



Science Report

MS FRAM

MS FRAM 27 December 2025 – 17 January 2026

In-Depth Antarctica,
Falkland Islands &
South Georgia
Expedition



History & Culture

During our voyage, we explored the historic whaling station of Grytviken in South Georgia — a place transformed from a hub of industry into a sanctuary of wilderness. Here, rusting relics stand among thriving wildlife, telling a powerful story of nature's renewal at the edge of the world.



Arts & Crafts

Our sea days were not only a time to rest while crossing the Southern Ocean but also moments filled with arts and crafts. We painted, drew, and used clay to create our own Antarctic creatures. It was a wonderful way to connect with one another and to explore our inner worlds, reflecting on the emotions inspired by our outdoor adventures.



Science Boat

During our voyage we conducted 7 Science Boat outings during which we collected Secchi disc measurements, CTD data, and water samples. While the greatest diversity and concentration of planktonic organisms was found in South Georgia associated to the kelp forests ecosystem, the clearer waters with low phyto and zoo-plankton diversity and abundance were encountered in the northern part of the Antarctic Peninsula.

CTD data was submitted to the [Southern Atlantic Environmental Research Institute \(SAERI\)](#), while Secchi disk data was automatically uploaded to the [Secchi Disk Project](#). Lastly, the samples collected for [FjordPhyto](#) will contribute to the project's ongoing eight-year effort to understand how glacial melt influences phytoplankton communities.

Thanks for your enthusiasm in joining the science boat and the workshops, it was a great fun to have a look to our samples with you.





Underwater Drone

During our voyage, we explored the underwater ecosystems of giant kelp forests (*Macrocystis pyrifera*) around Gold Harbour in South Georgia, which had poor visibility and the presence of coralline algae forests at 25m depth. We then opportunistically dropped our ROV in the Antarctic waters around the Barrientos Islands of the South Shetland Islands. There, the effects of ice scouring were evident in the flattened, carpet-like seaweed formations.

Gentoo penguins were frequently seen gliding between pieces of ice, a striking contrast to their clumsy movements during their land-based breeding activities.

[Click here to visit our YouTube channel to see the drone videos from your voyage.](#)



