

# BIOPOLE Annual Science Meeting

## WP4 – Programme Management

Geraint Tarling, Nadine Johnston, Rūta Hamilton, Jess Richt  
BAS

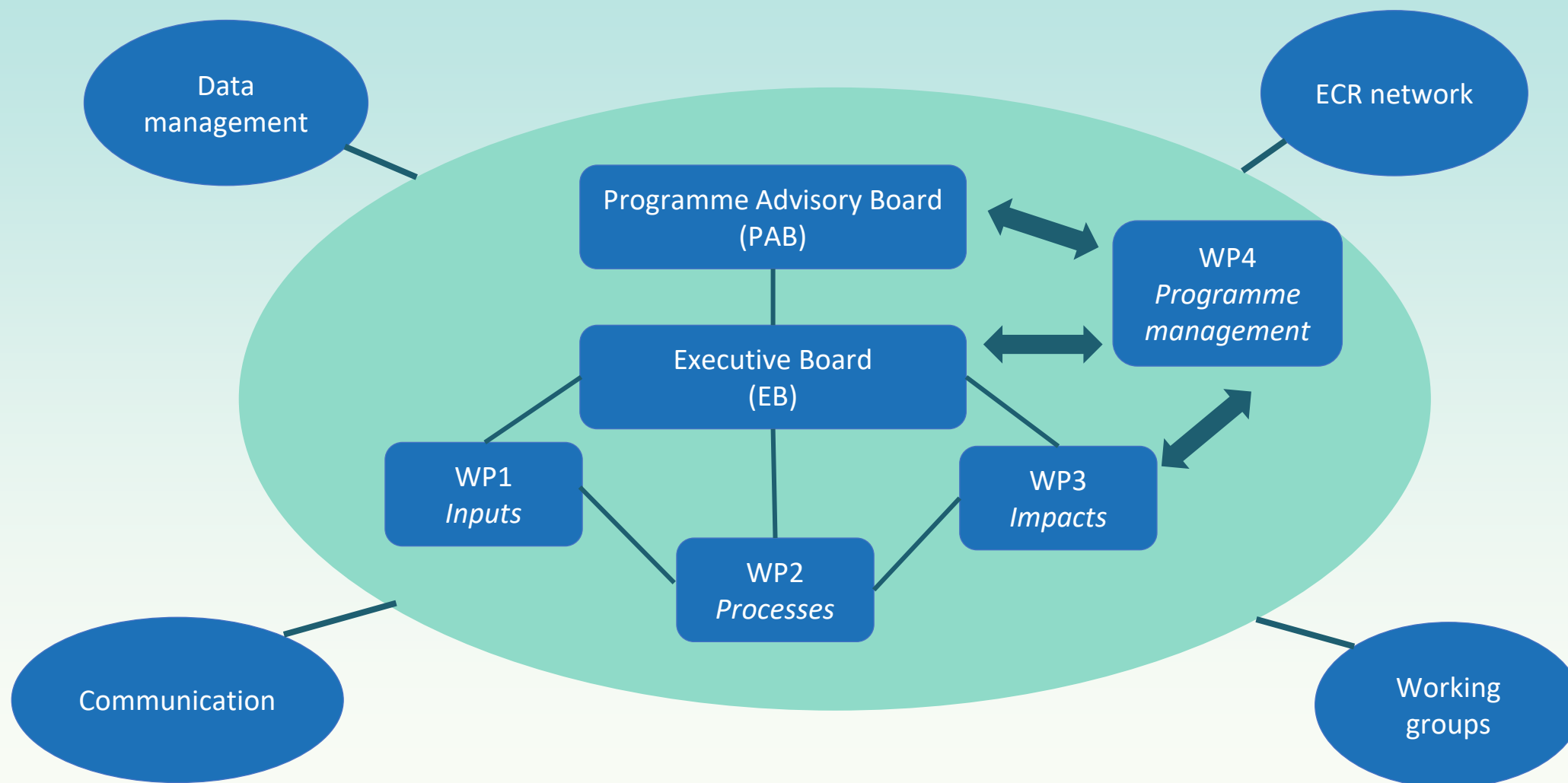
13<sup>th</sup> May 2025

# What We'll Cover Today

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- BIOPOLE Programme Management Structure
  - WP<sub>4</sub> Interactions
  - BIOPOLE Programme Management Plan, Data Management Plan, Communications Plan
  - BIOPOLE Publication Guidelines
  - Monitoring Tracker
  - Risk Register
  - Gantt Chart
  - Dissemination
  - BIOPOLE Community on Zenodo
  - BIOPOLE on UN's Ocean Best Practices System
  - Other WP<sub>4</sub> Activities
-

# BIOPOLE Management Structure



- EB
- PAB
  - Angus Atkinson (Interim Chair)
- Four elements that feed into management structure
  - Data Management (DMP)
    - Petra ten Hoopen
  - Communications (Comms Plan)
    - Stakeholders (Nadine Johnston)
    - Social media (Jess Richt)
    - Newsletter (Jess Richt)
    - Zenodo (Nadine Johnston)
  - Early Career Researcher (ECR) Network
    - Led by Laura Taylor – 29 members
    - Meetings, mentoring, ECR day, collaboration with other ECR networks, fieldwork, BIOPOLE representation
  - Working Groups
    - Parameters Cookbook updates (Kate Hendry)
    - Arctic fieldwork (Elena Garcia Martin)
    - Antarctic fieldwork database (Petra ten Hoopen)
    - Observations-modelling (Emma Young)
    - E-W Antarctic forum (Nadine Johnston, Geraint Tarling)

# BIOPOLE Programme Management Plan

## Purpose

- Outlines the policies and methods we are implementing
  - Monitoring progress
  - Dealing with risk and managing change
  - Assuring quality
  - Maximising impact



### Management Plan

#### National Capability (NC) Science Multi-Centre Round 2 project

#### BIOPOLE


Appropriate management is an important component of successful long-term science delivered by multiple Centres and a lead Centre nominee will be accountable for the overall science and management. Prof Geraint Tarling, British Antarctic Survey (BAS) is the named principal investigator (PI) responsible for managing the programme. He will be responsible for ensuring the programme is suitably managed in order to achieve its intended objectives and act as the focal point for contact with NERC, with responsibility for reporting. NERC will be informed of any change in Project lead (or PI). PI Tarling will be accountable to the Director of BAS, as the lead Centre of BIOPOLE.

