

The background of the slide features a deep blue underwater scene with two whales. A large, semi-transparent watermark consisting of the Roman numerals 'IX' is positioned on the left side of the image. The text 'Science & Education Report' is centered horizontally across the middle of the image.

Science & Education Report

MS FRAM

2nd to 23rd

February 2025

In-Depth Antarctica, Falklands and
South Georgia Expedition





Science & Education Program

"Dear Citizen Scientists,

By joining our ship MS Fram, you have decided on embarking on an immersive learning experience. You have had the opportunity to support real-time research by helping collecting valuable data, while also discovering new places, explorer stories and wildlife in breath-taking destinations.

We hope that this report will remind you of the wonderful adventure you have experienced with us, and we can only wish for you to be back onboard our lovely ship in the near future."

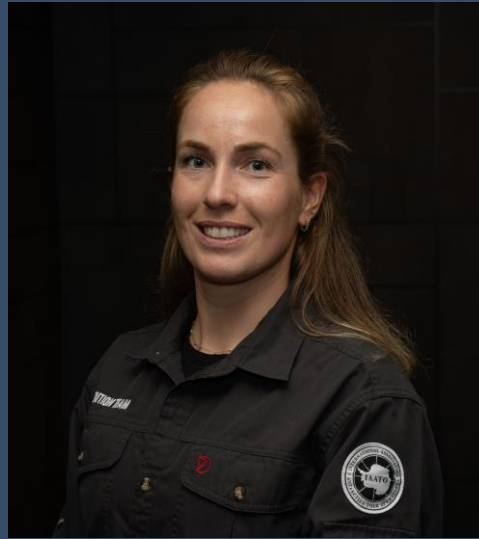
MANAGEMENT TEAM

Steffen



Expedition Leader

Leoni



Second Expedition
Leader

Maeva



Assistant Expedition
Leader

Alicia



Expedition Coordinator

HISTORIANS & STORYTELLERS!

Cristian



Historian

Jane



Historian

History

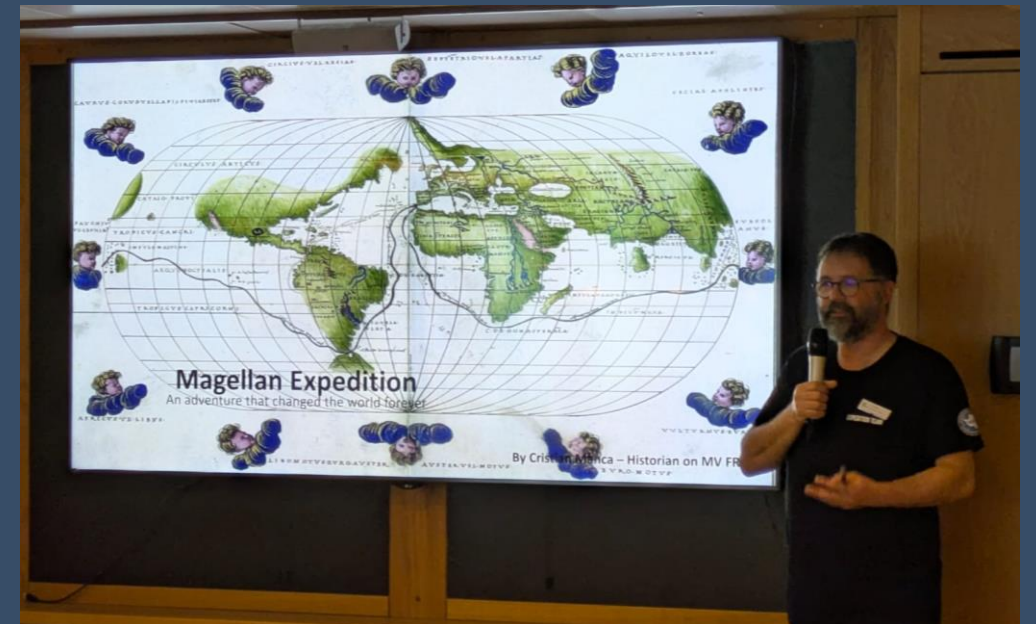
Through lectures and storytelling of Jane and Cristian and even the Captain, we discovered the history of the Falklands Islands, the whaling times in South Georgia and the adventures of Antarctic explorers.