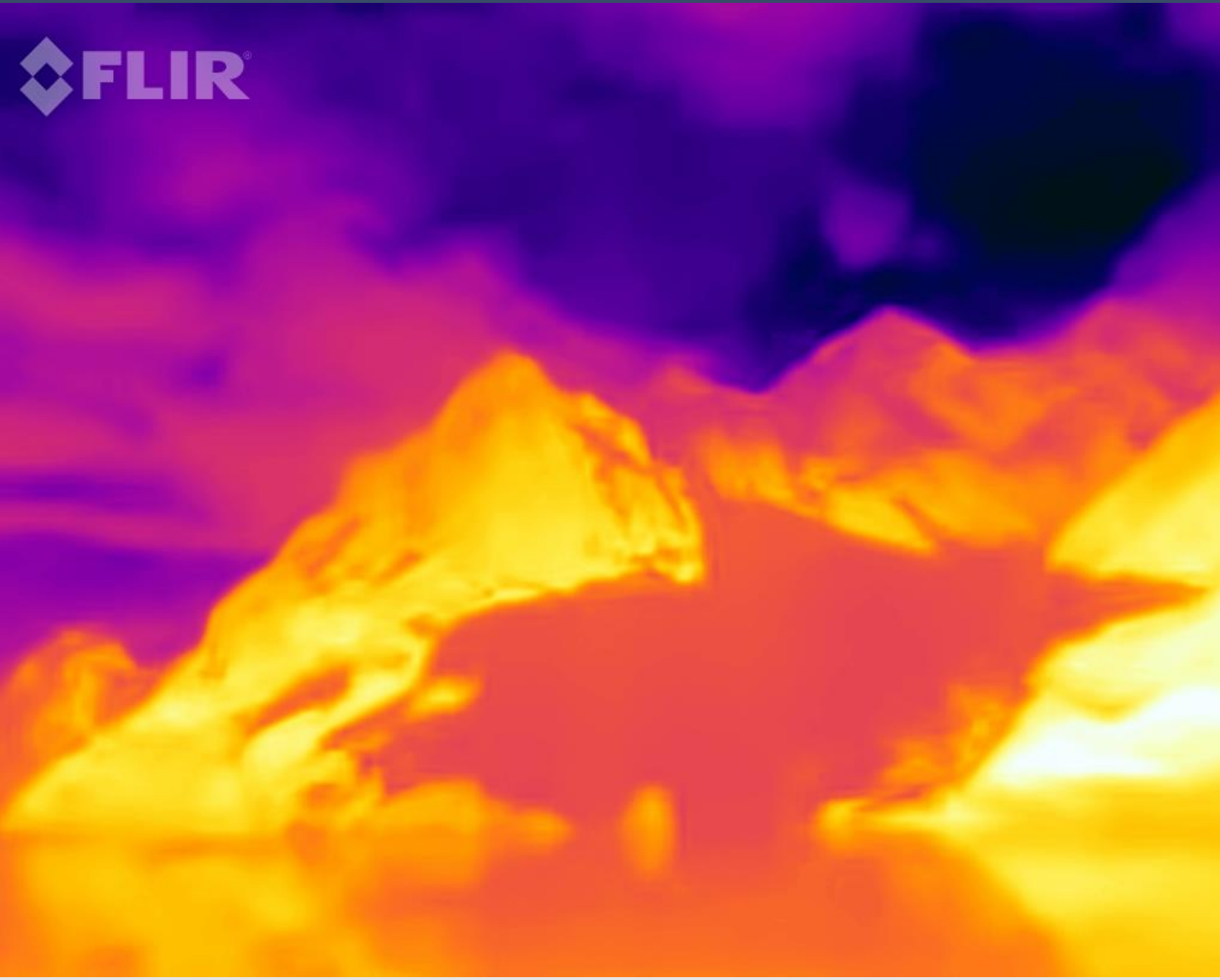
GLOBE Cloud Observer for NASA

Together with the help of Amélie and guests, we collected 7 observations for NASA using the GLOBE Observer app, all of which matched with a satellite overpass.

This provides essential data in the polar region to help calibrate satellites and to gain vital insights into atmospheric changes that trigger cloud formation.

Please continue observing the sky from home, as every contribution supports scientists.

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



The Polar Ice Thermal Imaging Project

The Polar Ice Thermal Imaging Project, led by Professor Joe Muise, investigates the surface properties of ice by measuring polar ice temperature variations and analyzing how they change over time and across different locations. The project aims to engage students and the general public in understanding global warming and its effects on polar regions. Amelie collected 6 images around South Georgia that have been submitted to the project.

You can explore an interactive map displaying data collected by various organizations [here](#).



iNaturalist

Thanks to your efforts, we recorded over 120 observations representing 63 species on iNaturalist! The most frequently reported species were king penguins and southern elephant seals, and about one-third of all species observed were plants. These opportunistic data help identify biodiversity hotspots and track the arrival of invasive species in remote regions.

