



**BIODIVERSITY
CHALLENGE FUNDS**



Biodiversity Challenge Funds Projects Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus

Half Year Report

It is expected that this report will be a **maximum of 2-3 pages** in length.

If there is any confidential information within the report that you do not wish to be shared on our website, please ensure you clearly highlight this.

Submission Deadline: 31st October 2025

Please note all projects that were active before 1st October 2025 are required to complete a Half Year Report.

Submit to: BCF-Reports@niras.com including your project ref in the subject line.

Project reference	DPLUS189
Project title	Evaluating climate change risks to Patagonian and Antarctic toothfish
Country(ies)/territory(ies)	South Georgia and South Sandwich Islands
Lead Organisation	British Antarctic Survey
Partner(s)	Cefas and the Government of South Georgia and the South Sandwich Islands
Project Leader	Rachel Cavanagh
Report date and number (e.g. HYR1)	13 November 2025 HYR2
Project website/blog/social media	https://www.bas.ac.uk/project/evaluating-climate-change-risks-to-patagonian-and-antarctic-toothfish/

1. Outline progress over the last 6 months (April – September) against the agreed project implementation timetable (if your project started less than 6 months ago, please report on the period since start up to end of September).

Although we are not looking for specific reporting against your indicators, please use this opportunity to consider the appropriateness of your monitoring, evaluation and learning (MEL) systems (are your indicators still relevant, can you report against any Standard Indicators, do your assumptions still hold true?). The guidance can be found on the resources page of the relevant fund website.

This report outlines progress between April-September 2025, encompassing the latter part of Year 2 Q4 to the beginning of Year 3 Q2. During this period the focus has been Output 2 (i.e. ecological risk assessment of the effects of climate change on toothfish), specifically i) finalising activities concerned with present-day toothfish-environment relationships (activities 2.1-2.6; 2.12); and ii) progressing activities concerned with future projections (activities 2.7-2.9), as well as work to inform Output 3 (i.e. climate change evaluation framework). The activities and indicators referred to here reflect the current version of the logframe (Annex 2, Annual Report, April 2025).

During this reporting period, the Project Leader (PL), Postdoctoral Research Assistant (PDRA) and project team members prepared two scientific papers (based on activities 2.1-2.6) ready for submission to peer-reviewed journals (indicator 2.1). As noted in our last annual report (April 2025), while the original proposal anticipated a single journal paper resulting from these activities (i.e. the present-day paper, activity 2.12), we have generated sufficient novel content for two. The first identifies spatial and environmental factors influencing Patagonian toothfish distribution, confirming depth and temperature as major drivers, providing new insights into the timing and nature of developmental shifts, and the environmental thresholds shaping distribution patterns. The second examines relationships between temperature and abundance of early life stages of Patagonian toothfish, finding juvenile abundance strongly linked to warmer temperatures below surface waters during the spawning period, highlighting the importance of examining habitat use at different life stages in relation to environmental conditions to better understand species-environment relationships.

Ahead of submitting to journals, we submitted the papers for consideration by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Working Group on Fish Stock Assessment (WG-FSA) in September 2025 (indicator 0.1). WG-FSA provides expert advice to CCAMLR on the status and management of fish stocks, including consideration of climate change impacts. The PL and other members of the project team from British Antarctic Survey (BAS) and Centre for Environment, Fisheries and Aquaculture Science (Cefas) participated in WG-FSA 2025 and presented the papers. We also presented preliminary work in extending these findings to climate projections to assess risks from habitat changes (activities 2.7-2.9, indicator 2.2).

The papers were well-received and discussed in detail with recognition that they provide a valuable contribution to WG-FSA work on integrating climate change into the management of fish stocks (CCAMLR Report WG-FSA-2025, paragraphs 4.1-4.4), particularly in relation to drivers of toothfish distribution at different developmental stages and variability in abundance and recruitment patterns. There was interest in applying the methods to other Southern Ocean regions and species, and, in the context of developing CCAMLR "Management Strategy Evaluations" and the inclusion of climate change within these (of relevance to Output 3). Reference to the work was also included in WG-FSA's climate change summary to CCAMLR's Scientific Committee (CCAMLR Scientific Report SC-CAMLR-44, paragraph 7.1).

Immediate next steps are to submit the two papers to peer-reviewed journals. This is later than noted in the logframe (April 2025, indicator 2.1), however receiving input from WG-FSA was extremely valuable and has strengthened both papers. We have also developed the methods for the projections paper (which will form a third journal paper), with the PDRA now ready to embark on the analyses (activities 2.10-2.11). The work underpinning all three papers contributes directly to progressing Output 3 i.e. the data acquisition, analysis, and visualisation components of the evaluation framework (activity 3.1).

2. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

There have been no notable problems or unexpected developments during the reporting period. However, I plan to submit a Change Request before the end of the year to request that some of the T&S and publication funds be moved into the next financial year for use in the final stakeholder workshop and for the final journal paper.	
3. Have any of these issues been discussed with NIRAS and if so, have changes been made to the original agreement?	
Discussed with NIRAS:	No
Formal Change Request submitted:	No, but plan to do so as noted in Section 2
Received confirmation of change acceptance:	N/A
Change Request reference if known: N/A	

Guidance for Section 4: The information you provide in this section will be used by Defra to review the financial status of projects. This review will identify projects at random for spot checks on financial management and will include requests for evidence of the actual spend information provided below. Please ensure the figures you provide are as accurate as possible and that you have the evidence to support it. You do not need to provide it now.

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2025 – 30 September 2025) Actual spend: £ [REDACTED]
4b. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this financial year (ending 31 March 2026)? <div style="background-color: black; height: 30px; width: 100%;"></div>
4c. If you expect an underspend, then you should consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year. If you anticipate a significant underspend because of justifiable changes within the project, please submit a re-budget Change Request as soon as possible, and not later than 31 st December. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes to your project if necessary. Please DO NOT send these in the same email as your report. NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.
5. Are there any other issues you wish to raise relating to the project or to BCFs management, monitoring, or financial procedures? Suspicions or allegations related to fraud and error concerns should be reported to fraudanderror@Defra.gov.uk
None.
6. Project risk management 6a. If your project has an Overseas Security and Justice assessment, please provide an update on any related risks, and any special conditions in your award paperwork if relevant for your project.

N/A
<p>6b. Have any concerns or allegations relating to sexual exploitation, abuse or harassment been reported in the past 6 months?</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>Suspicions or allegations related to safeguarding concerns should be reported to ODA.Safeguarding@defra.gov.uk</p>
None.
<p>7. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent Annual Report. As a reminder, all projects that were scored as 'Not Yet Sensitive' in the Gender Equality and Social Inclusion (GESI) assessment of their latest Annual Report should demonstrate how they are meeting the minimum GESI-Sensitive standard.</p>
<p>The most recent annual report (April 2025) had no feedback to address: <i>"There are no specific comments or queries to be addressed."</i></p>

Checklist for submission

Have you responded to feedback from your latest Annual Report Review ? You should respond in section 6, and annexe other requested materials as appropriate.	N/A
Have you reported against the most up to date information for your project ?	Yes
Have you clearly highlighted any confidential information within the report that you do not wish to be shared on our website?	N/A
Include your project reference in the subject line of submission email.	Yes
Submit to BCF-Reports@niras.com	Yes
Please ensure claim forms and other communications for your project are not included with this report.	Yes