



# Science & Education Report

MS FRAM

**MS FRAM**  
**22<sup>nd</sup>**  
**December**  
**2024 –**  
**12<sup>th</sup> January**  
**2025**

**In-Depth Antarctica, Falklands  
and South Georgia Expedition**



Picture by Vivi Bolin



# Storytelling



Visiting Shackleton's grave



Exploring Grytviken and learning about it's history



Carl Anton Larsen



# History Corner





# Lectures by our Historian Sandra





# Lectures by our Historian Manuel





# History & Art Walk

with your Historian Sandra





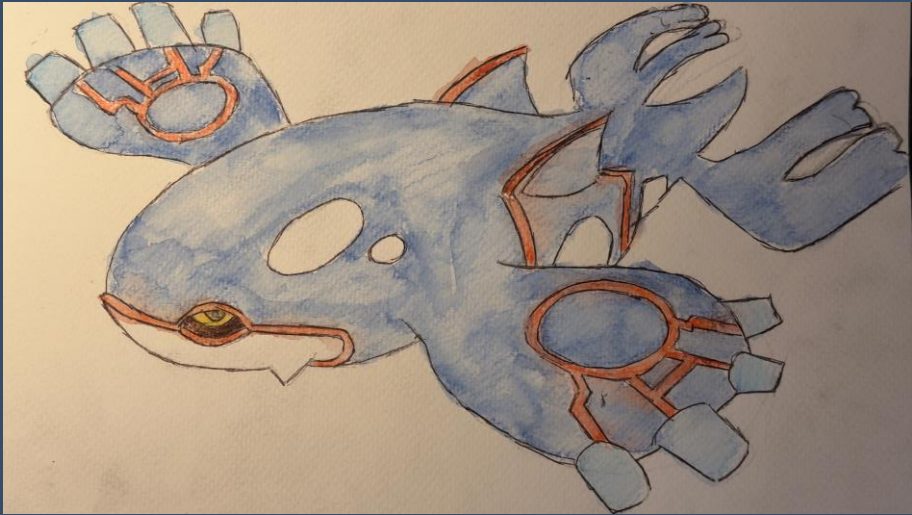
# Art Corner

Days at sea always bring inspiration and serenity while gently sailing through turbid waters.

Hidden talents are revealed under the creative spirits of our historians.









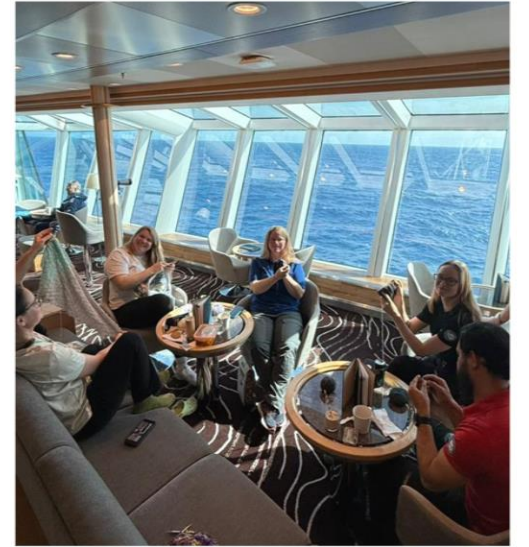








# Knit & Natter







# NASA Globe Cloud Observer

Together with Laura, you collected 4 observations of clouds for the citizen science project of NASA.

[View our data on the global map](#)





*Calanus simillimus*, a Copepod zooplankton.

