



Tata Steel UK Ltd

# Electric Arc Furnace

Dormouse Survey Report

2487033 P&C EAF (Issue for PAC)

MAY 2024

**RSK**  
**biocensus**  
EXPERTS IN ECOLOGY

## RSK GENERAL NOTES

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**Project No.:** 2487033


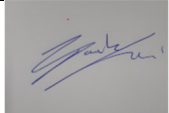

**Title:** Electric Arc Furnace – Dormouse Survey Report

**Client:** Tata Steel UK Ltd

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## EXECUTIVE SUMMARY

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The report presents the findings of hazel dormouse surveys carried out on land at Tata Steelworks in Port Talbot, South Wales. The surveys were carried out between September 2021 and August 2022. This report has been produced to support the Electric Arc Furnace project. The surveys were based on the 2021/2022 survey area (the boundary of the previous iteration of the project). The surveys were not updated with the change of red line boundary as there were no additional areas of suitable habitat.

The purpose of this survey was to establish the presence or likely absence of hazel dormouse in connection with the proposed development. Habitat suitable for hazel dormice comprised broadleaved woodland and bramble scrub was identified in a preliminary ecological appraisal (PEA) of the site by RSK Biocensus in 2021. The background data search identified no records of dormouse within 2 km of the site. However, dormice are known to be present at greater distances to both the east and west of the site.

A total of 55 nest-tubes were placed in suitable areas of habitat in September 2021 and checked once a month in October and November 2021 and between April and September 2022.

No signs of hazel dormice were observed during the surveys.

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# 1.0 INTRODUCTION

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## 1.1 Purpose of this report

- 1.1.1 The report presents the findings of hazel dormouse surveys (*Muscardinus avellanarius*) carried out on land at Tata Steelworks in Port Talbot, South Wales (central Grid Ref SS 77524 86021). The area termed 'the site' throughout this report is delineated on Figure 1 by the red-line boundary.
- 1.1.2 Surveys were commissioned to inform the planning process and Environmental Statement ecology chapter in respect to hazel dormouse using the site. The surveys were undertaken to determine if dormice are present and, if present, the level of dormouse activity at the site, to identify if hazel dormouse could be affected by the proposals and, if necessary, inform a mitigation strategy to reduce impacts to non-significant levels.

## 1.2 Background

- 1.2.1 The dormouse surveys were carried out between October 2021 and August 2022 within the 2021/2022 survey area (shown in purple in Figure 1). Subsequently, adjustments were made to the proposed development, however, no additional habitat with connectivity to the wider landscape was identified for further survey (shown in red in Figure 1).

## 1.3 Ecological context

- 1.3.1 A preliminary ecological appraisal (PEA), including a background data search (BDS) was completed by RSK (RSK, October 2021). The background data search identified no records of dormouse within 2 km of the site. However, dormice are known to be present at greater distances to both the east and west of the site.
- 1.3.2 The approximately 160 ha site is located to the south-east of the town of Port Talbot. The site is industrial predominately buildings with bare ground/ developed land. Open mosaic habitat is the most dominant habitat type comprising a mixture of scrub, grassland and ephemeral vegetation. There are a number of channels throughout the site and one large lake associated with the steelworks, located at the northern extent of the site.
- 1.3.3 The site is immediately bordered to the north, east and west by Tata Steelworks with coastal floodplain grassland, reedbed, an access road and Margam Moors Site of Special Scientific Interest (SSSI) adjacent to the south of the site. The surrounding landscape is a mixture of woodland, hedgerows, waterbodies (reservoir), coastal floodplain grassland and residential properties within Margam. Swansea Bay (Bristol Channel) is located approximately 880 m west of the site.



## 1.4 Habitat quality within the site

- 1.4.1 Habitats were assessed for their general suitability for hazel dormice during a preliminary ecological appraisal (PEA) by RSK (RSK, 2021); the results of this survey are summarised here. Areas of woodland within the site boundary supported fruiting and flowering species suitable for nesting, commuting and foraging hazel dormouse. They contain some important food sources for hazel dormice such as bramble (*Rubus fruticosus* agg.). The dense cover and thorns provide good protection for nests (Bright et al. 2006). The rough grassland field and ephemeral and short perennial habitat does not offer habitat suitable for hazel dormice.
- 1.4.2 The scattered scrub, small areas of woodland and hedgerows adjacent to the southern boundary of the site, and throughout the landscape to the south and southeast of the site, provide connectivity between the site and the surrounding area.

## 1.5 Development Proposals

- 1.5.1 The Proposed Development will require the demolition of existing buildings and structures, and the construction of a new EAF steel production facility. The Proposed Development also includes a scrap metal handling facility and associated scrap yards, slag processing facility, chemical and material storage structures, buildings, handling systems, electrical control rooms and power infrastructure, laboratories, offices and ancillary facilities, together with new and amended transport infrastructure, landscaping and associated development.