It is important that BIOPOLE management and decision-making processes have a clear structure and line of responsibility in order to ensure that proper controls and processes are in place for efficient project operation. Accordingly, we have designed a management scheme that is modelled on ORCHESTRA, the previous NERC NC-SM programme successfully led by BAS. That scheme proved to be effective at integrating scientific objectives with stakeholder involvement to produce the requisite targeted research results as commissioned by NERC.

The BIOPOLE management plan is organised around a multi-layered hierarchical management structure, with responsibilities assigned to each layer. By adopting this approach we ensure that we have the appropriate provision in place to achieve integration for all parties, which engages and encompasses Centres and stakeholders alike. The Executive Board, chaired by the PI, will be the ultimate decision making body with further devolved responsibilities held by the Project Management Team and the BIOPOLE Consortium. External to these bodies are an independent Programme Advisory Board, other scientific organisations and projects, and stakeholders. This management structure ensures that all research activity is conducted and adheres to its dedicated work plan.

Last updated: 10<sup>th</sup> May 2022

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# Communication and Data Management Plan



## DATA MANAGEMENT PLAN

### 1. DMP Information

#### 1.1 Authors

Petra ten Hoopen, BAS  
Adrian Martin, NOC  
Deena Mobbs, UKCEH  
Robyn Owen, BODC  
Bryan Spears, UKCEH  
Rick Stuart, EIDC  
Geraint Tarling, BAS

#### 1.2 Created date

31/05/2022

#### 1.3 Revision date

21/02/2023

#### 1.4 Version number

1.5

#### 1.5 Approved by PI/PM

#### 1.6 Approved by DC

BODC, Robyn Owen

EIDC, Rick Stuart

UK PDC, Petra ten Hoopen

### 2. Project Information

#### 2.1 Project Name

BIOPOLE

#### 2.2 Project URL

<https://biopole.ac.uk/>

#### 2.3 Project Summary

BIOPOLE will address a fundamental aspect of the Earth System – how nutrients in polar waters drive the global carbon cycle and primary productivity. BIOPOLE will determine how polar ecosystems regulate the balance of carbon and nutrients in the world's oceans and through their effect on global fish stocks and carbon storage. BIOPOLE will integrate ambitious fieldwork campaigns and innovative modelling in a multidisciplinary and highly coordinated approach between NC-funded institutes.



*Biogeochemical processes and ecosystem function in changing polar systems and their global impacts (BIOPOLE)*

### Communications Plan 2023

#### Background

BIOPOLE will address a fundamental aspect of the Earth System – how nutrients in polar waters drive the global carbon cycle and primary productivity.

BIOPOLE will determine how polar ecosystems regulate the balance of carbon and nutrients in the world's oceans and through their effect on global fish stocks and carbon storage.

BIOPOLE will integrate ambitious fieldwork campaigns and innovative modelling in a multidisciplinary and highly coordinated approach between NC-funded institutes.

BIOPOLE will capitalise on the UK's world-leading capability and infrastructure in ocean and high-latitude research, including cutting-edge land-based facilities, the new state-of-the-art polar research vessel and innovative autonomous instrumentation.

BIOPOLE's legacy will be the first assessment of the global impact of polar ecosystems on biogeochemical cycling and fish stocks; technologically novel approaches proven to deliver marine science; and strong partnerships, of key strategic importance, between leading international players and NC-funded institutes.

#### Aim

The aim of this Communications Plan is to provide a framework to deliver target audience engagement in 2022-2027 as it is imperative that the work of BIOPOLE is communicated to the widest possible audience and the project benefits from the support of a large cross section of society.

#### Objectives

- Enable two-way dialogue between stakeholders at NC-funded institutes and the science-user community (primarily UK)
- Foster science communication and wider interactions with the national and international science community on BIOPOLE and its work (including activities, such as fieldwork and the achievement of major milestones by the programme)

- Deliver synthesised findings to the key UK government departments to support UK obligations under the Antarctic Treaty and engagement with the Arctic Council
- Further inform decision-making by the Convention for the Conservation of Antarctic Marine Living Resources (via membership of BIOPOLE scientists) and support national and inter-government climate change negotiations and UK geopolitical influence
- Ensure BIOPOLE outputs contribute to global ocean ecosystem analyses, ESMs and IPCC assessments, supporting sustainable ocean governance
- Develop BIOPOLE as a platform, engaging UK HEI and international partners to broaden impact and legacy
- Create evaluation reports to determine success or otherwise of the plan