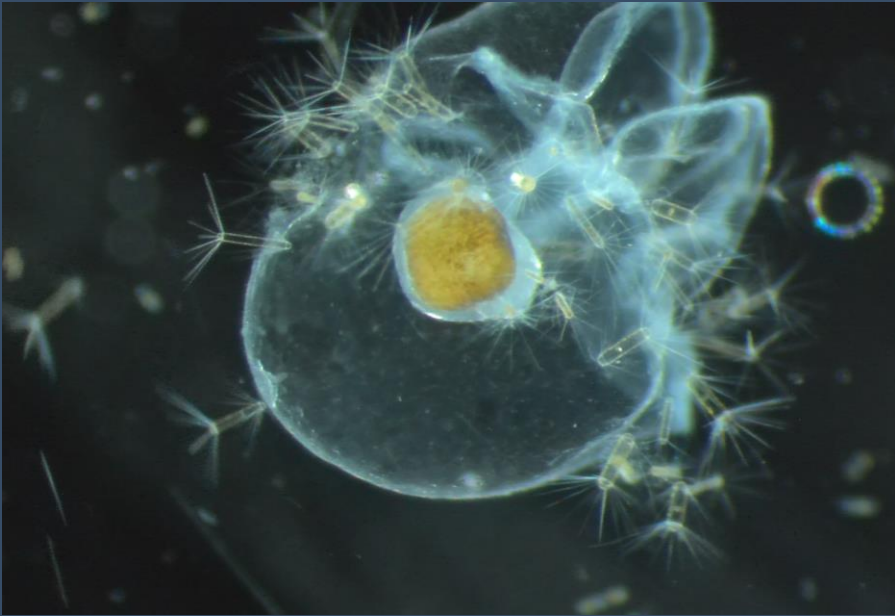
# Science Boat

On our voyage we conducted 9 Science Boats during which we collected Secchi disc measurements, CTD data, plankton samples, and hydrophone recordings.

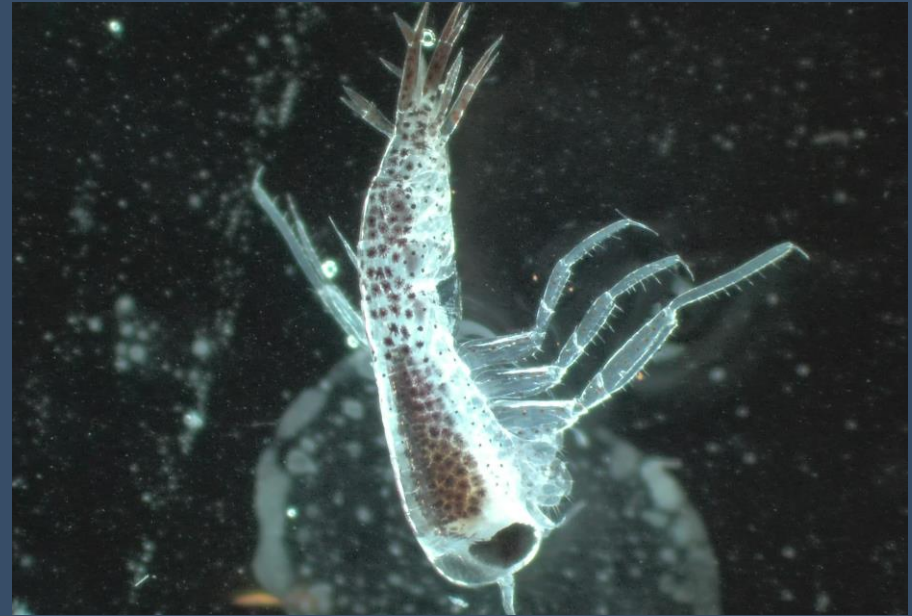
[Click here to view the Secchi data on Google Earth.](#)

[Click here to visit the Secchi Disc Project.](#)





