

The logo for FIVE ESTUARIES OFFSHORE WIND FARM. The word "FIVE" is in a grey sans-serif font, with the letter "V" colored purple and pink. To the right of "FIVE" are three wavy lines representing water, colored blue, green, and yellow from top to bottom. Below "FIVE" are the words "ESTUARIES" and "OFFSHORE WIND FARM" in a grey sans-serif font.

FIVE
ESTUARIES
OFFSHORE WIND FARM

FIVE ESTUARIES OFFSHORE WIND FARM

VOLUME 6, PART 6, ANNEX 4.11:
BADGER SURVEY REPORT: NORTH OF
A120 - PUBLIC

Application Reference	EN010115
Application Document Number	6.6.4.11
Revision	A
APFP Regulation:	5(2)(a)
Date	March 2024



Project	Five Estuaries Offshore Wind Farm
Sub-Project or Package	Environmental Statement
Document Title	Badger Survey Report: North of A120 - Public
Application Document Number	6.6.4.11
Revision	A
APFP Regulation	5(2)(a)
Document Reference	005024257-01

COPYRIGHT © Five Estuaries Offshore Wind Farm Ltd

All pre-existing rights reserved.

This document is supplied on and subject to the terms and conditions of the Contractual Agreement relating to this work, under which this document has been supplied, in particular:

LIABILITY

In preparation of this document Five Estuaries Offshore Wind Farm Ltd has made reasonable efforts to ensure that the content is accurate, up to date and complete for the purpose for which it was contracted. Five Estuaries Offshore Wind Farm Ltd makes no warranty as to the accuracy or completeness of material supplied by the client or their agent.

Other than any liability on Five Estuaries Offshore Wind Farm Ltd detailed in the contracts between the parties for this work Five Estuaries Offshore Wind Farm Ltd shall have no liability for any loss, damage, injury, claim, expense, cost or other consequence arising as a result of use or reliance upon any information contained in or omitted from this document.

Any persons intending to use this document should satisfy themselves as to its applicability for their intended purpose.

The user of this document has the obligation to employ safe working practices for any activities referred to and to adopt specific practices appropriate to local conditions.

Revision	Date	Status/Reason for Issue	Originator	Checked	Approved
A	Mar 2024	Environmental Statement	SLR/MacArthur Green	GoBe	VEOWFL

FIVE ESTUARIES OFFSHORE WIND FARM

Badger Survey Report: North of A120 PUBLIC

Prepared for: GoBe Consultants (on behalf of Five
Estuaries Offshore Wind Farm Ltd)

SLR Ref: 414.05356.00008
Version No: 1
February 2024



Document Control	
Document Properties	
Organisation	GoBe
Project Name	Five Estuaries Offshore Wind Farm
Report Title	Badger Survey Report: North of A120
Author(s)	Emily Drinkwater
Draft version/final	FINAL
Document reference	240205 414.05356.00008 Badger Report PUBLIC

Date	Revision No	Prepared By	Reviewed By	Approved By	Status	Comments
05/02/24	1	Emily Drinkwater	Jess Colebrook		FINAL	

BASIS OF REPORT

This document has been prepared by SLR Consulting Limited with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with GoBe Consultants (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

CONTENTS

1.0 INTRODUCTION	1
1.1 Survey Area	1
1.2 Purpose of this Report	1
1.3 Evidence of Technical Competence and Experience	2
2.0 METHODOLOGY	3
2.1 Field Surveys	3
2.2 Limitations	4
3.0 RESULTS & DISCUSSION	5

DOCUMENT REFERENCES

TABLES

Table 2-1 Sett Classification	3
--	----------

1.0 Introduction

Five Estuaries Offshore Wind Farm (VE OWF) is a Nationally Significant Infrastructure Project (NSIP). An Environmental Impact Assessment (EIA) is being undertaken, the findings of which will be presented within an Environmental Statement (ES), which will accompany a Development Consent Order (DCO) application under the Planning Act 2008.

SLR Consulting was commissioned by GoBe Consultants, on behalf of Five Estuaries Offshore Wind Ltd, to undertake a badger survey of those relevant parts of the project site that may be affected by the construction and operation of the onshore aspects of the VE OWF project north of the A120. These comprise the installation of a cable within a working corridor and the construction of a substation (hereafter referred to as “onshore infrastructure”).