Jane tells the daily life at the whaling stations



The Captain having a toast in memory of Shackleton, Grytviken



Lecture about the History of the Strait of Magellan by Cristian

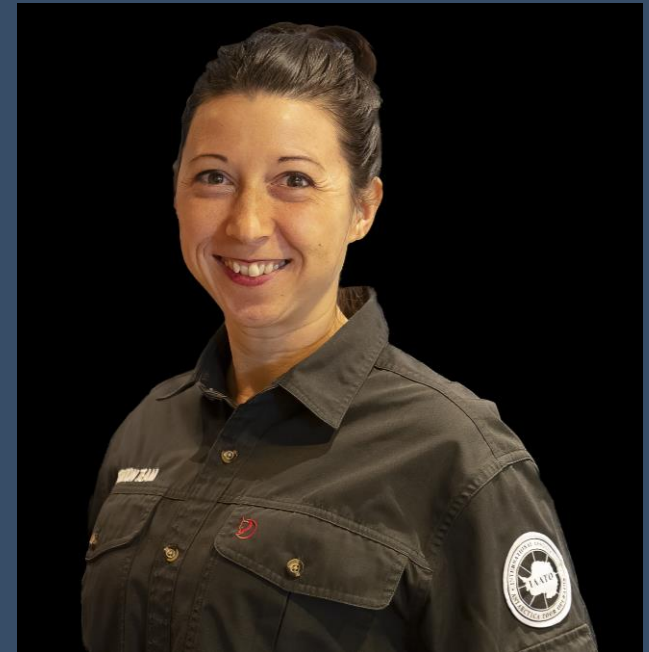
Our interpreters

Chloe



Chinese Interpreter

Johanna



German Interpreter

ACTIVITY TEAM

Candice



Paul



Robert



Sport & Sailor's customs

Why not take this opportunity to learn more about sailors and their customs at sea? Thanks to your activity team, you got to practise knots and sing traditional shanties the old fashioned way. Let's not forget about the brain teasers left around the ship for you to familiarise yourself with the art, design and equipment onboard your temporary home.



Knot Workshop



Seashanty rehearsal with Paul



What's in the emergency bags?

Outdoor adventures

Energized, happy, motivated! Your Activity team has taken you out on many adventures across the different landscapes. Kayaking, hiking, camping were on the menu when the conditions allowed.



Shackleton hike from Fortuna Bay



Kayaking in Orne Harbour



Camping night
in Leith Cove

The hidden work

You might be wondering what happens behind the curtains when all of us are onboard. While each department is busy in their daily task to ensure the good functioning of our lovely MS Fram, the activity team takes charge in organizing, sorting, cleaning the equipment at your disposal when ashore. It might not look like much, but thanks to their hard work, we can all appreciate smooth and safe operations whether it is kayaking, hiking, camping etc.



Pole cleaning between South Georgia and Antarctica



Camping gear cleaning and drying in the garage



Kayaks getting ready before the activity

Thank you for
helping us
keeping those
places unique!

Biosecurity inspection before going ashore



YOUR MEMORY MAKERS

Geraldine



Photographer

Jan



Videographer

Photo Adventures

We hope that you asked Geraldine and Jan all the questions you had about camera settings during those photo adventures, whether on land or at sea. As you know, a tremendous work goes into the post processing and editing, but the results are always outstanding!



Picture by Jan Hvizdal/HX



Photo Adventure on land, Gold Harbour/South Georgia



Photo Cruise Adventure , Neko Harbour /Antarctica



Picture by Geraldine Prince/HX

SCIENCE TEAM

Caroline



Science & Education
Coordinator

Linda



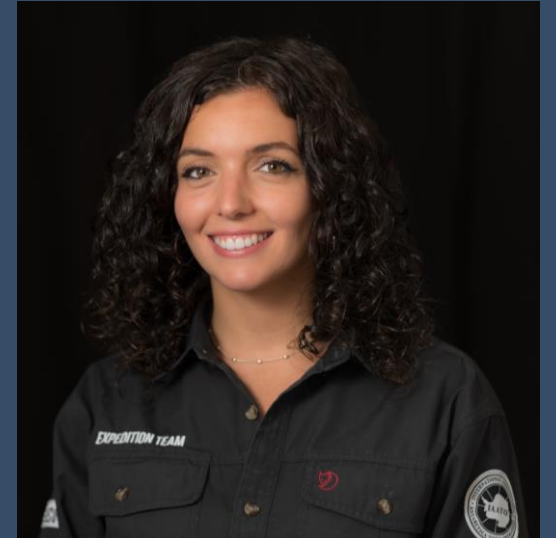
Environmental Scientist

George



Ornithologist

Giulia



Marine Scientist

Onboard Workshops

Our scientists Giulia, Linda, George, Chloe and Caroline lead various interactive workshops about Ice, rocks and volcanoes, feathers, whales, plankton, seaweeds and Chilean sea lions.



Live experiment: do seaweed bladders contain carbon monoxide? with George



"How to build a whale" with Giulia



"How do rocks form?" with Linda





Citizen Science Projects

Thank you for participating in the many different citizen science projects we work in collaboration with.



NASA Globe Cloud Observer

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


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


iNaturalist

We submitted 343 observations of 102 different species of wildlife and plants.