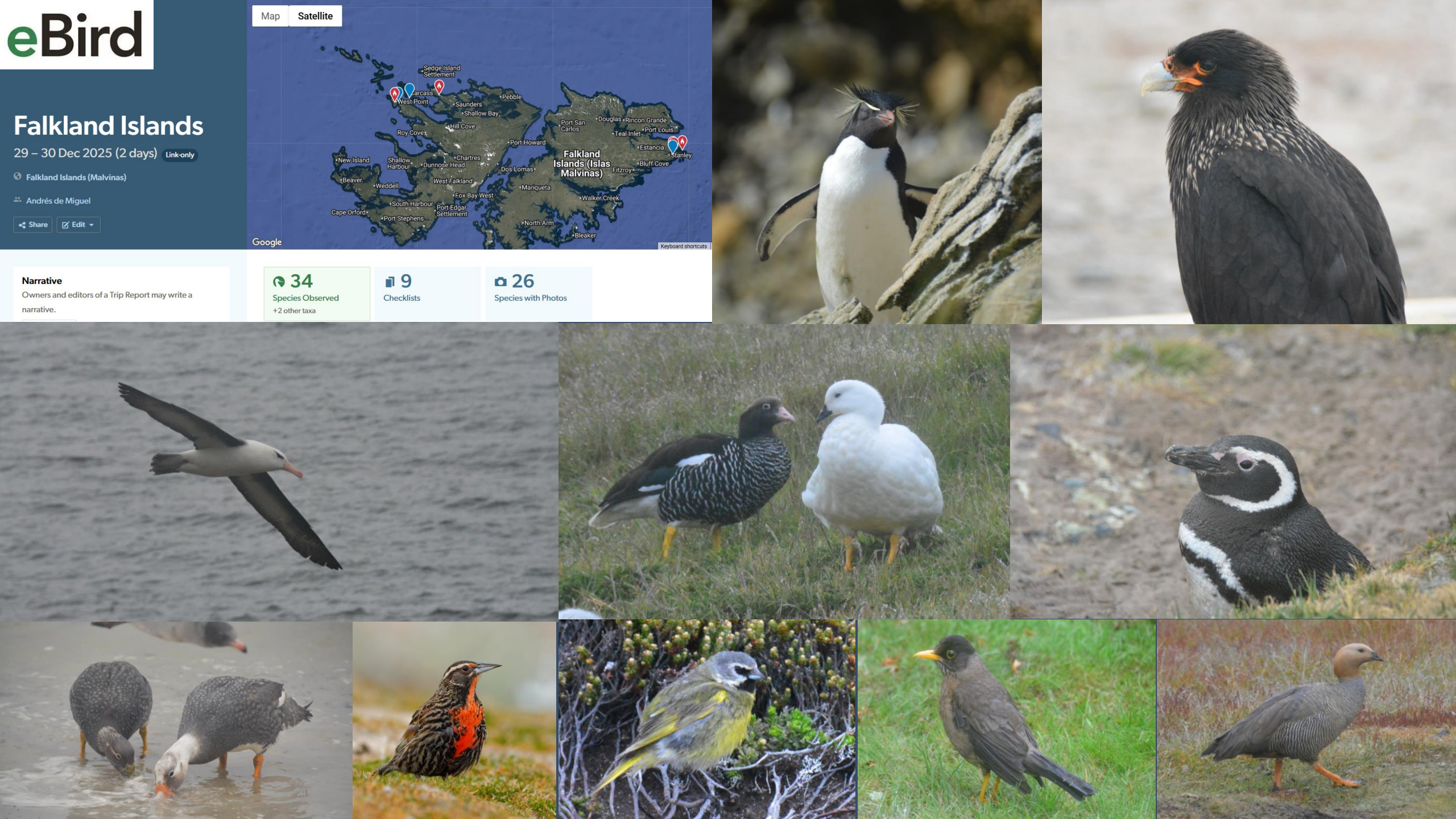
You can upload your observations from our voyage [here](#) when back home.



eBird

Your onboard Ornithologist Andres completed 65 eBird checklists of 72 different species. The greatest diversity was observed in the Falkland Islands and the Chilean fjords, while South Georgia and the Antarctic Peninsula were limited to seabird species. The most abundant species was the king penguin with more than 25,426 individuals in total, while the most frequently observed species was the southern giant petrel. The complete overview of our voyage is available in our trip report.

[View our data on our eBird trip report](#)



Falkland Islands

29 – 30 Dec 2025 (2 days) [Link only](#)

Falkland Islands (Malvinas)

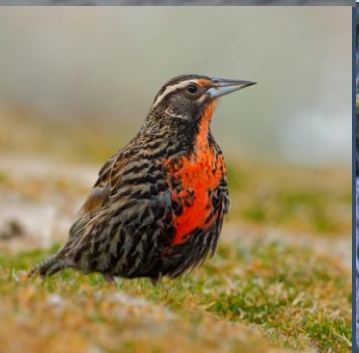
Andrés de Miguel

Share Edit

34
Species Observed
+2 other taxa

9
Checklists

26
Species with Photos



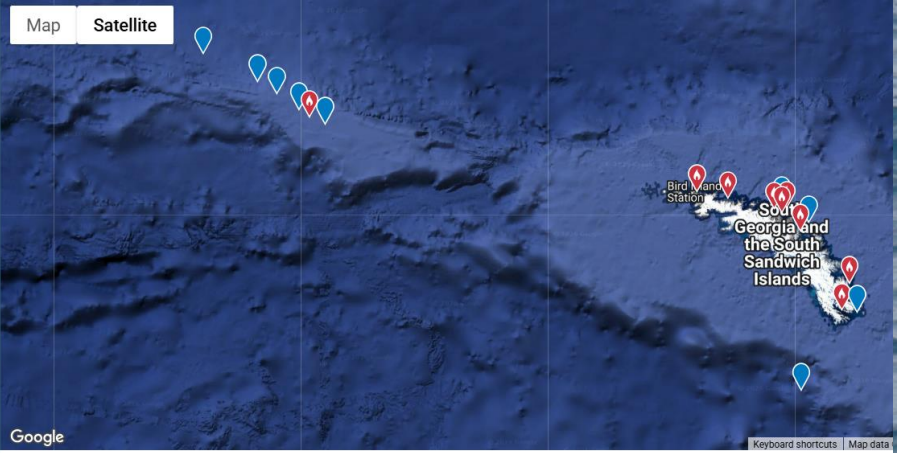
South Georgia

1 – 5 Jan 2026 (5 days) [Link only](#)