#### Key Audiences and Channels

Audience	Detail	Channels
Stakeholders	Science community (primarily UK)  Key UK government departments (the UK Department for Environment, Food and Rural Affairs, Department of Energy and Climate Change (under BEIS), and the Foreign, Commonwealth and Development Office)	BIOPOLE website <a href="https://biopole.ac.uk/">https://biopole.ac.uk/</a> BIOPOLE Twitter <a href="https://twitter.com/BIOPOLE_NERC">@BIOPOLE_NERC</a> BIOPOLE Facebook <a href="https://www.facebook.com/biopole">Biopole</a> BIOPOLE BAS page <a href="https://www.bas.ac.uk/biopole">BIOPOLE – BAS</a> Conferences Presentations Posters BIOPOLE banner  Through stakeholder fora White papers Target the All-Party Parliamentary Group for the Polar Regions (All-Party Parliamentary Groups)
Internal	NC-funded institutes (project members) BIOPOLE Programme Advisory Board Project partners	<a href="mailto:JiscMail">JiscMail</a> , Meetings <a href="mailto:JiscMail">JiscMail</a> , Meetings, Reports <a href="mailto:JiscMail">JiscMail</a> , Meetings
Public and young people	Science festivals School visits	Open-science talks Publications Reports Podcasts Web and social media channels: Facebook, Twitter

# BIOPOLE Publication Guidelines



- BIOPOLE promotes **collaborative research** across all partners and contributors
- All publications must **credit contributors and NERC** appropriately
- Use **BIOPOLE publication guidelines** from the start of writing
- **Log all publications** in the BIOPOLE Monitoring Tracker
- Where BIOPOLE has made a notable contribution to a publication, **include acknowledgment text:**

*The contributions of [Person X, Y and Z] were supported by the BIOPOLE National Capability Multicentre Round 2 funding from the Natural Environment Research Council (grant no. NE/W004933/1).*



## Publication Guidelines BIOPOLE Programme

### Overview

- BIOPOLE abides by the ethos that we are conducting scientific research as a collective endeavour. This comprises inputs and collaborations between BIOPOLE Programme Members (Natural Environment Research Centre, NERC, staff spread across 5 UK research centres), BIOPOLE Science Partners and BIOPOLE Strategic Partners (hereafter, BIOPOLE Collaborators), and potentially, other external (i.e., non-BIOPOLE) collaborators, that all contribute to the goals and objectives of the BIOPOLE Programme (<https://biopole.ac.uk/about/>)
- Publications arising from BIOPOLE research, be they peer-reviewed scientific papers, articles for non-peer reviewed publications, reports to advisory committees and assessment bodies, or metadata papers and reports, are all important 'outputs' for BIOPOLE. The relative inputs and contribution of individuals or groups/facilities/gatekeepers and the BIOPOLE Programme (and its funder, i.e., NERC) must be appropriately and systematically acknowledged in the authorship and Acknowledgements section. This will provide appropriate credit to those involved and an acknowledgement of public accountability for the content of the output.
- These guidelines are intended to provide a set of fair principles that should be implemented from the outset of the writing of any BIOPOLE publication. The guidelines are primarily aimed at publications where a BIOPOLE writing team is leading the work and addressing one or more BIOPOLE objectives.
- It is acknowledged that, in being a programme that has emphasised collaboration between BIOPOLE Programme Members and BIOPOLE Collaborators, BIOPOLE Programme Members may be asked to contribute to publications led by a BIOPOLE Collaborator. In these circumstances, we ask that best endeavours are made to follow these guidelines. The BIOPOLE Principal Investigator (PI), Work Package (WP) Leaders, and/or Executive Board (EB) Members can provide advice and support on any issues that might arise.
- Where BIOPOLE has made a notable contribution to a publication (with or without co-authorship), we ask that the following text is included in the Acknowledgments Section:

# Monitoring Tracker

- Deliverables
- Milestones
- Cruise and fieldwork schedule
- Papers (38)
- Dissemination activities
- Data inventories
- ORCID

		BIOPOLE Project Output Monitoring		Last updated		Mar-24				Status key:		Overdue
		Milestones and Deliverables		Outstanding to be completed		118						Complete
		Start		01/04/2022								Not due yet
		no. Months		60								On schedule - due in 6 months
		End		31/03/2027								Delay likely
VP	Ta	Milestone/ Deliverable N	Milestone/Deliverable Title	EB responsible	Lead	Institute of Le	Contributor	Date Due	Type	Output	Completed?	
1	1.1	M1.1.4	Hold meetings and workshop to collate cross centre field and lab	Kate Hendry	Kate Hendry	BAS	+ 10 people all centres	Oct 2022	internal report	Content for web site when	Complete	
1	1.1	D1.1.1	Publish data set on coordinated land and sea based field pilot campaign in Loch Etive/West Coast Scotland	Bryan Spears	Amy Pickard and Kate Hendry	UKCEH & BAS	+ 15 people all centres	Dec 2023	dataset	Data set on Etive published	Overdue	
1	1.1	M1.1.1	Complete coordinated land and sea based field pilot campaign in Loch Etive/West Coast Scotland	Bryan Spears	Amy Pickard and Kate Hendry	UKCEH & BAS	+ 15 people	Dec 2022	internal report	Produce internal report and content for web site on field activities &	Complete	
1	1.1	D1.1.9	Review, revise, and Publish BIOPOLE Cook-Book on web site	Kate Hendry	Kate Hendry	BAS	+ 15 people all centres and EB	Jan 2023	other	Biopole CookBook report with peer Internal report	Complete	
1	1.1	M1.1.6	Synthesis of existing shelf-basin/WAP glider data (AB)	Bryan Spears	Alex Brearley	BAS	Kate Hendry, Oscar Schofield	May 2024	dataset		On schedule - due in 6 months	
1	1.1	M1.1.2	Deployment of land-based field team to successful completion of field campaign in Nj Alesund 2	Bryan Spears	Bryan Spears	UKCEH	+20 people all centres	Aug 2024	internal report	Produce internal report and web site content on field activities	Not due yet	
1	1.1	M1.1.2	Deployment of land-based field team to successful completion of field campaign in Tana River	Bryan Spears	Chris Evans	UKCEH	+20 people all centres	Aug 2024	internal report	Produce internal report and web site content on field activities	Not due yet	
1	1.1	M1.1.3	Deployment of land-based field team to successful completion of field campaign in Rothera & KEP	Bryan Spears	Bryan Spears	UKCEH	+ 20 people all centres	Apr 2025	internal report	Produce internal report and web site content on field activities	Not due yet	
1	1.1	D1.1.7	Quality controlled dataset of T,S and bio-optics from field experiment in	Bryan Spears	Hugh Venables	BAS	Alex Brearley, Kate Hendry	Apr 2025	dataset	dataset with doi	Not due yet	
1	1.1	D1.1.5	Paper on existing nutrient data around South Georgia and West Antarctic Peninsula	Kate Hendry	Geraint Tarling	BAS	Geraint Tarling	Jul 2023	paper - manuscript submission	paper (data journal)	Complete	
1	1.1	D1.1.3	Paper submitted on coordinated land and sea based field campaign in Nj Alesund, Tana River, Rothera and KEP	Bryan Spears & Mike Meredith	Not identified yet	UKCEH	+ 20 people all centres	Oct 2025	paper - manuscript submission	Paper documenting biogeo and isotopic source signatures and variation in	Not due yet	
1	1.1	M1.1.2	Deployment of land-based field team to successful completion of field campaign in Nj Alesund	Bryan Spears	Bryan Spears	UKCEH	+20 people all centres	Aug 2023	internal report	Produce internal report and web site content on field activities	Complete	
1	1.1	D1.1.4	Data set published on coordinated land	Bryan Spears &	Not identified yet	UKCEH	+ 20 people all	Dec 2025	dataset	Data set from	Not due yet	