View our data submitted on [our iNaturalist project](#)

Event in progress



 02-02-2025 Falklands, South Georgia and Antarcti...
Feb 2, 2025 - Feb 23, 2025

About

Members 13

Observations from guests and guides onboard MS Fram sailing from Punta Arenas to the Falklands Islands, South Georgia and Antarctica

Read More >

Your Membership

Edit Project

Project Journal

Overview

343
OBSERVATIONS

102
SPECIES

77
IDENTIFIERS

8
OBSERVERS

Stats





Science Boat

We conducted 9 science boats and collected data for 3 citizen science projects: South Georgia Big Seaweed Search, Secchi disk study and FjordPhyto. In addition, we collected water samples to look at the plankton under the microscope and measured water parameters with the CTD (Conductivity, Temperature, Depth).

[View our data](#) submitted to the Secchi Disk Project

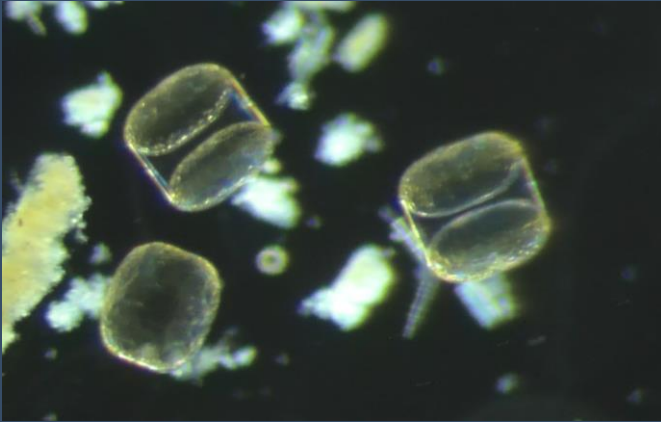
[Read about the South Georgia Big Seaweed Search project](#)

[Read about the FjordPhyto project](#)

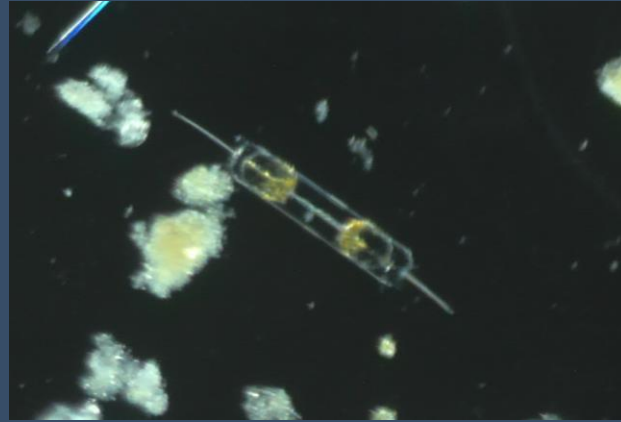
Phytoplankton

Plankton is the collection of drifting organisms in the water column that do not have the ability to swim or propel themselves against the currents. They could be divided into two main categories; phytoplankton (i.e. microalgae and plants) and zooplankton (i.e. animals).

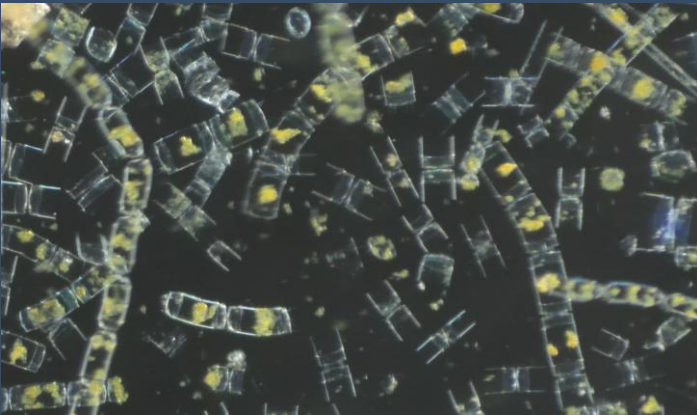
During our microscopy sessions, we discovered phytoplankton and zooplankton from the waters of the Falkland Islands, South Georgia, the Orkneys islands and Antarctica. In South Georgia, we collected mostly zooplankton such as copepods while Antarctic waters were richer in phytoplankton. In Whalers bay, the phytoplankton was blooming and very rich in diatoms while the waters of Half Moon, Orne and Port Charcot contained less phytoplankton but different species.



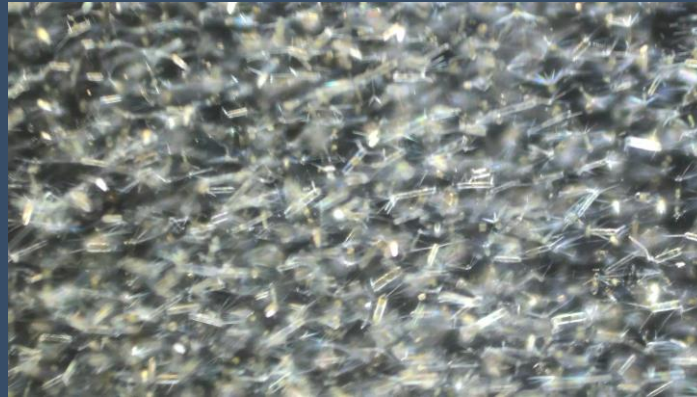
Diatom



Diatom



Chains of diatoms *Odontella*



Diatom *Corethron pennatum*

Zooplankton

In addition to our water sampling with the plankton nets, we caught some amphipods while sampling seaweeds for our guest scientist. And our colleagues working in the engine department kindly brought us some squat lobsters and krill that were collected in the filters.