## 2.0 METHODOLOGY

- 2.1.1 Dormouse survey visits were undertaken between October 2021 to September 2022 to determine if hazel dormice were present or likely absent from the site. The lead surveyor, Porscha Thompson, was a senior ecologist for RSK Biocensus with six years' experience undertaking surveys of this type and holds a Natural Resources Wales licence (Licence Number: S087346/1) to survey for hazel dormouse. All surveyors are members of the Chartered Institute of Ecology and Environmental Management (CIEEM). The nest-tubes were installed in September 2021. The survey dates and weather conditions are detailed in Table 1.

**Table 1: Survey dates and weather recorded during the field surveys**

| Date              | Air Temp. | Cloud Cover (Octus 1-8) | Wind Speed (Beaufort 1-12) | Precipitation |
|-------------------|-----------|-------------------------|----------------------------|---------------|
| 05 October 2021   | 10        | 3                       | 3                          | None          |
| 24 November 2021  | 7         | 8                       | 1                          | None          |
| 20 April 2022     | 11        | 2                       | 2                          | None          |
| 10 May 2022       | 14        | 2                       | 5                          | None          |
| 08 June 2022      | 15        | 2                       | 6                          | None          |
| 12 July 2022      | 20        | 2                       | 1                          | None          |
| 09 August 2022    | 20        | 2                       | 2                          | None          |
| 08 September 2022 | 16        | 1                       | 2                          | None          |

## 2.2 Nest-tube survey

- 2.2.1 Nest-tube surveys are used to confirm presence or likely absence and gain an understanding of distribution across the site. This involves setting out artificial 'nest tubes' (i.e. tubes in which dormice often choose to nest) in suitable habitat, and checking the tubes for nests (indicating dormouse presence), usually at monthly intervals. Following guidance in Natural England's Hazel Dormouse Conservation Handbook (Bright *et al.* 2006), an 'index of probability' is used to determine how many months the survey should span, i.e. when the survey effort is sufficient. It assumes the use of 50 nest tubes, and awards points to each month as an indicator of how likely it is that nests will be found in that month (Table 2). To determine presence or likely absence of dormouse, a minimum score of 20 points must be scored over several months.
- 2.2.2 Fifty-five artificial nest-tubes were placed along transects through all suitable habitat across the site (survey locations in Figure 1).

**Table 2: Index of probability for hazel dormouse surveys.**

| Index of Probability      | Oct | Nov | Apr | May | Jun | Jul | Aug | Sep | Total       |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| Baseline of 50 nest tubes | 2   | 2   | 1   | 4   | 2   | 2   | 5   | 7   | <b>25</b>   |
| 55 nest tubes             | 2.2 | 2.2 | 1.1 | 4.4 | 2.2 | 2.2 | 5.5 | 7.7 | <b>27.5</b> |

- 2.2.3 Monthly checks were carried out at the times of year when evidence of dormice (e.g. nests) was most likely to be detected, to determine if they are present on the site. Each survey visit involved checking the nest-tubes for the presence of hazel dormouse nests and searching for any signs of hazel dormice i.e. feeding remains, evidence of bark stripping for nest building, or sightings.
- 2.2.4 This methodology can give information on population distribution, size and extent, which is necessary to inform the European protected species (EPS) licensing process and to inform mitigation measures.

## 2.3 Survey Limitations

- 2.3.1 Mammals are potentially susceptible to coronaviruses, so disease risk management precautions were taken to minimise the risk of accidentally transmitting COVID-19 from people to wild mammals (Natural England, 2020). Sustained close proximity (within 2m) to any known nest was kept to a minimum and handling of mammals was avoided. Therefore, the nest-tubes were checked but nests were not investigated for the presence of dormice; hazel dormice were only observed from a distance if they left the nest and/ or tube.
- 2.3.2 These survey results are valid for a maximum of 2 years.

## 3.0 RESULTS

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- 3.1.1 No evidence of hazel dormice (or other small mammals/ birds) were found during the surveys.

## 4.0 EVALUATION AND CONCLUSIONS

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- 4.1.1 The site has been subject to an appropriate level of survey effort and no evidence of hazel dormice was found. It can therefore be concluded that hazel dormice are likely to be absent from the site and do not pose a constraint to the proposed development.



## 5.0 REFERENCES

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Bright, P., Morris, P. and Mitchell-Jones, T. (2006), The Hazel Dormouse Conservation Handbook (2nd edition), Peterborough, English Nature 73pp.

Natural England (2020) Covid-19 and interacting with wildlife for the purpose of surveying and mitigation works. Advice sheet. Natural England.

RSK Biocensus (October 2021), *Project Cronus: Port Talbot – PEA REV00*. RSK

## 6.0 FIGURES

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**Figure 1**– Dormouse Nest-Tube Locations





**Legend:**

- Site boundary
- 2021/2022 survey area
- Dormouse nest tube

|     |            |             |     |     |     |
|-----|------------|-------------|-----|-----|-----|
| 00  | 16/08/2024 | 2487033     | TG  | EC  | KOB |
| Rev | Date       | Description | Drn | Chk | App |

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TITLE: Figure 1:  
Dormouse Tube Locations

0 150 300 450

Metres

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REV 00





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