South Georgia and South Sandwich Islands

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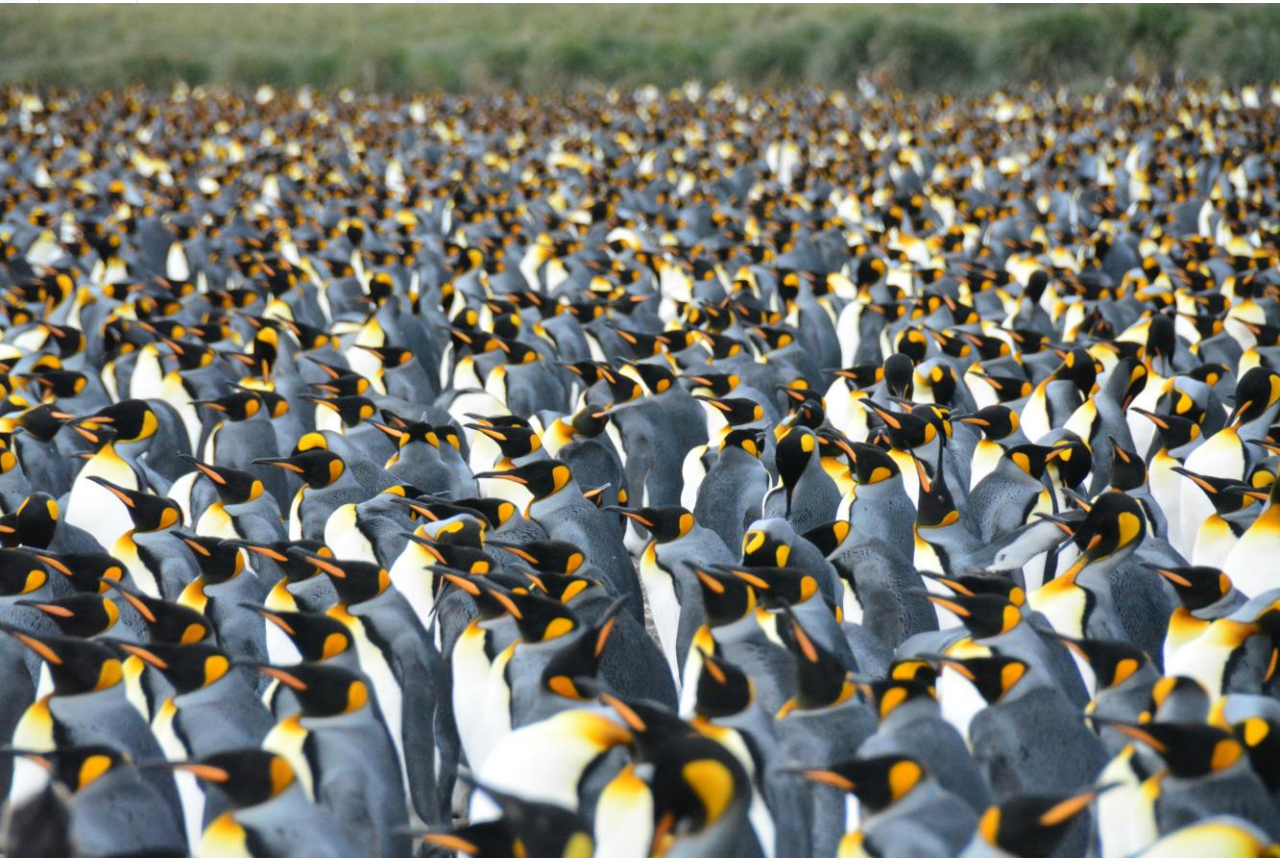


Narrative
Owners and editors of a Trip Report may write a narrative.