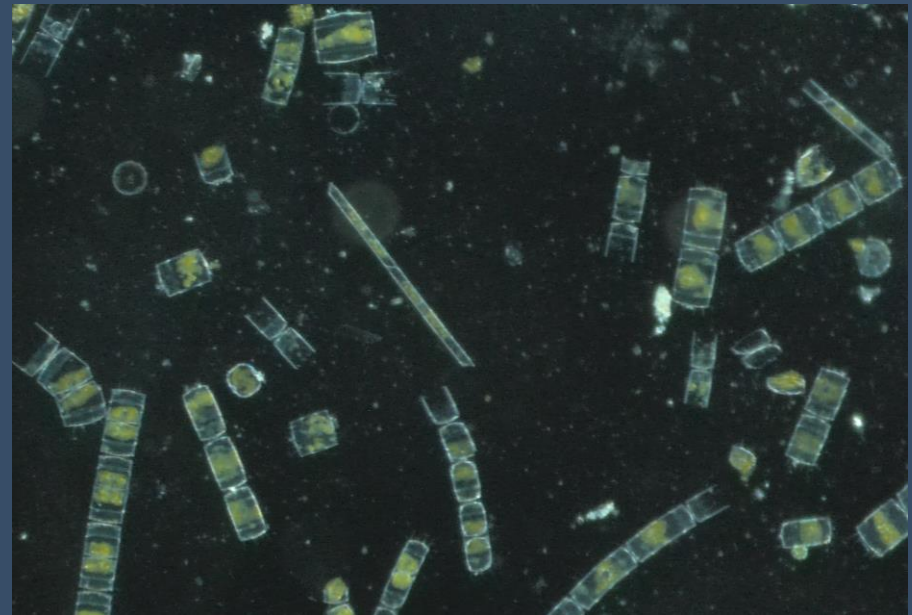
A jellyfish surrounded by corethron diatoms.



Amphipod (a type of crustacean).