This report presents the findings of the badger survey undertaken between May and July 2022, in line with the recommendations in the Preliminary Ecological Appraisal (PEA)¹. **Due to the risk of badger persecution, details of sett locations are not included in this publicly accessible report.** A separate confidential report has been prepared for circulation to key consultees and stakeholders which contains full results.

1.1 Survey Area

In accordance with the PEA report, the badger survey comprised a search for the presence of active badger setts and signs within the Order Limits that was under consideration at the time, for part of the scheme north of the A120, plus the surrounding area within 30m. In practice, the survey for badgers was undertaken in tandem with the habitat survey and so extended up to 100m from the Order Limits.

Within this report the following terms are used:

- Survey Area: Within the Order Limits north of the A120, plus the surrounding area that is within 100m (i.e., 100m either side of the onshore export cable corridor (ECC) and to all sides of any other infrastructure or works areas such as Temporary Construction Compounds (TCCs) and access tracks); and
- Areas other than these are specifically described.

1.2 Purpose of this Report

This report presents the findings of 2022 badger survey north of the A120 and seeks to establish baseline conditions and for this species. The assessment of impacts resulting from the onshore elements of VE OWF is beyond the scope of this report and will be covered in the Onshore Biodiversity and Nature Conservation Chapter of the ES.

The main objectives of the work were to determine:

- the presence/absence of badger setts within 30m of the Order Limits under consideration at the time of survey;

¹ Five Estuaries Offshore Wind Farm: Preliminary Ecological Appraisal (Onshore), SLR Consulting, May 2022

- if any setts were in active current use; and
- where possible, the likely sett category (main, annex, subsidiary or outlier; these terms are explained Section 2.1).

1.3 Evidence of Technical Competence and Experience

The badger surveys were primarily undertaken by Emily Drinkwater and Ellen Miller. Emily is an Associate Ecologist and Ellen is a Senior Ecologist, both at SLR Consulting and Associate members of the Chartered Institute of Ecology and Environmental Management (CIEEM) (ACIEEM). Emily and Ellen each have over 10 years' experience as professional ecologists. Emily also authored this report.

In addition, all ecological surveyors employed on the project maintained a watching brief for signs of badger during other surveys. Badger records were also therefore gathered by Shannon Davies and Amy Gill. Amy Gill is a Senior Field Ecologist and Shannon Davies is a Senior Ecologist with 4 and 5 year's professional experience respectively. Both work for SLR and are Qualifying members of CIEEM.

Jess Colebrook has provided additional technical support and QA review. Jess a Principal Ecologist at SLR Consulting with over 20 years' experience as a professional ecologist. She is a Chartered Environmentalist (CEnv) and a full member of CIEEM (MCIEEM). Jess is leading the onshore ecological work necessary to inform the EIA for the project.

2.0 Methodology

2.1 Field Surveys

The field survey was undertaken in tandem with the habitat survey over a period of 18 days in 2022; specific dates were as follows: 24th May – 27th May 2022 and 20th June – 24th June 2022 and 27th June – 1st July 2022 and 11th – 14th July 2022.

Additional records were made on 11th May 2022 and 15th and 16th June 2022.

Surveys followed standard methods² and included a search for the presence of badger setts and other signs such as dung pits or latrines, paths, prints and hairs. Where possible, setts have been classified as being Main, Annex, Subsidiary or Outlier, depending upon their size, relative locations and degree of use. Classification criteria for rural setts are listed in [Table 2-1](#)³. However, it should be noted that classification relies on professional judgement, as for example, urban setts can have fewer entrances⁴.

Table 2-1
Sett Classification

Sett Type	Definition
Main	At least five holes, often with large spoil heaps and obvious pathways originating from and between sett entrances. Usually active.
Annex	Sett with several holes, connected to a main sett by a clear badger path, normally less than 150m from the main sett. Not used all of the time.
Subsidiary	Usually at least 50m from the main sett with no obvious paths connecting to other setts. Used intermittently.
Outlier	One or two holes. No obvious paths connecting to other setts and only used sporadically. Little spoil outside holes. Often used by other mammals.

Where a sett was found, the location of each entrance was recorded (where practical) and a note made for those which appeared to be in active current use. Further discrimination of activity levels was not considered necessary for the objectives of this study. The terms used to describe activity levels were defined as follows:

- Active current use = badgers directly observed or sett with fresh bedding, spoil, prints or hairs at the entrance.
- Not in active current use = not exhibiting the above features.