27
Species Observed
+2 other taxa

19
Checklists

20
Species with Photos





Antarctica

6 – 13 Jan 2026 (8 days) [Link-only](#)

Antarctica
Andrés de Miguel
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Narrative
Owners and editors of a Trip Report may write a narrative.

22
Species Observed
+3 other taxa

14
Checklists

8
Species with Photos



Chilean Fjords

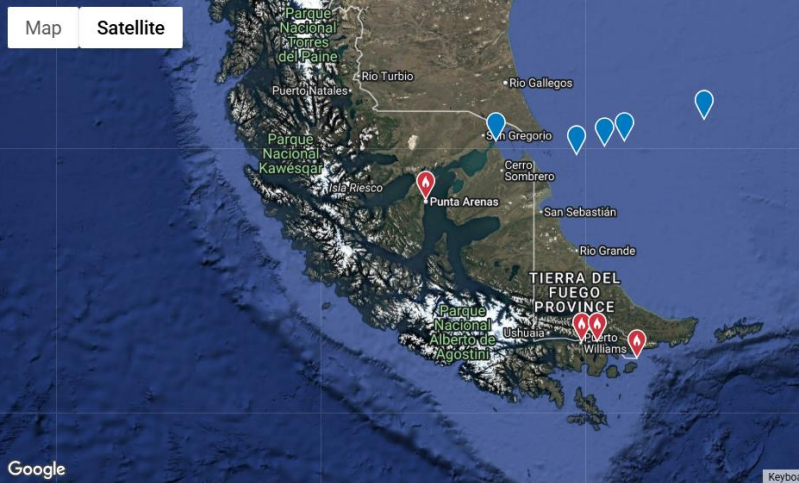
27 Dec 2025 – 15 Jan 2026 (20 days)

Link-only

Argentina | Chile Subregions

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Narrative

Owners and editors of a Trip Report may write a narrative.

 34
Species Observed
+2 other taxa

9 Checklists

 7
Species with Photos





Happywhale

We submitted more than 30 observations during our voyage, with a total of 31 individuals encountered. Specifically, 16 humpback whales' flukes, 14 orcas, and one blue whale were reported. All humpback whales were sighted around South Georgia, while most orca observations were from an encounter in the Antarctic waters, prior to our reaching the Signy Research Station. Two humpback whales seen around South Georgia gave an immediate match, one showing resighting for the first time in 10 years, the second, the first time in 20 years! This illustrates the power of Citizen Science around the world, and how opportunistic observations provide key information on the movement patterns of marine mobile animals.