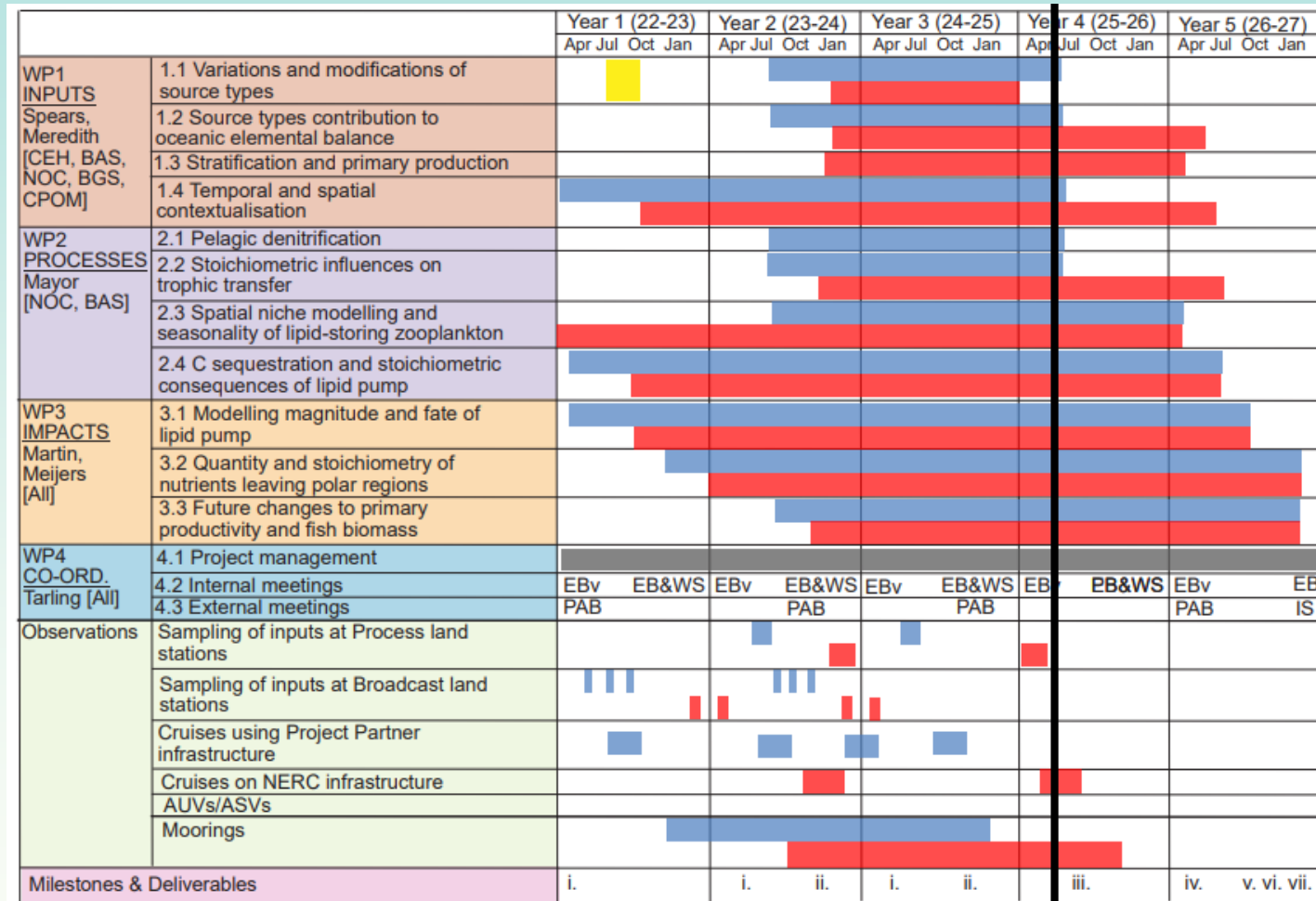


# Risk Register

- BIOPOLE shared/Project Tools
- Collated risks, mitigations, contingencies
- Please review/input