Comb jelly, Hercules Bay



Copepod



Amphipod



Squat lobster



Krill



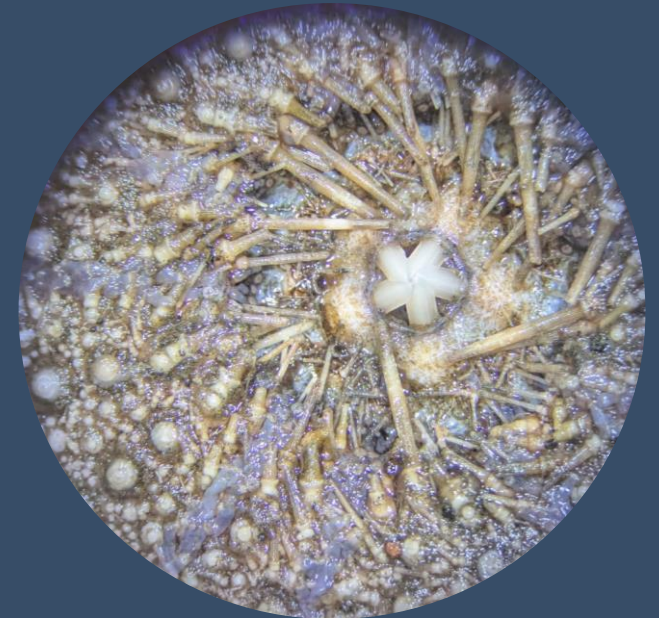
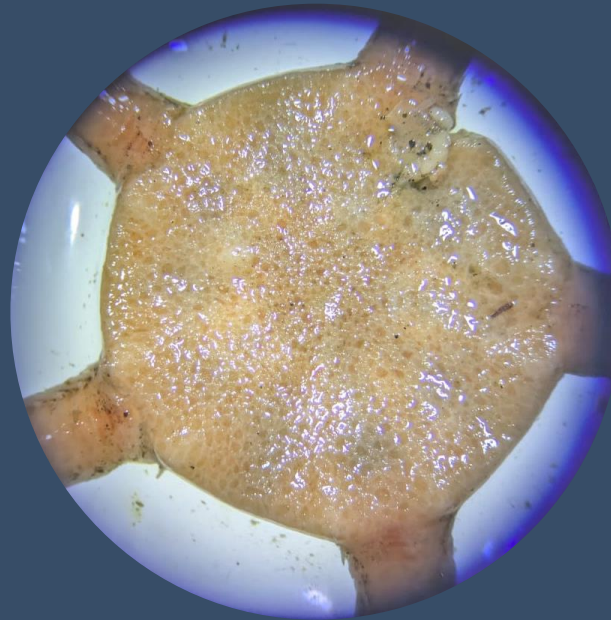
Krill

Marine life in Whalers Bay

On the shore of Whalers Bay at Deception Island, you might have observe some sea organisms stranded on the beach. The expedition team collected a brittle sea star, a sea urchin and a salp for one of our science center.



Brittle sea star, salp and sea urchin



Underwater Drone

Our guest scientist Freya Allfred explored Orne harbour underwater seaweeds with our drone which helped her to know which type of seaweed live there. In addition to various underwater landscapes, we could observe some sea stars, sponges, amphipods and a worm.

View the highlights from our underwater drone footage [on YouTube](#)



Soundscapes

Rediscover the acoustic ambiances of some the places we visited.

Listen to our [soundscapes](#) recorded in the Falklands, South Georgia and Antarctica for this voyage and the previous ones.



Caroline recording a soundscape at New Island, Falkland Islands

ORCA Cruise Conservationist



Looking out for whales and dolphins



Richard joined the expedition team as a ORCA cruise conservationist, an UK-based charity looking out for whales and dolphins. During our days at sea, he spent long hours on the outer deck 5, binoculars in his hands, searching with the smallest sign of wildlife breaking the surface of the water. Many of you had a chance to interact with him and learn more about the ORCA charity and the work they do across the world. HX has been working in collaboration with them for several years, and it is always a pleasure to have one of their members join our team for a voyage or two.

Guest Scientists - ORCA

Jayne and Nikki have been on board carrying out some exciting whale research, for a project that is monitoring recovering whale populations in the Southern Ocean with a particular focus around South Georgia and the Antarctic Peninsula. Jayne and Nikki have been collecting their data from the bridge of the ship using a distance sampling methodology which will enable them to calculate population abundance and density. A total of 727 cetaceans have been recorded, see the complete ORCA sightings map [by clicking on this link](#).