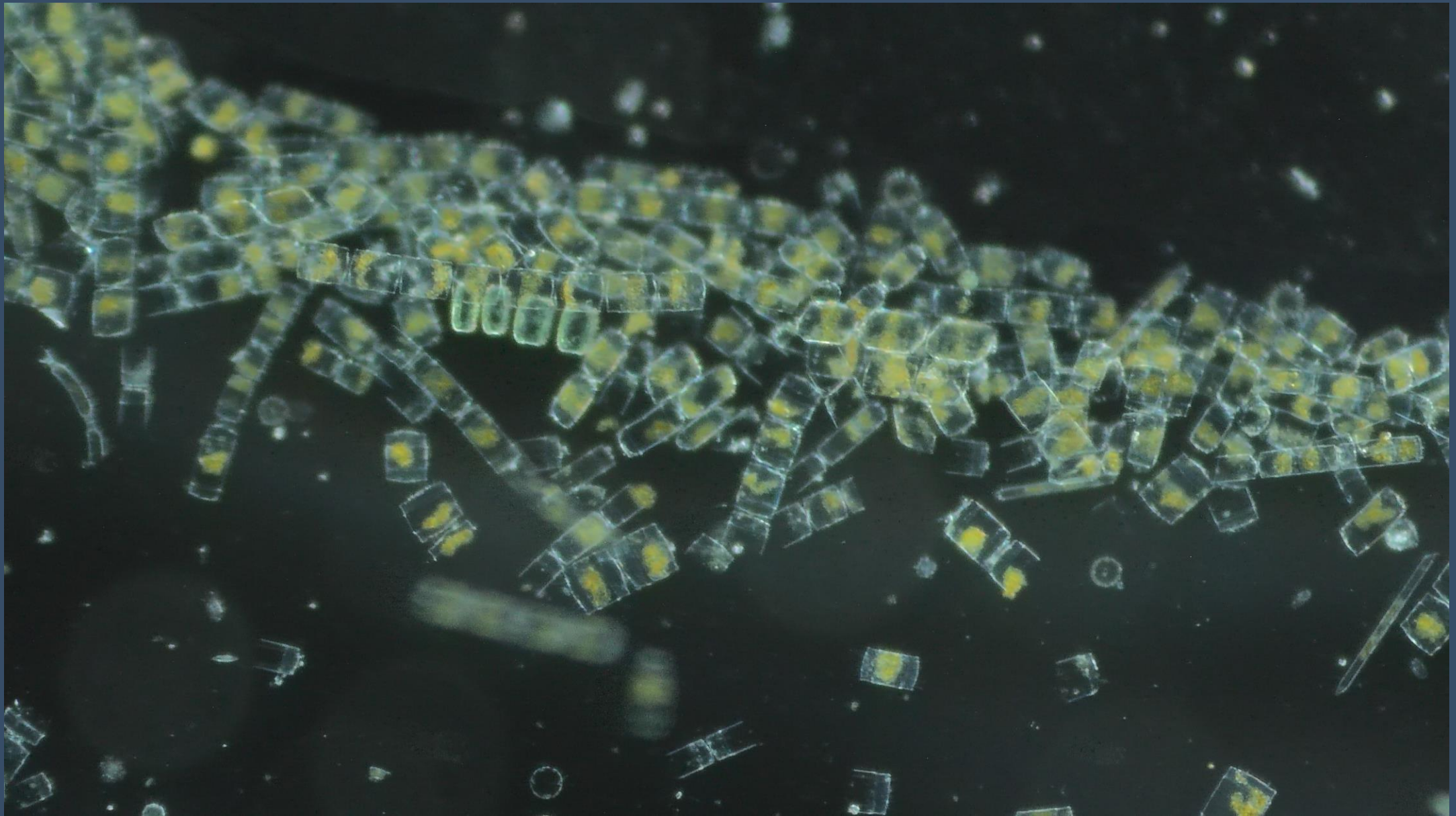


Copepod female with eggs.



Diatoms (silica based phytoplankton).







Diatom phytoplankton bloom at Deception island.



Event in progress





2024-12-22 Fram Antarctica, Falklands and South ...

Dec 22, 2024 - Jan 12, 2025

About

Members 15

Observations from guests and Expedition Team from our voyage onboard Fram.

Read More >

Your Membership

Edit Project

Project Journal

Overview

266  
OBSERVATIONS

126  
SPECIES


59  
IDENTIFIERS

11  
OBSERVERS

Stats


Recent Observations

View All



Unknown


13 days ago



Common Dandelion  
*Taraxacum officinale*

1 10 days ago


RG



Adelie Penguin  
*Pygoscelis adellae*

3 3 days ago

RG



Black-browed Albatross  
*Thalassarche melanophrys*

2 a day ago

# iNaturalist

Thanks to your efforts we collected an astonishing 266 observations for iNaturalist.

[View our iNaturalist project here.](#)





Picture of black-browed albatross  
by Chris Oosthuizen

# e-Bird

Your onboard ornithologists completed 21 ebird checklists of 33 different species.

[View our data in our e-Bird trip report.](#)



# Happywhale

A large number of whales were seen this voyage. As such, we were able to submit photos of nine individual humpback whale flukes, a fin whale with a notch in its dorsal fin and some scarring on the body, and a beaked whale with many scars. Many of the humpbacks are new individuals that have never before been recorded. Make sure to upload any other fluke pictures you may have when home, especially old photos from past encounters (the older the better!). [View our submissions to Happywhale](#)