BIOPOLE Risk Register												
Version 02		<p>Key to Impacts: High = major impact on key deliverable. Med = reduction in significance of a deliverable or delay. Low = loss of slack in Delivery Plan</p> <p>Key to Probability: High = very likely to occur. Med = ~50:50 chance of occurring. Low = Unlikely to occur</p> <p>Key terms: EB- Executive Board; WP - Workpackage; WPL - Workpackage Leader; PAB - Programme Advisory Board</p>										
Risk N°	Status	WP N°	Risks	Impact	Prob-ability	Mitigation Plans	Contingency Plans	Implication of contingency	Respons-ibility	Date posted	Review Dates	Outcomes
R1	OPEN	Generic	Loss of key personnel.	High	High	Avoid single points of failure where possible, document procedures, share resources and knowledge.	Recruitment and succession planning	Likely delays during recruitment process and training up.	EB	01/04/22	15/02/24	23/02/23: Dan Mayor and Kathryn Cook moved to University of Exeter, re-evaluate WP2 deliverables
R2	OPEN	Generic	Field work: Delay, or non-completion, of field work due to polar conditions, logistics, diplomatic clearances, COVID Legacy issues etc	High	High	Plan with knowledge of climatological conditions. Appoint fieldwork leads. Commence planning and clearance process at earliest juncture.	Delay to next season. Develop alternative plan to achieve science goals.	Delay in science delivery.	WPLs	01/04/22	15/02/24	Impact changed from 'medium' to 'high' for major fieldwork (on 22/09/2022)
R3	OPEN	Generic	Modelling: delayed due to infrastructure access restrictions as a result of COVID and lack of coordination across different centres and work-packages.	Medium	Medium	Ensure frequent cross-centre contact. Appoint modelling lead.	Report problems to management meetings. Restructure delivery and timings.	Delay in science delivery.	EB	01/04/22	15/02/24	Risk probability changed from 'high' to 'medium' since it doesn't seem to be high anymore (infrastructure issues) (on 22/09/2022)
R4	OPEN	Generic	External interactions: additional complexity in field work and modelling due to connected external research programmes	Medium	High	Identify points of contact for each external relationship. Review engagements	Revise science delivery. Scope other external contacts.	Deviation of BIOPOLE science from stated objectives	EB	01/04/22	15/02/24	see key external relationships tab
R5	OPEN	Generic	Loss and/or unavailability of key equipment, including procurement issues	Medium	Medium	Maintain list of key equipment with plans for replacement, spares, maintenance. Seek extra funding where needed. Start procurement at earliest juncture	Revise workplan. Escalate to Centre Science Directors where necessary	In ability to collect key parameters and datasets as part of ongoing field programmes and external collaborations	WPLs	01/04/22	15/02/24	High impact for moorings losses. Others change prob to medium (on 22/09/2022); eco-sub issues (see key equipment) 15/06/23: Chucki sea shipping issues; 20/07/23: eco-sub not working for the Arctic deployment, look into contingencies for the future 2/15/2024: sliders not transmitting data back

# BIOPOLE Gantt Chart

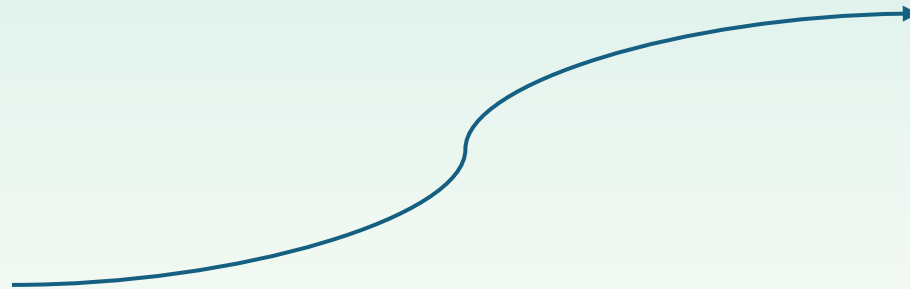


■ Arctic work 
 ■ Antarctic work 
 ■ Methods development 
 PB(v) Exec. Board (virtual) 
 PAB Project Advisory Board 
 WS Workshop 
 IS International science conference