[Visit our Science & Education Hub online](#) to find out more

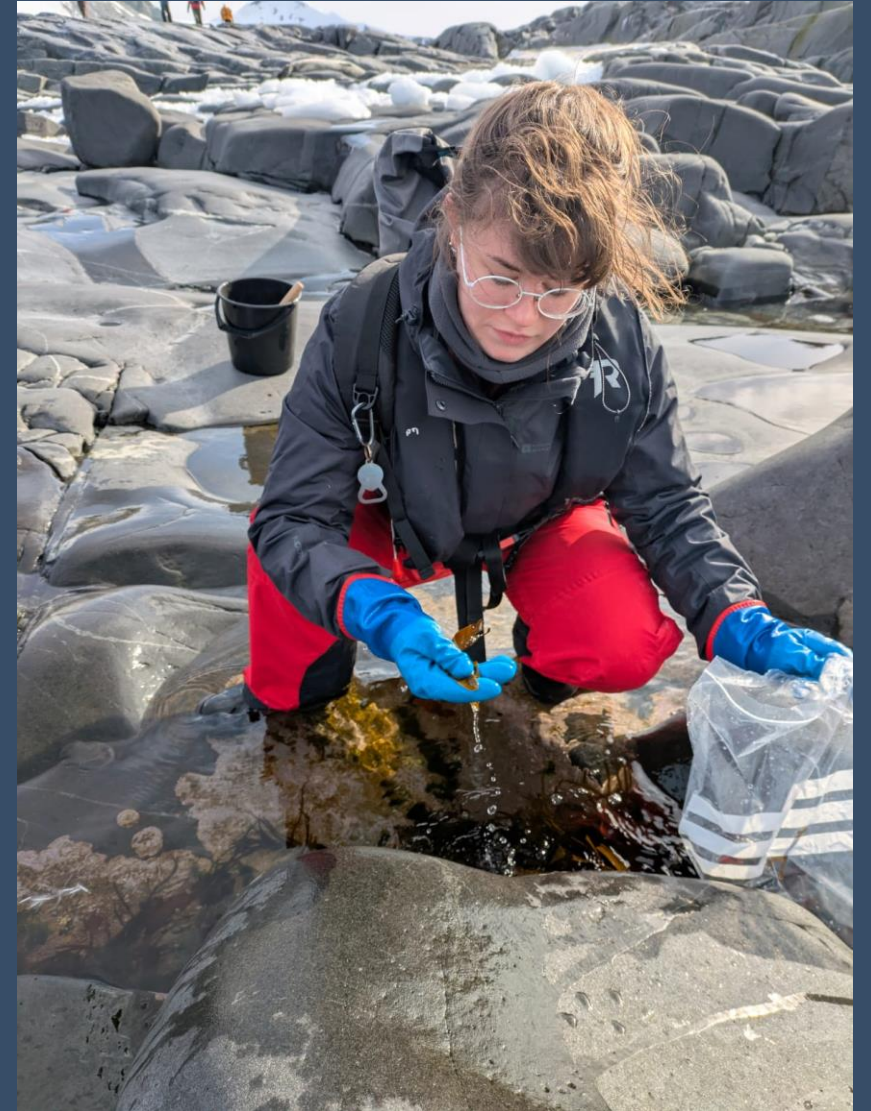


Guest Scientist Freya Allfred

Freya has been onboard collecting seaweed from South Georgia and the Antarctic Peninsula for her PhD fieldwork at Durham University. Onboard the science boat Freya collected species for carbon and nitrogen analyses to monitor the nutrient cycles in the Southern Ocean. This has been her third time in Antarctica and has collected over 100 samples from the inter-tidal zone, water and sediments.



