WATER VOLE SURVEY & REPORT

at

Land off Bradford Road
Batley
West Yorkshire
WF17 6JD

JCA Ref:
20148b/AWe

Date of Report:
17/07/2023



JCA Limited
Arboricultural & Ecological Consultants

Quality Assurance

Version	**Desktop Survey Completed:**		**Site Surveyed:**		**Report Completed:**		**Checked:**	
	Date	Name	Date	Name	Date	Name	Date	Name
Planning	28/02/23	James Foster	23/06/23 & 12/07/23	Adam West	17/07/23	Adam West	17/07/23	Alex Donovan

All ecologists employed by JCA are members of, or are under application for, membership of the Institute of Ecology and Environmental Management (IEEM) and follow the Institute's code of professional conduct when undertaking ecological work.

Risk Assessment Completed	
Bio-security Procedure Completed	
Lone Worker Procedure Completed	

Summary

A report is required at **Land off Bradford Road, Batley** to assess the potential for water vole to be present along the water course adjacent to site, in the form of nesting sites and foraging habitat.

Surveys at the site commenced in June 2023 and concluded in July 2023.

No evidence for water vole presence has been identified.

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1. Introduction

1.1 Background

1.1.1 In June 2023, JCA Ltd was commissioned by **Padgetts Motorcycles Ltd** to undertake a Preliminary Ecological Appraisal (PEA) at a site located at Ordnance Survey (OS) National Grid Reference SE 24698 23228, with nearby postcode WF17 6JD, hereafter referred to as 'the site'.

1.1.2 The desk study component of the PEA identified one record of water vole *Arvicola terrestris*, a UKBAP, WYBAP and Kirklees BAP designated species, within 2km of the site. The record was made in 2020 and was approximately 1379m from the site. The field survey component identified suitable water vole habitat in the watercourse on the site's eastern boundary.

1.1.3 The purpose of the survey is to establish a baseline of ecological information and assess whether the proposed activities have the potential to adversely affect water voles.

1.1.4 A report is required at **Land off Bradford Road, Batley** to assess the site's potential for supporting otter and water vole, in the form of nesting sites and foraging habitat.

1.1.5 The aim of this report is to investigate the potential impact that the proposed development may have on the local/ national otter and water vole populations.

1.2 Site Location

1.2.1 The site is located at Ordnance Survey (OS) National Grid Reference **SE 24698 23228**, with nearby postcode **WF17 6JD**. The site is bordered to the north, south and west by industrial and residential buildings and to the east by woodland.

1.3 Details of Proposed Development

1.3.1 A full scheme for the development is not available at this stage.

1.4 Aims and Objectives

1.4.1 The purpose of the otter and water vole survey was to inform the assessment of impacts to ecological receptors and required the following:

- To determine the presence or likely absence of water voles within influencing distance of the site; and

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- To provide preliminary advice on mitigation strategies against any adverse effects on the local water vole populations which may arise as a result of the proposed development.

1.4.2 To enable this, the following scope of works was programmed:

- Desktop study – a review of historical records of water voles in the surrounding area, including the results of recent ecological surveys in the area.
- Field surveys – a survey of the east bank of the watercourse from the site to 200m upstream of the working area. The east bank either side of this stretch of water, and the entirety of the west bank, are artificially reinforced and offer no potential for burrows to be present.
- Ecological report – detailing the survey results, implications for the scheme and recommendations.

1.5 Legislation

1.5.1 Water voles are protected under schedule 5 of the WCA 1981 (as amended). While previously only their burrows were protected from disturbance or damage, since 6th April 2008 they have been given further protection which makes it illegal to:

- Intentionally or recklessly kill, injure or take water voles;
- Possess or control live or dead water voles or derivatives thereof;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used by any water vole for shelter or protection; and
- Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.

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2. Methodology

2.1 Desktop Survey Methodology

2.1.1 As part of the Preliminary Ecological Appraisal (PEA) (JCA, 2023) information was obtained from West Yorkshire Ecology Services (WYES), the ecological records centre for Batley, regarding records of water vole within a 2km radius of the site.

2.2 Field Survey Methodology

2.2.1 The surveys were undertaken by Adam West *ACIEEM* on 23/06/23 and 12/07/23.

2.2.1 All field surveys referred to methodologies outlined in Strachan et al. (2011). Evidence of otters, water voles and other riparian mammal activity, such as invasive American mink *Neovison vison* were looked for during the survey. Water vole field signs surveyed for include:

- Latrines
- Feeding evidence
- Feeding stations
- Burrows
- Grazed lawns
- Footprints
- Runways through vegetation

2.2.2 Water vole numbers for each area were calculated based on the equation by Morris *et al*. (1998) as:

- y = 1.48 + 0.683x (where y = water vole numbers and x = number of latrines)

2.2.3 Results were then recorded as “high” water vole density and water vole “present” for each area depending on the length of the watercourse that was surveyed, in line with Morris et al. (1998). This is presented in Appendix A: Water Vole Survey Results Map.