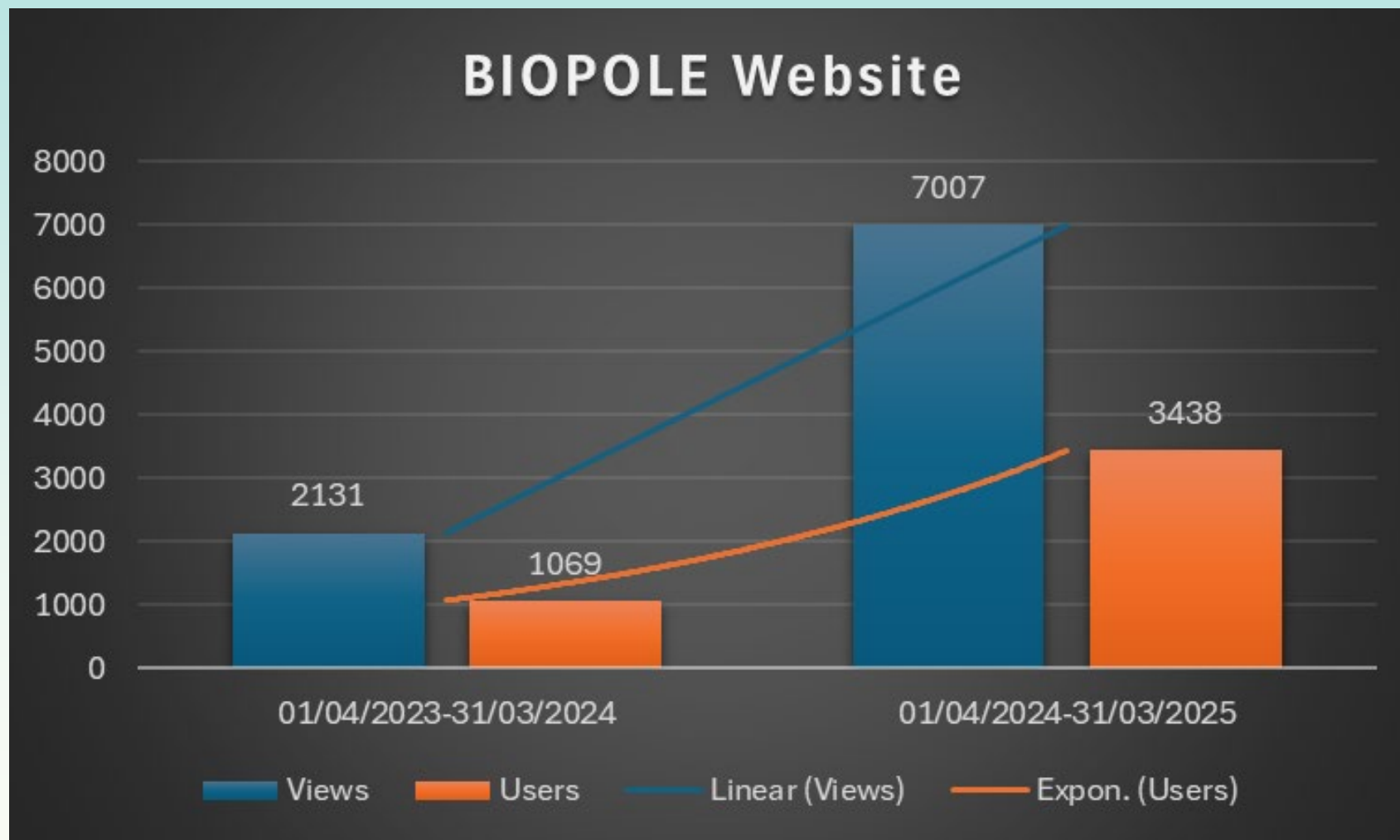
# Dissemination

- Website [www.biopole.ac.uk](http://www.biopole.ac.uk)
- Social media
  - Bluesky: [@biopole.bsky.social](https://bsky.app/profile/biopole.bsky.social)
  - Instagram: [@biopole\\_nerc\\_nc](https://www.instagram.com/biopole_nerc_nc)
  - X: [@BIOPOLE\\_NERC](https://twitter.com/BIOPOLE_NERC)
  - Facebook: [@BIOPOLE.NERC](https://www.facebook.com/BIOPOLE.NERC)

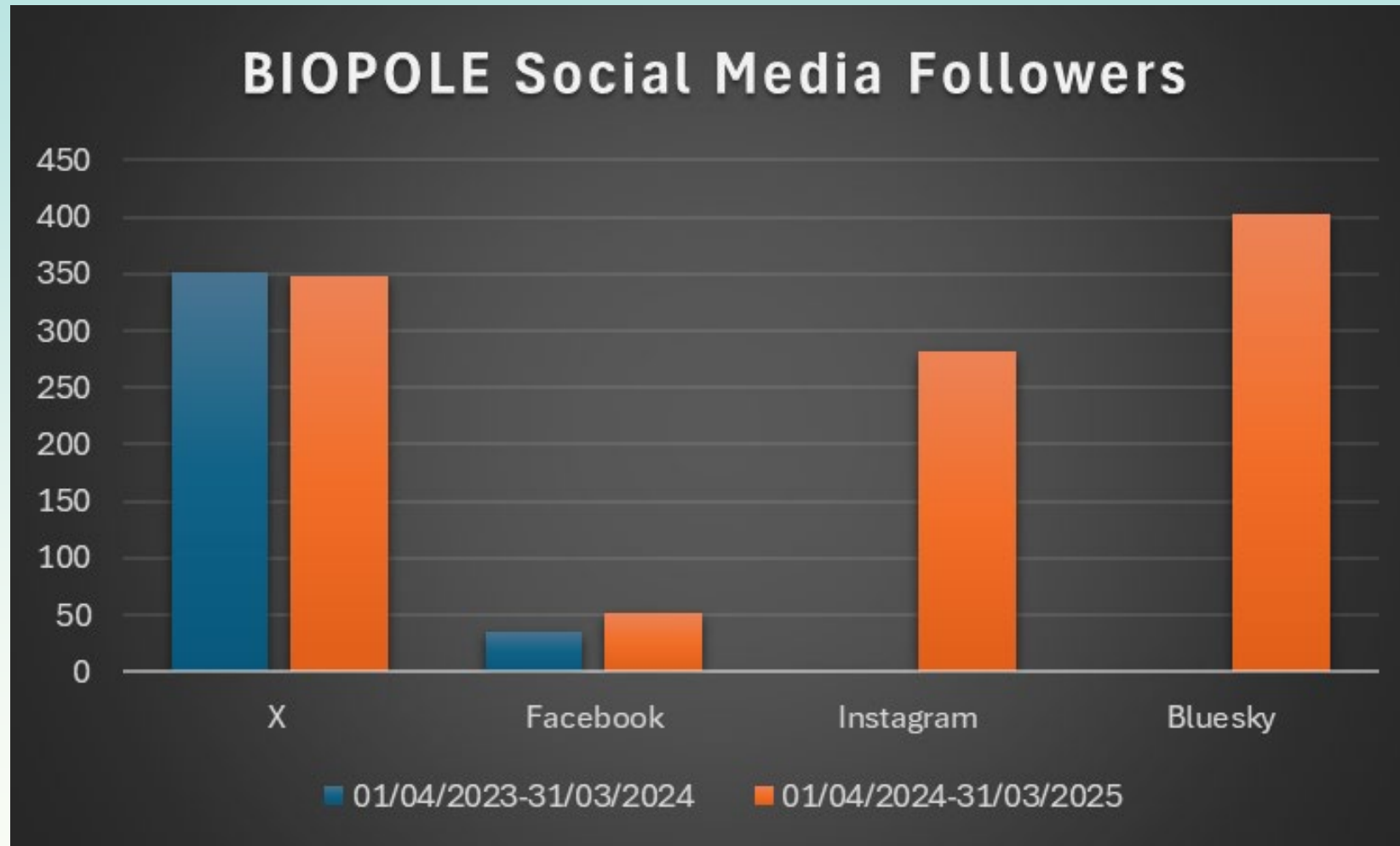
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# Dissemination (Website)