[Visit our Science & Education Hub online](#) to find out more



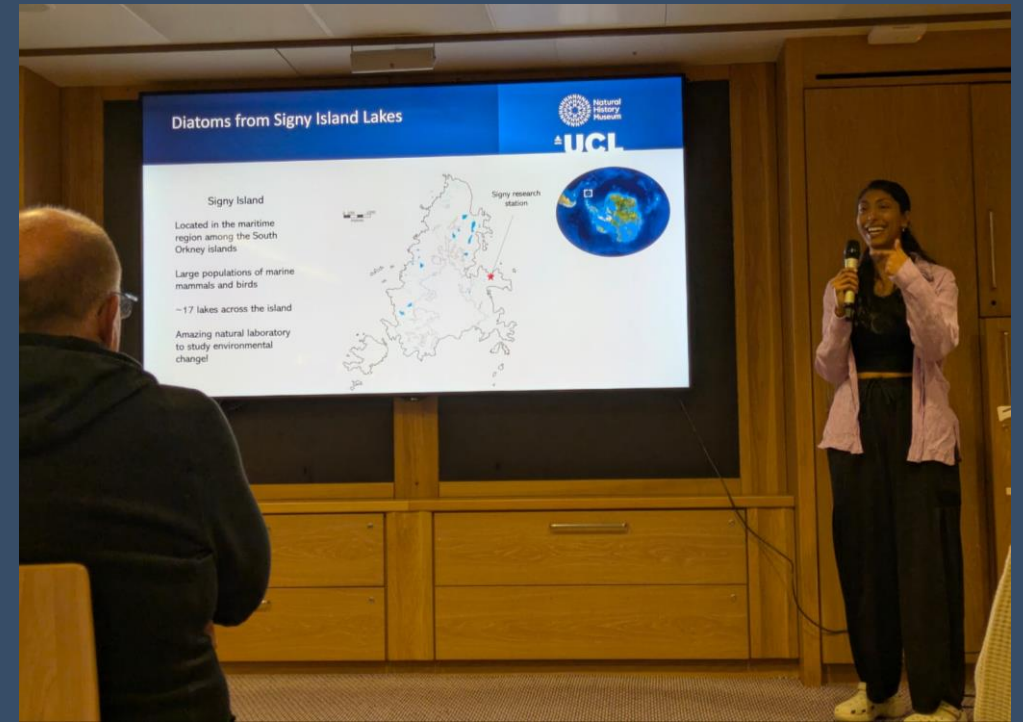
Freya Allred sampling seaweed at Astrolabe Island, Antarctica

Guest Scientists - BAS

We had the pleasure of having a guest scientist and a chief technician working at Signy station for the British Antarctic Survey. Shajeda is a PhD student and will sample water from several Signy Island lakes and study the diatoms in order to understand the impact of climate changes on the lake ecosystems. Phil is chief technician and has worked in Signy since the 90's. He will now embark at Punta Arenas for Rothera station located in the Antarctic Peninsula.

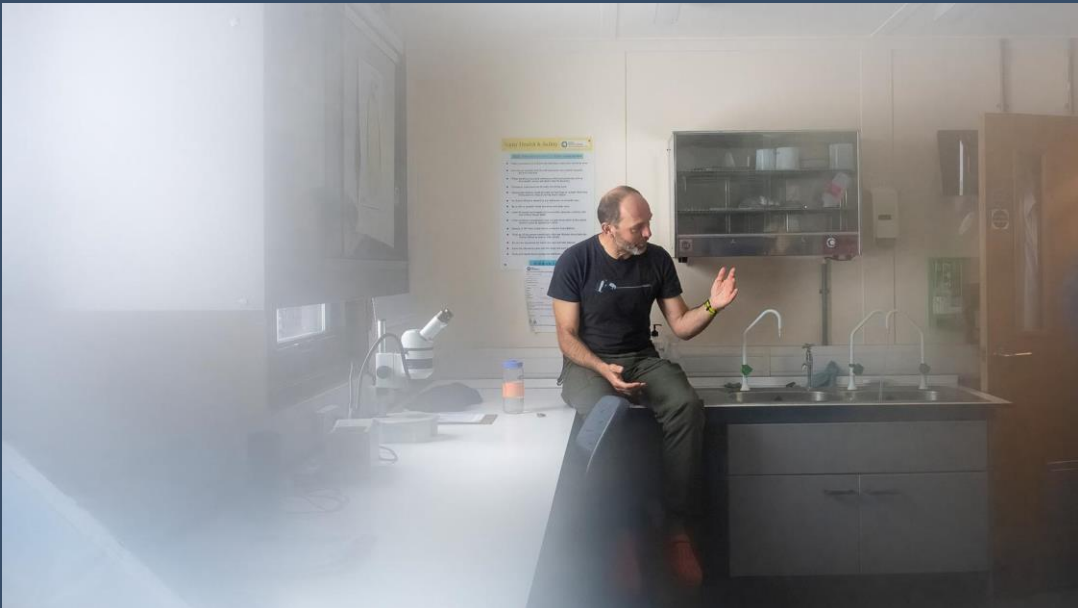


[Visit our Science & Education Hub online](#)
to find out more



Signy research Station

We had the rare opportunity to visit an Antarctic research station in the South Orkneys islands. During our visit, we discovered where and how the team of six people live in the summer months in this remote part of the globe. We also met Darren, specialist of birds, who explained us how he monitors birds colonies over years.