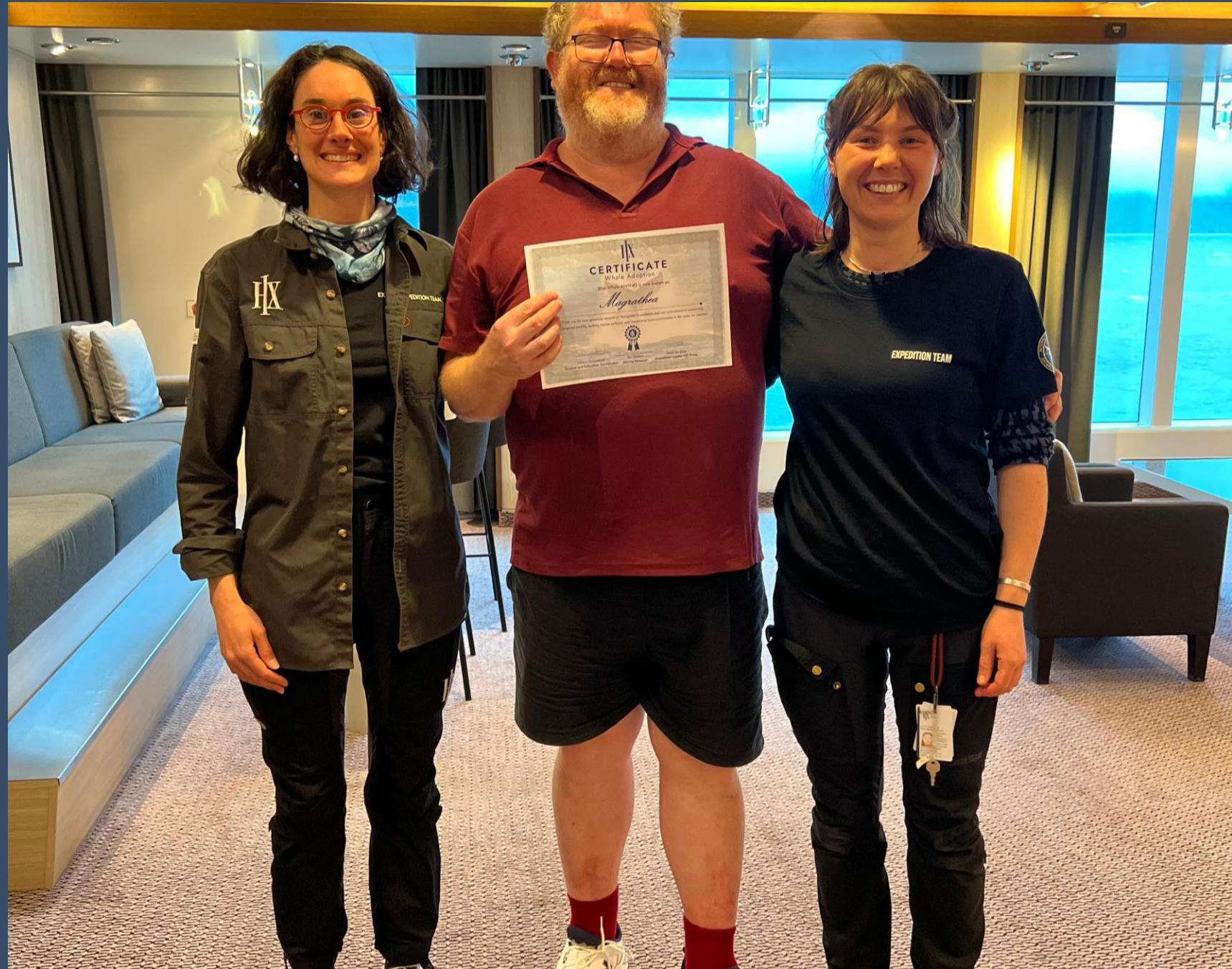




Happywhale

The highlight of our voyage was our encounter with the newly named blue whale, Magrathea. This magnificent individual was first sighted in 2019 near South Georgia by the British Antarctic Survey. Through our naming auction, we raised valuable funds — something both Happywhale and the entire MS Fram team are truly thrilled about.

Thank you for supporting cutting-edge science at the end of the world, and stay tuned for the next chapter in Magrathea's incredible journey.



Wildlife List — Marine Mammals



Wildlife List – Marine Mammals – Cetaceans

| 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>Balaenoptera bonaerensis</i> | Antarctic minke whale | Südlicher Zwergwal |
| <i>Cephalorhynchus commersonii</i> | Commerson's dolphin | Commerson-Delfin |
| <i>Cephalorhynchus australis</i> | Peale's dolphin | Peale-Delfin |
| <i>Cephalorhynchus cruciger</i> | hourglass dolphin | Stundenglasdelfin |
| <i>Hyperoodon planifrons</i> | southern bottlenose whale | Südlicher Entenwal |
| | Unidentified whale | |
| | Unidentified dolphin | |
| | Unidentified beaked whale | |

Wildlife List – Marine Mammals – Pinnipeds

| SCIENTIFIC NAME | ENGLISH | DEUTSCH |
|--------------------------------|-------------------------|--------------------------|
| <i>Arctocephalus australis</i> | South American fur seal | Südamerikanischer Seebär |
| <i>Arctocephalus gazella</i> | Antarctic fur seal | Antartischer Seebär |
| <i>Otaria flavescens</i> | South American sea lion | Mähnenrobbe |
| <i>Leptonychotes weddellii</i> | Weddell seal | Weddelrobbe |
| <i>Mirounga leonina</i> | southern elephant seal | Südlicher See-Elefant |
| | Unidentified pinniped | |



