix*), adder (*Vipera berus*) and common lizard (*Zootoca vivipara*) within 1km of the Order Limits.
- 4.1.2 NBN returned a record of slow-worm within the 10km grid square SS78.
- 4.1.3 The Extended Phase 1 Habitat Survey identified the semi-improved grassland at the proposed development site as being suitable to support reptiles.

4.2 Reptile Survey Results

- 4.2.1 Despite suitable weather conditions the surveys did not identify reptiles within the proposed development site. Table 4.1 summarises the weather conditions and results during each survey.
- 4.2.2 The proposed development site does not support a significant population of reptiles. Based on the criteria laid out in Table 3.1 the site is not a Key Reptile site. Reptiles are likely to be absent from the site or if present, only in very low numbers.

Table 4.1: Weather Conditions and Survey Results

Survey Date	Time	Temperature (°C)	Humidity (%) and Rainfall	Average Wind Beaufort	Reptile Survey Results
29/04/2013	10:00	9.7 °C	65% No rain	2B	Nil
01/05/2013	12:20	13.1 °C	62% No rain	1B	Nil
03/05/2013	10:30	12.1°C	84% No rain	1B	Nil
07/05/2013	10:20	18.0°C	82% No rain	2B	Nil
10/05/2013	10:00	11.2 °C	87 % No rain	1B	Nil
13/05/2013	09:45	10.6 °C	69 % Brief shower during survey lasting ~3 mins.	1B	Nil
15/05/2013	10:40	10.0 °C	73% Two short showers during survey and retrieval of refugia	2B	Nil

Potential Impacts

- 4.2.3 It is very difficult to prove absence of reptiles on a site and in most cases it may be best to express negative survey results on a site as "likely absence" (Froglife, 1999). No reptiles were recorded during the survey at the site. Based on the criteria laid out in Table 3.1 reptiles are likely to be absent from the site, but if present, at a low population only.
- 4.2.4 The vegetation on site will be totally removed as a result of the development. There will be a loss of habitat. Disturbance and removal of vegetation may injure individuals. However, the removal of the vegetation will not have a significant impact on local reptile populations.

5 RECOMMENDATIONS FOR FURTHER SURVEY AND MITIGATION

5.1 Further Surveys

- 5.1.1 No further surveys will be required. Based on the negative result from the surveys no reptile translocation will be required.

5.2 Recommendations for Mitigation

- 5.2.1 Habitat management and a tool box talk are recommended to ensure that no individual reptiles are injured or killed by any ground works. Based on the nil return from the surveys this habitat management does not need to be supervised by an ecologist.
- 5.2.2 In the unlikely event of any reptiles being identified during the habitat management or soil stripping works should stop and an ecologist should be contacted for further advice prior to commencement of works.

Tool Box Talk

- 5.2.3 TATA Steel UK Limited must include the risk of reptiles and the mitigation measures in their site induction package and prior to any site clearance tasks.

Habitat Management and Supervision

- 5.2.4 To manage the potential for reptiles to be present where the semi improved grassland/tall ruderal and scrub is to be removed, ensure that vegetation is cut to c.100mm in height one week prior to soil stripping. This should persuade any reptiles that may be present to retreat off-site on their own accord. The vegetation should be cut with hand-held machinery (e.g. trimmers and chainsaws) to reduce the risk of reptiles being crushed by machinery. Any areas of semi improved/tall ruderal grassland to be retained should be protected (fenced off) from disturbance during clearance and construction to prevent injury to individuals.

- 5.2.5 Based on the nil return from the surveys this habitat management does not need to be supervised by an ecologist. In the unlikely event of any reptiles being identified during the habitat management or soil stripping works should stop and an ecologist should be contacted for further advice prior to commencement of works.
- 5.2.6 There is potential for breeding birds in the scrub vegetation on proposed development site. The timings of vegetation clearance should avoid the breeding bird season (no clearance between 1st March and 1st September) as well as following recommendation for reptiles.

6 REFERENCES

AECOM (2012) *Ecological Constraints Report September 2012*.

Froglife (1999) *Reptile Survey: An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation*, Froglife Advice Sheet 10. Froglife, Halesworth.

Gent, T. and Gibson, S. (1998) *Herpetofauna Workers' Manual*. JNCC, Peterborough.

JNCC (1989) *Guidelines for selection of biological SSSI's*, Peterborough.