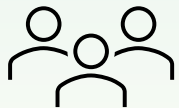


# Dissemination (Social Media)




# Dissemination (Newsletters)

- Seasonal
- Overview of progress
- Activities and event reports
- Researcher in the spotlight
- Upcoming event calendar



**Your input**



**BIOPOLE Newsletter**  
*Winter 2024/25*  
*compiled by Jessica Richt (BAS)*

**Welcome to our seasonal newsletter!**

One of the strengths of BIOPOLE is the equal contributions made by modelling and observations towards meeting its objectives. This transcends all aspects of BIOPOLE, from the initial planning, through the delivery of milestones and deliverables and to its final outputs in peer-reviewed science papers, reports and advisory documents. As chief scientist of an expedition to the Southern Ocean starting at the end of this month (SD046), I can testify to the importance of this modelling-observation interaction in ensuring that we have a plan that is achievable and focussed. This expedition is crucially timed to capture the seasonal descent of the copepod community contributing to the lipid pump.

## BIOPOLE Monthly Reminder Email

### **BIOPOLE Dissemination**

Please fill out this [form](#) on dissemination activities that you have already participated or, ideally, are going to participate in.

### **BIOPOLE Papers**

Please fill out this [form](#) about the publications that you've been working on.

### **'Researcher in the Spotlight' Series**

Please fill out this [form](#) if you would like to be featured in our 'Researcher in the Spotlight' series.

### **BIOPOLE Seasonal Newsletter**

If you have any information that you believe would contribute to the BIOPOLE's seasonal newsletter, please share it with us at [biopole@bas.ac.uk](mailto:biopole@bas.ac.uk)



# BIOPOLE Community on Zenodo



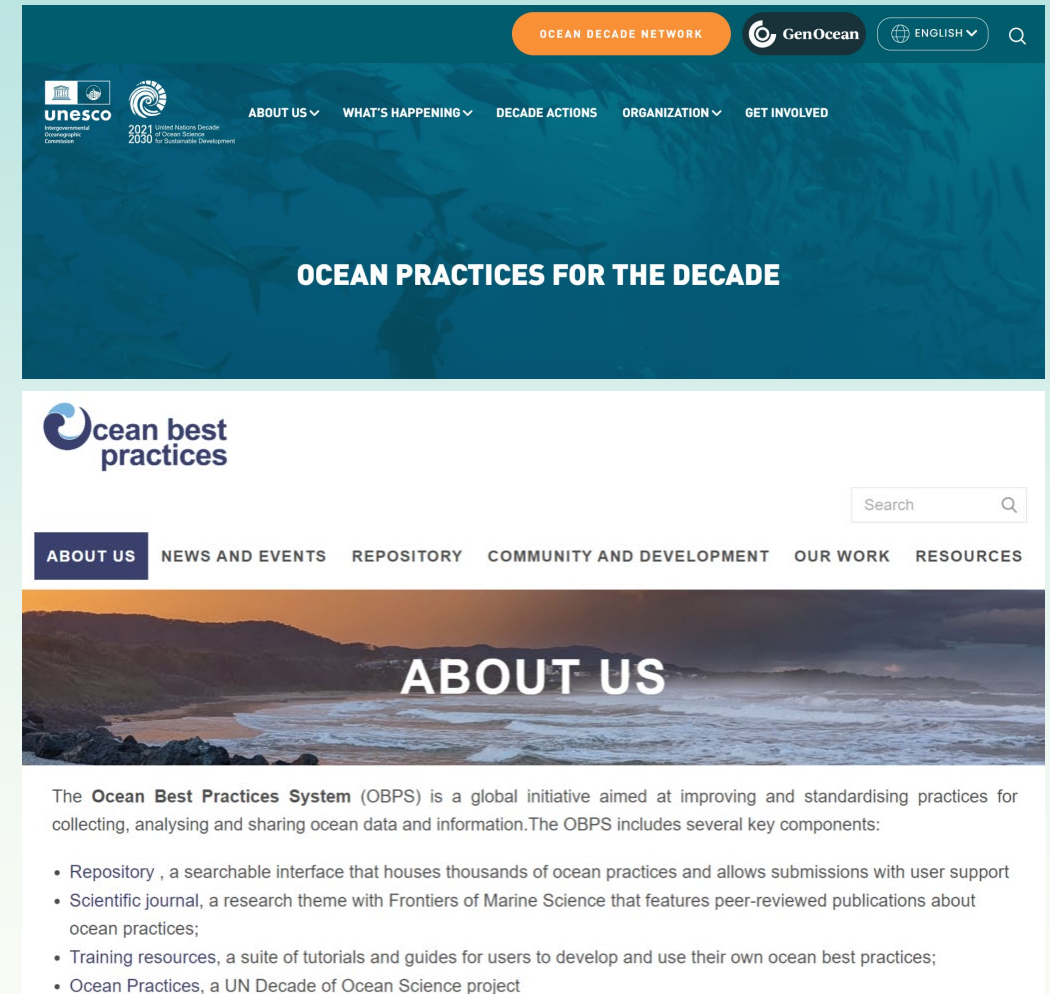
- **Zenodo Community** for BIOPOLE outputs
- **Version control & DOIs** for updates
- **No format/size limits**, open access via CERN
- **Encouraged uploads** to benefit the wider research community
- **ORCID + review process** for publishing