Wildlife List — Birds



Wildlife List – Seabirds

| SCIENTIFIC NAME | ENGLISH | DEUTSCH |
|---------------------------------|-----------------------------|----------------------------|
| <i>Aptenodytes patagonicus</i> | king penguin | Königspinguin |
| <i>Pygoscelis papua</i> | gentoo penguin | Eselspinguin |
| <i>Eudyptes chrysocome</i> | southern rockhopper penguin | Südfelsenpinguin |
| <i>Eudyptes chrysolophus</i> | macaroni penguin | Goldschopfpinguin |
| <i>Spheniscus magellanicus</i> | Magellanic penguin | Magellanpinguin |
| <i>Pygoscelis adeliae</i> | Adélie penguin | Adeliepinguin |
| <i>Pygoscelis antarcticus</i> | chinstrap penguin | Kehlstreifpinguin |
| <i>Oceanites oceanicus</i> | Wilson's storm petrel | Buntfuß-Sturmschwalbe |
| <i>Garrodia nereis</i> | grey-backed storm petrel | Graurücken-Sturmschwalbe |
| <i>Fregetta tropica</i> | black-bellied storm petrel | Schwarzbauch-Sturmschwalbe |
| <i>Diomedea exulans</i> | wandering (snowy) albatross | Wanderalbatros |
| <i>Phoebastria palpebrata</i> | light-mantled albatross | Graumantelalbatros |
| <i>Thalassarche melanophris</i> | black-browed albatross | Schwarzbrauenalbatros |
| <i>Diomedea epomophora</i> | southern royal albatross | Südkönigsalbatros |
| <i>Diomedea sanfordi</i> | northern royal albatross | Nordkönigsalbatros |
| <i>Thalassarche chrysostoma</i> | grey-headed albatross | Graukopfalbatros |

Wildlife List – Seabirds

| SCIENTIFIC NAME | ENGLISH | DEUTSCH |
|-----------------------------------|-----------------------------|--------------------------------|
| <i>Macronectes giganteus</i> | southern Giant petrel | Riesensturmvogel |
| <i>Macronectes halli</i> | northern Giant petrel | Hallsturmvogel |
| <i>Fulmarus glacialis</i> | southern fulmar | Silbersturmvogel |
| <i>Pagodroma nivea</i> | snow petrel | Schneesturmvogel |
| <i>Daption capense</i> | cape petrel | Kapsturmvogel |
| <i>Pterodroma lessonii</i> | white-headed petrel | Weißkopf-Sturmvogel |
| <i>Halobaena caerulea</i> | blue petrel | Blausturmvogel |
| <i>Procellaria aequinoctialis</i> | white-chinned petrel | Weißkinn-Sturmvogel |
| <i>Ardenna gravis</i> | great Shearwater | Großer Sturmtaucher |
| <i>Ardenna grisea</i> | sooty Shearwater | Dunkler Sturmtaucher |
| <i>Pachyptila desolata</i> | Antarctic prion | Taubensturmvogel |
| <i>Pachyptila belcheri</i> | slender-billed prion | Dünnschnabel-Sturmvogel |
| <i>Pachyptila turtur</i> | fairy prion | Feensturmvogel |
| <i>Pelecanoides urinatrix</i> | common diving petrel | Subantarktis-Lummensturmvogel |
| <i>Pelecanoides georgicus</i> | South Georgia diving petrel | Breitschnabel-Lummensturmvogel |
| <i>Chionis albus</i> | snowy sheathbill | Weißgesicht-Scheidenschnabel |
| <i>Pelecanoides magellani</i> | Magellanic diving petrel | Magellan-Lummensturmvogel |

Wildlife List – Waterbirds

| SCIENTIFIC NAME | ENGLISH | DEUTSCH |
|-------------------------------------|---------------------------|----------------------------------|
| <i>Tachyeres brachypterus</i> | Falkland steamer Duck | Falkland-Dampfschiffente |
| <i>Chloephaga picta</i> | upland goose | Magellangans |
| <i>Chloephaga hybrida</i> | kelp goose | Kelpgans |
| <i>Chloephaga rubidiceps</i> | ruddy-headed goose | Rotkopfgans |
| <i>Lophonetta specularioides</i> | crested duck | Schopffente |
| <i>Anas georgica</i> | yellow-billed pintail | Spitzschwanzente |
| <i>Nycticorax nycticorax</i> | black-crowned night heron | Nachtreiher |
| <i>Phalacrocorax magellanicus</i> | rock shag | Felsenscharbe |
| <i>Leucocarbo atriceps</i> | imperial shag | Kaiserscharbe |
| <i>Leucocarbo georgianus</i> | South Georgia shag | Südgeorgienscharbe |
| <i>Leucocarbo bransfieldensis</i> | Antarctic shag | Antarktikscharbe |
| <i>Haematopus leucopodus</i> | Magellanic oystercatcher | Magellanausternfischer |
| <i>Haematopus ater</i> | blackish oystercatcher | Südamerikanischer Austernfischer |
| <i>Charadrius falklandicus</i> | two-banded plover | Falkland-Regenpfeifer |
| <i>Calidris fuscicollis</i> | white-rumped sandpiper | Weißbürzel-Strandläufer |
| <i>Chroicocephalus maculipennis</i> | brown-hooded gull | Patagonienmöwe |