2.3 Limitations:

2.3.1 The optimum season for undertaking water vole surveys is April-September,

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with one survey between the start of April and the end of June and a second survey between the start of July and the end of September. The first survey was carried out on 23/06/23 with the second survey taking place on 12/07/23.

2.3.2 There were no perceived limitations which would compromise the validity of the surveys.

2.3.3 The details of this report will remain valid for a period of 18 months. Beyond this period, it is recommended that a new review of the ecological conditions is undertaken.

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3. Results

3.1 Desktop Survey Results

3.1.1 Records are used to inform field surveys about the possible presence of a species in a particular area at an early stage of the investigation. The existence of records indicates that a particular species has at least been present at a particular location; however, absence of records cannot be interpreted as a species' absence at a location of interest.

3.1.2 One record of water vole, a UKBAP, WYBAP and Kirklees BAP designated species, was received from WYES. The record was made in 2020 and was approximately 1379m from the site.

3.2 Field Survey Results

3.2.1 During the water vole surveys conducted on 23/06/23 and 12/07/23, no field signs of water vole were identified within the study area.

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4 Discussion and Analysis of Results

4.1.1 After carrying out a thorough water vole survey and a detailed Desktop Study, no evidence of water vole presence was found within the study area.

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5 Conclusions and Recommendations

5.1.1 As water voles are likely absent from the watercourse, no recommendations are made with regard to water vole protection or mitigation.

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6 References

Water Vole:

Natural England (2008) Water voles – the law in practice: Guidance for planners and developers. Natural England, Peterborough.

Natural England (2010) Water voles and development: licensing policy. Technical Information Note TIN042. Natural England, Peterborough.

Strachan R and Moorhouse T (2006) Water vole conservation handbook 2nd Edition. Wildlife Conservation Research Unit, Oxford.

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Appendices

Appendix 1: Site Plan

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Water Vole Survey Study Area



Address: Land off Bradford Road
Batley, West Yorkshire
WF17 6JD
Job ID: 20148b/AWe

Key

Study Area

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Appendix 2: Photographic Evidence



Photo 1: The surveyed watercourse viewed north to south.

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Photo 2: The surveyed watercourse viewed south to north.

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Photo 3: Artificial bank reinforcement at the southern extent of the study area.

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Photo 4: Artificial bank reinforcement at the southern extent of the study area.

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Appendix 3: Glossary

Feeding stations: Favoured feeding location used by water voles. These are usually neat piles of chewed lengths of vegetation, with sections measuring 8cm with 45 degree cuts.

Latrines: Piles of droppings left by water voles. Droppings are cylindrical and range from green through to dark purple/black. Latrines are used to mark out territories between February to November. Trampled latrines are a good indication that breeding is taking place.

Nests: Water voles can make woven nests the size of footballs. However, they commonly form burrows in watercourse banks which are typically wider than they are high with a 4-8cm diameter.

Runways: Water voles create runways or tunnels through vegetation, used to commute to foraging sites and as escape routes from predators.

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Appendix 4: Author Qualifications

Adam West, Principal Ecologist

BSc (Hons) Animal and Wildlife Management.

Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Batchelor's degree, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence and a Natural England Level 2 bat survey class licence.

Alex Donovan, Graduate Ecologist

MBIOL, BSc Biology (Industrial).

Alex joined JCA in 2023 after graduating from the University of Leeds with a First Class Honours Integrated Master's degree in Biology. As part of his degree programme, Alex spent an industrial placement year working in the Uplands Research Department of the Game and Wildlife Conservation Trust, assisting on various ecological surveys and projects. Alex is a registered Trainee Bird Ringer, licensed through the BTO, and has previously conducted seasonal bat emergence and transect surveys.

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The Information and advice which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and bona fide opinions.

Signed

.....

Adam West *ACIEEM*

17/07/2023

Reviewed by

.....

Alex Donovan

17/07/23

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For and on behalf of ***JCA Ltd***

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ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes
- Butterfly & Insect Surveys

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)
- Planting Schemes
- Monitoring of bird or bat boxes.

ARBORICULTURAL SERVICES

Guidance for Architects & Developers

- British Standard 5837 Surveys
- Arboricultural Implications Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control

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