# Wildlife List - Birds



Picture of black-browed  
albatross by Vivi Bolin



# Wildlife List — Sea- and shorebirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH
Aptenodytes patagonicus	King Penguin	Königspinguin
Pygoscelis papua	Gentoo Penguin	Eselspinguin
Eudyptes chrysocome	Southern Rockhopper Penguin	Südfelsenpinguin
Eudyptes chrysolophus	Macaroni Penguin	Goldschopfpinguin
Spheniscus magellanicus	Magellanic Penguin	Magellanpinguin
Pygoscelis adeliae	Adelie Penguin	Adeliepinguin
Pygoscelis antarcticus	Chinstrap Penguin	Kehlstreifpinguin
Oceanites oceanicus	Wilson's Storm Petrel	Buntfuß-Sturmschwalbe
Garrodia nereis	Grey-backed Storm Petrel	Graurücken-Sturmschwalbe
Fregetta tropica	Black-bellied Storm Petrel	Schwarzbauch-Sturmschwalbe
Diomedea exulans	Wandering (snowy) Albatross	Wanderalbatros
Phoebastria palpebrata	Light-mantled Albatross	Graumantelalbatros
Thalassarche melanophris	Black-browed Albatross	Schwarzbrauenalbatros
Diomedea epomophora	Southern Royal Albatross	Südkönigsalbatros
Diomedea sanfordi	Northern Royal Albatross	Nordkönigsalbatros
Thalassarche chrysostoma	Grey-headed Albatross	Graukopfalbatros
Macronectes giganteus	Southern Giant Petrel	Riesensturmvogel
Macronectes halli	Northern Giant Petrel	Hallsturmvogel
Fulmarus glacialis	Southern Fulmar	Silbersturmvogel
Pagodroma nivea	Snow Petrel	Schneesturmvogel
Aphrodroma brevirostris	Kerguelen Petrel	Kerguelensturmvogel
Pterodroma mollis	Soft-plumaged Petrel	Weichfeder-Sturmvogel
Daption capense	Cape Petrel	Kapsturmvogel
Halobaena caerulea	Blue Petrel	Blausturmvogel
Procellaria aequinoctialis	White-chinned Petrel	Weißkinn-Sturmvogel
Ardenna gravis	Great Shearwater	Großer Sturmtaucher
Ardenna grisea	Sooty Shearwater	Dunkler Sturmtaucher
Pachyptila desolata	Antarctic Prion	Taubensturmvogel



# Wildlife List — Sea- and shorebirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH
Tachyeres brachypterus	Falkland Steamer Duck	Falkland-Dampfschiffente
Chloephaga picta	Upland Goose	Magellangans
Chloephaga hybrida	Kelp Goose	Kelpgans
Chloephaga rubidiceps	Ruddy-headed Goose	Rotkopfgans
Lophonetta specularioides	Crested Duck	Schopfente
Anas georgica	Yellow-billed Pintail	Spitzschwanzente
Nycticorax nycticorax	Black-crowned Night Heron	Nachtreiher
Phalacrocorax magellanicus	Rock Shag	Felsenscharbe
Leucocarbo atriceps	Imperial Shag	Kaiserscharbe
Leucocarbo georgianus	South Georgia Shag	Südgeorgienscharbe
Leucocarbo bransfieldensis	Antarctic Shag	Antarktikscharbe
Haematopus leucopodus	Magellanic Oystercatcher	Magellanausternfischer
Haematopus ater	Blackish Oystercatcher	Südamerikanischer Austernfischer
Chroicocephalus maculipennis	Brown-hooded Gull	Patagonienmöwe
Leucophaeus scoresbii	Dolphin Gull	Blutschnabelmöwe
Larus dominicanus	Kelp Gull	Dominikanermöwe
Sterna vittata	Antarctic Tern	Antarktikseeschwalbe
Sterna hirundinacea	South American Tern	Falklandseeschwalbe
Stercorarius maccormicki	South Polar Skua	Antarktiskua
Stercorarius antarcticus	Brown Skua	Subantarktiskua
Stercorarius chilensis	Chilean Skua	Chileskua
Pachyptila belcheri	Slender-billed Prion	Dünnschnabel-Sturmvogel
Pelecanoides georgicus	South Georgia Diving Petrel	Breitschnabel-Lummensturmvogel
Pelecanoides magellani	Magellanic diving-petrel	Magellanischer Tauchsturmvogel
Puffinus puffinus	Manx shearwater	Schwarzschnabel-Sturmtaucher