# BIOPOLE on UN's Ocean Best Practices System

- **OBPS: UN Ocean Decade initiative** for standardising ocean data practices
- **BIOPOLE Cookbook** published on Ocean Best Practices System (OBPS), included in OBPS 'Polar Collaborations' Community & Capacity Sharing Hub
- Aims to promote **uptake of BIOPOLE's standardised polar sampling protocols**
- **Standardisation** enables broad spatial/temporal comparisons and supports modelling



- BIOPOLE at The National Capability Long-Term Science Multicentre 2 (NC LTSM 2) Meeting
- BIOPOLE East West Antarctic Forum: Future Field Activities and Datasets
- BAS Comms Win Industry Award Featuring Coverage by BIOPOLE Scientists
- Annual Report 2024-2025
- BIOPOLE representation in conferences and initiatives

# Capturing Carbon Metrics

- BIOPOLE - a case study for calculating the carbon footprint of our programme activities

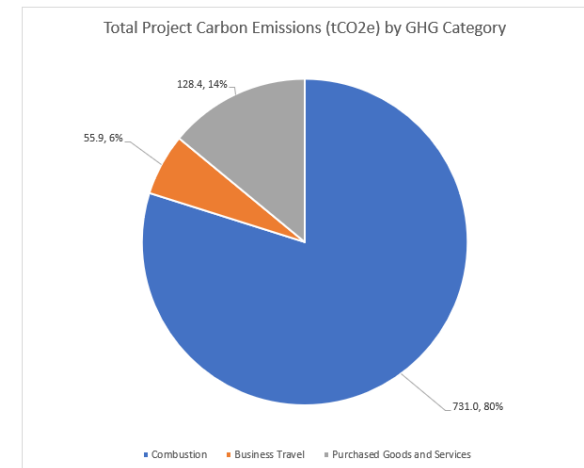
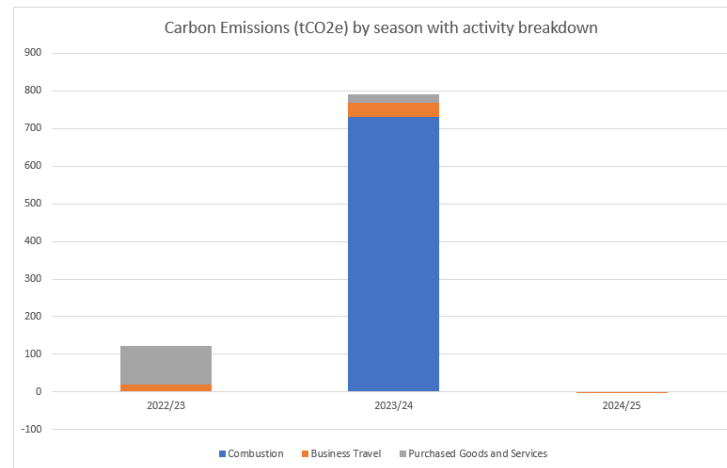
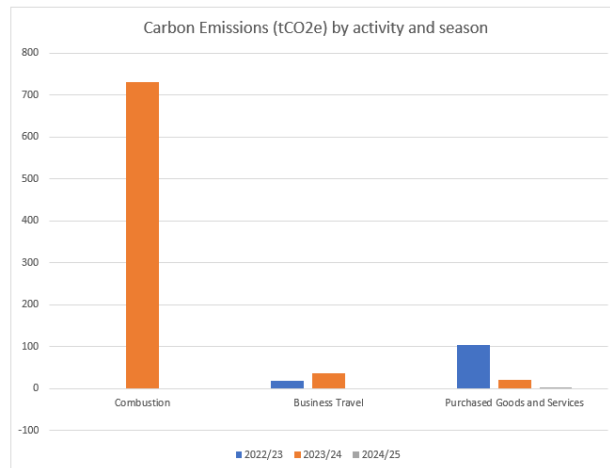


Kris Nicholls



Nopi Exizidou

GHG Scope	GHG Category	2022/23	2023/24	2024/25	Total
Scope 1	Combustion	0	731.0	0	731.0
Scope 3	Business Travel	18.9	37.6	-0.6	55.9
Scope 3	Purchased Goods and Services	103.7	21.7	3.0	128.4
Total		122.6	790.3	2.5	915.3



# World Bicycle Day – June 3rd

- Let's celebrate by cycling to work or going for a ride after work.
- Send me a photo of you and your bike on **June 3rd**, and I'll put together a collage to celebrate our collective effort!
- More info soon!



# Questions/Problems/Ideas

- Find us - Geraint, Nadine, Rūta, Jess at [biopole@bas.ac.uk](mailto:biopole@bas.ac.uk)