It is important to note that the season in which the survey is conducted will have an impact on the interpretation of field signs, as badger activity fluctuates throughout the year. Badgers move between setts within their territories in response to environmental factors such as availability of seasonal food resources, human disturbance, accumulation of parasites, or territoriality. A sett, or a particular entrance may be brought into use

² Scottish Natural Heritage (SNH) (2003). 'Best Practice Guidance - Badger Surveys', Inverness Badger Survey 2003, Commissioned Report No. 096.

³ Neal, E. & Cheeseman, C. (1996) Badgers. T & A D Poyser Ltd, London.

⁴ Davison, J. Huck, M., Delahay, R.J. & Roper, T.J. (2008) Urban badger setts: characteristics, patterns of use and management implications. Journal of Zoology 275, 190-200.

at any time. To conclusively ascertain badger presence at a sett at any given time, bait-marking and/or an extended trail-cam survey would typically be the most conclusive method; this has not been deemed necessary to meet the objectives of this study. The reason for this is that for the purpose of impact assessment, it would be presumed that any sett could be brought into active use at any time between the survey and the construction period.

2.2 Limitations

Dense scrub prevented full access to a small proportion of the Survey Area, for example some mammal holes were observed but could not be reached at all or were only partially accessed. In such locations, additional search effort for signs of badger such as paths, hairs and prints was made at the boundary of the scrub and it is considered likely that evidence of an inaccessible and currently active sett would have been found if present. This is considered to be a minor constraint to the objectives of this study, since the vast majority of the survey area proved accessible.

Access permission was not granted for a small proportion of the Survey Area, which was therefore not subject to survey. It remains possible that evidence of badger including setts, could be present in unsurveyed parts.

An ecological study provides only a “snapshot” of the conditions prevailing at the time of survey. Lack of evidence does not necessarily preclude badgers from being present within an area at a later date; badgers are highly mobile and can move in response to changes in environmental factors.

Nevertheless, given the site context and the types of habitat present, the level of survey is considered to be sufficient to meet the objectives of this report, and for meeting the objectives of this report, set out in section 1.2.

3.0 Results & Discussion

Badgers' diet is predominantly based upon earthworms, pasture/grassland represents good quality foraging, and is present throughout the Survey Area. Cereal fields – also frequent in parts of the Survey Area - may also be used by foraging badgers, but typically represent a poorer food source than pasture.

No conclusive evidence of a main sett was noted during the survey. A total of nineteen subsidiary and outlier setts were recorded in four broad locations: Lawford, Ardleigh, Little Bromley and Manning Grove. This evaluation should however be treated with caution, with final sett categories to be more robustly determined via reference to desk study information about the badger population beyond the Survey Area.

EUROPEAN OFFICES

United Kingdom

AYLESBURY

T: +44 (0)1844 337380

BELFAST

belfast@slrconsulting.com

BRADFORD-ON-AVON

T: +44 (0)1225 309400

BRISTOL

T: +44 (0)117 906 4280

CARDIFF

T: +44 (0)29 2049 1010

CHELMSFORD

T: +44 (0)1245 392170

EDINBURGH

T: +44 (0)131 335 6830

EXETER

T: + 44 (0)1392 490152

GLASGOW

glasgow@slrconsulting.com

GUILDFORD

guildford@slrconsulting.com

LONDON

T: +44 (0)203 805 6418

MAIDSTONE

T: +44 (0)1622 609242

MANCHESTER (Denton)

T: +44 (0)161 549 8410

MANCHESTER (Media City)

T: +44 (0)161 872 7564

NEWCASTLE UPON TYNE

T: +44 (0)191 261 1966

NOTTINGHAM

T: +44 (0)115 964 7280

SHEFFIELD

T: +44 (0)114 245 5153

SHREWSBURY

T: +44 (0)1743 23 9250

STIRLING

T: +44 (0)1786 239900

WORCESTER

T: +44 (0)1905 751310

Ireland

DUBLIN

T: + 353 (0)1 296 4667

France

GRENOBLE

T: +33 (0)6 23 37 14 14



F I V E 
ESTUARIES
OFFSHORE WIND FARM

PHONE
EMAIL
WEBSITE
ADDRESS

0333 880 5306
fiveestuaries@rwe.com
www.fiveestuaries.co.uk

COMPANY NO

Five Estuaries Offshore Wind Farm Ltd
Windmill Hill Business Park
Whitehill Way, Swindon, SN5 6PB
Registered in England and Wales
company number 12292474