Wildlife List - Birds



Wildlife List — Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Aptenodytes patagonicus</i>	King Penguin	Königspinguin	王企鹅
<i>Pygoscelis papua</i>	Gentoo Penguin	Eselspinguin	白眉企鹅
<i>Eudyptes chrysocome</i>	Southern Rockhopper Penguin	Südfelsenpinguin	凤头黄眉企鹅
<i>Eudyptes chrysolophus</i>	Macaroni Penguin	Goldschopfpinguin	长眉企鹅
<i>Spheniscus magellanicus</i>	Magellanic Penguin	Magellanpinguin	南美企鹅
<i>Pygoscelis adeliae</i>	Adelie Penguin	Adeliepinguin	阿德利企鹅
<i>Pygoscelis antarcticus</i>	Chinstrap Penguin	Kehlstreifpinguin	纹颊企鹅
<i>Oceanites oceanicus</i>	Wilson's Storm Petrel	Buntfuß-Sturmschwalbe	烟黑叉尾海燕
<i>Garrodia nereis</i>	Grey-backed Storm Petrel	Graurücken-Sturmschwalbe	灰背海燕
<i>Fregetta tropica</i>	Black-bellied Storm Petrel	Schwarzbauch-Sturmschwalbe	白腹舰海燕
<i>Diomedea exulans</i>	Wandering (snowy) Albatross	Wanderalbatros	漂泊信天翁
<i>Phoebastria palpebrata</i>	Light-mantled Albatross	Graumantelalbatros	灰背信天翁
<i>Thalassarche melanophris</i>	Black-browed Albatross	Schwarzbrauenalbatros	黑眉信天翁
<i>Diomedea epomophora</i>	Southern Royal Albatross	Südkönigsalbatros	皇信天翁
<i>Diomedea sanfordi</i>	Northern Royal Albatross	Nordkönigsalbatros	北方皇信天翁

Wildlife List — Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Thalassarche chrysostoma</i>	Grey-headed Albatross	Graukopfalbatros	灰头信天翁
<i>Macronectes giganteus</i>	Southern Giant Petrel	Riesensturmvogel	巨鹱
<i>Macronectes halli</i>	Northern Giant Petrel	Hallsturmvogel	霍氏巨鹱
<i>Fulmarus glacialis</i>	Southern Fulmar	Silbersturmvogel	银灰暴风鹱
<i>Pagodroma nivea</i>	Snow Petrel	Schneesturmvogel	雪鹱
<i>Aphrodroma brevirostris</i>	Kerguelen Petrel	Kerguelensturmvogel	短嘴圆尾鹱
<i>Pterodroma mollis</i>	Soft-plumaged Petrel	Weichfeder-Sturmvogel	柔羽圆尾鹱
<i>Procellaria cinerea</i>	Grey Petrel	Grausturmvogel	灰风鹱
<i>Daption capense</i>	Cape Petrel	Kapsturmvogel	花斑鹱
<i>Halobaena caerulea</i>	Blue Petrel	Blausturmvogel	蓝鹱
<i>Procellaria aequinoctialis</i>	White-chinned Petrel	Weißkinn-Sturmvogel	白颈风鹱
<i>Ardenna gravis</i>	Great Shearwater	Großer Sturmtaucher	大鹱
<i>Ardenna grisea</i>	Sooty Shearwater	Dunkler Sturmtaucher	灰鹱
<i>Pachyptila desolata</i>	Antarctic Prion	Taubensturmvogel	鸽锯鹱

Wildlife List — Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Pachyptila belcheri</i>	Slender-billed Prion	Dünnschnabel-Sturmvogel	细嘴锯鹱
<i>Pachyptila turtur</i>	Fairy Prion	Feensturmvogel	仙锯鹱
<i>Pelecanoides urinatrix</i>	Common Diving Petrel	Subantarktis-Lummensturmvogel	鹈燕
<i>Pelecanoides georgicus</i>	South Georgia Diving Petrel	Breitschnabel-Lummensturmvogel	南乔治亚鹈燕
<i>Chionis albus</i>	Snowy Sheathbill	Weißgesicht-Scheidenschnabel	白鞘嘴鸥

Wildlife List — Water birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	
<i>Tachyeres brachypterus</i>	Falkland Steamer Duck	Falkland-Dampfschiffente	短翅船鴨
<i>Chloephaga picta</i>	Upland Goose	Magellangans	斑肋草雁
<i>Chloephaga hybrida</i>	Kelp Goose	Kelpgans	白草雁
<i>Chloephaga rubidiceps</i>	Ruddy-headed Goose	Rotkopfgans	棕頭草雁
<i>Lophonetta specularioides</i>	Crested Duck	Schopfente	冠鴨
<i>Anas georgica</i>	Yellow-billed Pintail	Spitzschwanzente	黃嘴針尾鴨
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	Nachtreiher	夜鹭
<i>Phalacrocorax magellanicus</i>	Rock Shag	Felsenscharbe	岩鸕鶿
<i>Leucocarbo atriceps</i>	Imperial Shag	Kaiserscharbe	藍眼鸕鶿
<i>Leucocarbo georgianus</i>	South Georgia Shag	Südgeorgienscharbe	南喬治亞鸕鶿
<i>Leucocarbo bransfieldensis</i>	Antarctic Shag	Antarktikscharbe	南極鸕鶿
<i>Haematopus leucopus</i>	Magellanic Oystercatcher	Magellanausternfischer	智利蛎鷸
<i>Haematopus ater</i>	Blackish Oystercatcher	Südamerikanischer Austernfischer	南美蛎鷸
<i>Chroicocephalus maculipennis</i>	Brown-hooded Gull	Patagonienmöwe	褐頭鷗
<i>Leucophaeus scoresbii</i>	Dolphin Gull	Blutschnabelmöwe	豚鷗