# Wildlife List — Land birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH
Cathartes aura	Turkey Vulture	Truthahngeier
Phalcoboenus australis	Striated Caracara	Falklandkarakara
Cinclodes antarcticus	Blackish Cinclodes	Falkland-Uferwipper
Muscisaxicola maclovianus	Dark-faced Ground Tyrant	Maskengrundtyrann
Troglodytes cobbi	Cobb's Wren	Falklandzaunkönig
Turdus falcklandii	Austral Thrush	Magellandrossel
Spinus barbatus	Black-chinned Siskin	Bartzeisig
Leistes loyca	Long-tailed Meadowlark	Langschwanzstärling
Melanodera melanodera	White-bridled Finch	Weißbart-Ammertangare
Anthus antarcticus	South Georgia Pipit	Riesenpieper
Chionis albus	Snowy Sheathbill	Weißgesicht-Scheidenschnabel



# Wildlife List — Marine Mammals



Picture of humpback  
whales by Vivi Bolin



# Wildlife List – marine mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH
<i>Balaenoptera borealis</i>	Sei whale	Seiwal
<i>Balaenoptera physalus</i>	Fin whale	Finnwal
<i>Megaptera novaeangliae</i>	Humpback whale	Buckelwal
<i>Orcinus orca</i>	Killer whale, orca	Schwertwal, Orca
<i>Cephalorhynchus commersonii</i>	Commerson's dolphin	Commerson-Delfin
<i>Lagenorhynchus australis</i>	Peale's dolphin	Peale-Delfin
<i>Lagenorhynchus obscurus</i>	Dusky dolphin	Schwarzdelfin
<i>Ziphiidae sp.</i>	Unidentified beaked whale	
<i>Arctocephalus australis</i>	South American fur seal	Südamerikanischer Seebär
<i>Arctocephalus gazella</i>	Antarctic fur seal	Antartischer Seebär
<i>Otaria byronia</i>	South American sea lion	Mähenrobbe
<i>Leptonychotes weddellii</i>	Weddell seal	Weddelrobbe
<i>Mirounga lionina</i>	Southern elephant seal	Südlicher See-Elefant

# Guest scientist

We also had the privilege of hosting James Bradley, a researcher based in France. James's research investigates the survival of microorganisms in extreme cryosphere environments, including on glaciers and snow in polar regions.

James has been collecting samples of glacier ice, snow, and sediments in order to study the microbial inhabitants of these environments, and their adaptation to extreme conditions (including cold temperatures, low nutrients, freeze-thaw, and seasonality). This understanding will inform the way we view life in the cryosphere - providing new knowledge of the life at the extremes of our world, as glacial landscapes disappear.

Whilst onboard, James managed to collect ice, snow and sediments from several sites in South Georgia (Shackleton Gap Glacier, Turnback glacier, Heaney glacier) and Antarctica (Deception Island, Kerr Point).







# PENGUIN WATCH GUEST SCIENTISTS

We had the privilege of hosting Craig and Zoe from Penguin Watch, a penguin monitoring project based at Oxford Brookes University on MS Fram. Zoe and Craig work for this research project across the Falklands, South Georgia, South Shetland and the Antarctic Peninsula. They have conducted drone surveys for population counts over 17 colonies (seabirds and seals) during this trip and serviced 4 timelapse cameras that look at penguin behaviour and biology. Their highlights this trip were surveying Point Wild, and Doris and Anchorage Bays in South Georgia, which hadn't been surveyed by our project yet this year and getting to the Yalour Islands to service a camera that is difficult to get to! They will need time to analyse the results, and we look forward to hearing more about their research.

Visit [penguinwatch.org](https://penguinwatch.org) for more information

Donate at [www.brookes.ac.uk/alumni-and-supporters/make-a-gift/seabird-penguin-watch](https://www.brookes.ac.uk/alumni-and-supporters/make-a-gift/seabird-penguin-watch)





# IX

Connect with your  
inner scientist