

SEABIRD-FISHERIES INTERACTIONS: THE RELATIVE IMPORTANCE OF THE FALKLAND ISLANDS  
FISHERY IN SHAPING THE LOCAL BLACK-BROWED ALBATROSS POPULATION

Work conducted with support from the Falkland Islands Government  
Environmental Studies Budget (ESB) 2020/2021



Report to FIG

Amanda Kuepfer  
June 2021

## 1. RESEARCH TEAM

Amanda Kuepfer (University of Exeter) – PhD student, grant holder

Dr. Stephen Votier (University of Exeter) – Principal supervisor

Prof. Richard Sherley (University of Exeter) – Second supervisor

Dr. Paulo Catry (MARE – Marine and Environmental Sciences Centre, ISPA, Lisbon) – Co-supervisor

Dr. Paul Brickle (SAERI – South Atlantic Environmental Research Institute) – Local supervisor

Dr. Alexander Arkhipkin (FIFD – Falkland Islands Fisheries Department) – Local supervisor

## 2. PURPOSE OF REPORT

In accordance with conditions of offering of the ESB grant (2020/2021), this report serves to inform the Falkland Islands Government of the use of the ESB funds and project outputs to date.

## 3. USE OF FUNDS

The funds were used to support and progress the PhD project of “Seabird-fisheries interactions: The relative importance of the Falkland Islands fishery in shaping the local black-browed albatross population”.

### 3.1. Research

#### 3.1.1. Discards and seabird-vessel interactions

This study forms the first Chapter of my PhD thesis and uses data that were collected as part of a discard management study by the Falkland Islands Fisheries Department in 2015 and 2017. Peer-review publication of this work is listed as a high priority under the Falkland Islands National Plan of Action for reducing incidental catch in trawl fisheries (Kuepfer et al., 2018, Objective 7.1). A manuscript is currently under review.

#### 3.1.2. Chick diet I – Multi-annual trends in discard use by chicks

This study forms the second Chapter of my PhD thesis and uses chick regurgitate data collected during eight seasons between 2004 and 2020, including by myself in 2019 and 2020. All data collection, prey identification, and analyses have been completed. A manuscript is expected to be submitted by July 2021.

#### 3.1.3. Chick diet II – Discard use in chicks, as assessed through a complementary diet approach

Due to COVID-19 restrictions, the stable isotope samples collected in February and March 2020 could not be processed and analysed in July 2020, as originally intended. An alternative plan has now been implemented whereby the samples are being processed on my behalf by an experienced Assistant Researcher at the University of Exeter, with agreed completion date by end of July 2021. NERC funding of approx. £5000 remains available for the analysis of the stable isotope samples.

### ***3.3. Studentship and administration***

Funds were further used in support of a monthly studentship stipend and an annual university tuition fee.

## **4.0. PROJECT OUTPUTS**

### ***4.1. Project progress***

Successfully upgraded from MPhil to PhD following an Upgrade Review (August 2020)

Finalisation of Chapter 1 (Feb 2021)

Submission of Chapter 1 to a peer-reviewed journal (April 2021)

Finalisation of Chapter 2 (June 2021)

Successful application for Analytical Support at the NERC Life Sciences Mass Spectrometry Facility for Stable Isotope Analysis (June 2020) (£5,500)

### ***4.2. Visibility and public engagement***

- Falklands Radio interview about my PhD for World Albatross Day (19 June 2021)
- FITV interview about my PhD for World Albatross Day (19 June 2021)
- Online visibility: Regular posts on social media by New Island wardens and SAERI on progress of my work; information on this PhD can be accessed on the SAERI website <https://www.south-atlantic-research.org/research/phd-research-projects/the-importance-of-fisheries-in-shaping-the-ecology-of-black-browed-albatrosses-in-the-falkland-islands/>.

## **5. ACKNOWLEDGEMENTS**

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