Wildlife List — Water birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Larus dominicanus</i>	Kelp Gull	Dominikanermöwe	黑背鸥
<i>Sterna vittata</i>	Antarctic Tern	Antarktikseeschwalbe	南极燕鸥
<i>Sterna hirundinacea</i>	South American Tern	Falklandseeschwalbe	南美燕鸥
<i>Stercorarius maccormicki</i>	South Polar Skua	Antarktiskua	麦氏贼鸥
<i>Stercorarius antarcticus</i>	Brown Skua	Subantarktiskua	大贼鸥
<i>Stercorarius chilensis</i>	Chilean Skua	Chileskua	智利贼鸥

Wildlife List — Land birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Cathartes aura</i>	Turkey Vulture	Truthahngeier	红头美洲鹫
<i>Geranoaetus polyosoma</i>	Variable Hawk	Rotrückenbussard	红背鵟
<i>Phalcoboenus australis</i>	Striated Caracara	Falklandkarakara	红腿巨隼
<i>Cinclodes antarcticus</i>	Blackish Cinclodes	Falkland-Uferwipper	淡黑抖尾地雀
<i>Muscisaxicola maclovianus</i>	Dark-faced Ground Tyrant	Maskengrundtyrann	暗脸地霸鹟
<i>Tachycineta leucopyga</i>	Chilean Swallow	Chileschwalbe	白臀树燕
<i>Turdus falcklandii</i>	Austral Thrush	Magellandrossel	南美鹟
<i>Anthus correndera</i>	Correndera Pipit	Correnderapieper	科雷鹟
<i>Spinus barbatus</i>	Black-chinned Siskin	Bartzeisig	黑颏金翅雀
<i>Leistes loyca</i>	Long-tailed Meadowlark	Langschwanzstärling	长尾草地鹟
<i>Melanodera melanodera</i>	White-bridled Finch	Weißbart-Ammertangare	黑喉雀鹀
<i>Anthus antarcticus</i>	South Georgia Pipit	Riesenpieper	南极鹟
	Andean condor		



e-Bird

With our ornithologist George, you identified and counted 58 different species. The most spotted species were the Rockhopper penguin, the Gentoo penguin, the Wilson's Storm Petrel and the Black-Browed Albatross.

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

Wildlife

List - Marine Mammals



Wildlife List – Cetaceans

SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Balaenoptera borealis</i>	Sei whale	Seiwal	塞鲸
<i>Balaenoptera musculus</i>	Blue whale	Blauwal	蓝鲸
<i>Balaenoptera physalus</i>	Fin whale	Finnwal	长须鲸
<i>Megaptera novaeangliae</i>	Humpback whale	Buckelwal	座头鲸
<i>Orcinus orca</i>	Killer whale, orca	Schwertwal, Orca	虎鲸
<i>Eubalaena australis</i>	Southern right whale	Südkaper	南露脊鲸
<i>Balaenoptera bonaerensis</i>	Antarctic minke whale	Südlicher Zwergwal	南极小须鲸
<i>Cephalorhynchus commersonii</i>	Commerson's dolphin	Commerson-Delfin	康氏矮海豚
<i>Lagenorhynchus australis</i>	Peale's dolphin	Peale-Delfin	皮氏斑纹海豚
<i>Lagenorhynchus cruciger</i>	Hourglass dolphin	Stundenglasdelfin	沙漏斑纹海豚
<i>Berardius arnuxii</i>	Arnoux's beaked whale	Südlicher Schwarzwal	阿氏贝喙鲸
<i>Hyperoodon planifrons</i>	Southern bottlenose whale	Südlicher Entenwal	南部宽吻鲸

Wildlife List – True seals and eared seals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	CHINESE
<i>Arctocephalus gazella</i>	Antarctic fur seal	Antartischer Seebär	南极海豹
<i>Otaria byronia</i>	South American sea lion	Mähnenrobbe	南美海狮
<i>Hydrurga leptonyx</i>	Leopard seal	Seeleopard	豹海豹
<i>Leptonychotes weddellii</i>	Weddell seal	Weddelrobbe	威德尔海豹
<i>Lobodon carcinophaga</i>	Crabeater seal	Krabbenfresser	食蟹海豹
<i>Mirounga leonina</i>	Southern elephant seal	Südlicher See-Elefant	南象海豹

Happywhale

We submitted 11 whale pictures to Happywhale.

[View our submissions](#) to Happywhale for this voyage and follow your whales.





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Connect with your
inner scientist