

# **Appendix 10.2 Electrofishing Report**

# **Lochluichart Wind Farm S42**

Supporting Environmental Information Report

**Bluebell Wind Limited** 

SLR Project No.: 405.065579.00001

October 2025



See a Difference.

## **Memorandum Report**

08 November 2023

TO: Andrew Fido

FM: Sandy Craig

CC: Vince Smith

RE: 312771 – Lochluichart Baseline Electrofishing Report

#### 1.0 Introduction

Boralex on behalf of Bluebell Windfarms Ltd. instructed Mabbett & Associates Ltd (Mabbett) to undertake a baseline Using fully quantitative, three-pass electrofishing as per standard Scottish Fisheries Coordination Centre protocols as requested by the client. This report is designed to describe the baseline densities of juvenile salmonids at the three specific sites outlined by Mabbet to inform development of the Lochluichart extension II phase.

The Allt Giubhais Mor is a small upland stream which drains off land typical of the area with mixed land uses, including forestry, moorland and pasture. The burn flows into Loch Glascarnoch, a large hydro reservoir created by the formation of the Glascarnoch dam. In general, the habitat consists of many small cascades and riffles over a cobble boulder dominated substrate. Instream cover is limited and there is no significant riparian woodland along its course despite stands of Scots pine on the adjacent land.

There are several barriers to fish migration downstream of the survey sites which have been previously identified by SEPA including the impassable barriers of Glascarnoch dam and a heck further downstream. As such, access for anadromous salmonids is not possible. The upper reaches of the burn, however, are relatively productive and represent an important nursery burn for brown trout *Salmo trutta*.

#### 1.1 Methodology

Site surveys were undertaken on the 25<sup>th</sup> of September, using three-pass area-delimited electrofishing to obtain precise and unbiased estimates of juvenile fish densities (**Figure 1**). Fish were captured using a backpack electrofisher (E-Fish 500, 450 V 50 Hz smooth direct current) with a three-person team comprising of one electrofisher, one person with a hand net and one person utilising a banner net. Each site comprised three successive downstream to upstream passes with a 20-minute rest between each pass. After each pass, fish were placed in holding containers, anaesthetised, measured and identified to species and life-stage level. Density estimates were determined for three-pass sites using minimum density estimates.



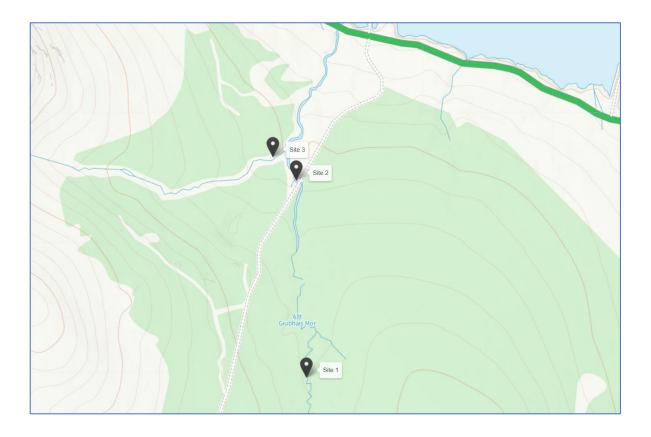












**Figure 1**. Map showing the location of the electrofishing survey sites. The three black pins are the sites within the development area (Site 1, Site 2, Site 3). The waterbody in the top right is Loch Glascarnoch.

Site 1	Allt Giubhais Mor upstream	NH334695
Site 2	Allt Giubhais Mor downstream	NH333702
Site 3	Unnamed tributary	NH333703

#### 1.2 Results

Brown trout were present at all sites surveyed with multiple age classes also observed at each site. Fry densities were relatively low in the Allt Giubhais Mor mainstem at 0.046 fish/m<sup>2</sup> & 0.032 fish/m<sup>2</sup> and Parr densities were more reasonable with 0.077 fish/m<sup>2</sup> & 0.081 fish/m<sup>2</sup> for sites 1 & 2 respectively. Site 3, a small tributary of the Allt Giubhais Mor, had far higher densities with fry recorded at 0.149 fish/m<sup>2</sup> and parr at 0.194 fish/m<sup>2</sup>.

It is worth noting that on the day of the surveys the river level was elevated and the sites fished would not be considered ideal fry habitat. Site 3 offered better variety in habitat including slow water refuges and finer substrate types.

Site ID	Lifestage	Observed Trout Density (fish per m²)	Observed Salmon Density (fish per m²)
Site 1	Fry	0.046	-
	Parr	0.077	-
Site 2	Fry	0.032	-
	Parr	0.081	-
Site 3	Fry	0.149	-
	Parr	0.194	-

**Table 1**: Results of electrofishing sites on the Allt Giubhais Mor and associated estimates of salmon and trout fry and parr densities. Dash (-) indicates species/age class not present.



Figure 2: Multiple age classes of brown trout caught at site 1.



Figure 3: Adult brown trout, estimated to be 4 years old.

#### 1.3 Conclusion

Overall, the three sites surveyed within the windfarm area appear healthy from a fish community perspective. Based on the presence of multiple age classes, the burn is clearly an important habitat for brown trout; however, access to anadromous salmonids is lacking due to the aforementioned hydropower

infrastructure and offtakes downstream. As barriers to fish passage have previously been identified, the lack of salmon does not reflect an issue with the burn itself. The Allt Giubhais Mor burn appears to be typical of a highland watercourse of its size and despite limited nutrients and steep relief, will be producing significant numbers of brown trout.

This memorandum report has been prepared by the following Mabbett personnel:

### MABBETT & ASSOCIATES LTD



Sandy Craig Senior Ecologist

This report has been reviewed and approved by the following Mabbett personnel:

MABBETT & ASSOCIATES LTD



Vince Smith Director, Ecology