Wildlife List – Waterbirds

| SCIENTIFIC NAME | ENGLISH | DEUTSCH |
|---------------------------------|---------------------|----------------------|
| <i>Leucophaeus scoresbii</i> | dolphin gull | Blutschnabelmöwe |
| <i>Larus dominicanus</i> | kelp gull | Dominikanermöwe |
| <i>Sterna hirundinacea</i> | South American tern | Falklandseeschwalbe |
| <i>Sterna vittata</i> | Antarctic tern | Antarktikseeschwalbe |
| <i>Stercorarius maccormicki</i> | south polar skua | Antarktiskua |
| <i>Stercorarius antarcticus</i> | brown skua | Subantarktiskua |
| <i>Stercorarius chilensis</i> | Chilean skua | Chileskua |
| <i>Gallinago stricklandii</i> | Fuegian snipe | Kordillerenbekassine |

Wildlife List – Landbirds

| SCIENTIFIC NAME | ENGLISH | DEUTSCH |
|----------------------------------|---------------------------|-----------------------|
| <i>Cathartes aura</i> | turkey vulture | Truthahngeier |
| <i>Phalcoboenus australis</i> | striated caracara | Falklandkarakara |
| <i>Caracara plancus</i> | southern crested caracara | Schopfkarakara |
| <i>Cinclodes antarcticus</i> | blackish cinclodes | Falkland-Uferwipper |
| <i>Muscisaxicola maclovianus</i> | dark-faced ground tyrant | Maskengrundtyrann |
| <i>Tachycineta leucopyga</i> | Chilean swallow | Chileschwalbe |
| <i>Cistothorus platensis</i> | grass wren | Graszaunkönig |
| <i>Troglodytes cobbi</i> | Cobb's wren | Falklandzaunkönig |
| <i>Turdus falcklandii</i> | austral thrush | Magellandrossel |
| <i>Passer domesticus</i> | house sparrow | Haussperling |
| <i>Anthus correndera</i> | correndera pipit | Correnderapieper |
| <i>Spinus barbatus</i> | black-chinned siskin | Bartzeisig |
| <i>Leistes loyca</i> | long-tailed meadowlark | Langschwanzstärling |
| <i>Melanodera melanodera</i> | white-bridled finch | Weißbart-Ammertangare |
| <i>Phrygilus patagonicus</i> | Patagonian sierra-finch | Graukopf-Ammertangare |
| <i>Elaenia albiceps</i> | white-crested elaenia | Weißkronen-Olivtyrann |
| <i>Theristicus melanopis</i> | black-faced ibis | Schwarzzügelibis |

Wildlife List — Flora



Wildlife List — Flora of the Falkland Island

| SCIENTIFIC NAME | ENGLISH |
|------------------------------|-----------------|
| <i>Hierochloe redolens</i> | cinnamon grass |
| <i>Poa alopecurus</i> | blue grass |
| <i>Luzula alopecurus</i> | native woodrush |
| <i>Gunnera magellanica</i> | pig vine |
| <i>Armeria macloviana</i> | Falkland thrift |
| <i>Cerastium arvense</i> | field mouse-ear |
| <i>Oxalis enneaphylla</i> | scurvy grass |
| <i>Hebe elliptica</i> | boxwood |
| <i>Luzuriaga marginata</i> | almond flower |
| <i>Apium australe</i> | wild celery |
| <i>Senecio candidans</i> | sea cabbage |
| <i>Acaena lucida</i> | native yarrow |
| <i>Acaena magellanica</i> | prickly burr |
| <i>Symphyotrichum vahlii</i> | marsh daisy |
| <i>Pernettya pumila</i> | mountain berry |
| <i>Empetrum rubrum</i> | diddle-dee |
| <i>Baccharis magellanica</i> | Christmas bush |

Wildlife List – Flora of the Falkland Island

| SCIENTIFIC NAME | ENGLISH |
|-------------------------------|--------------------------------|
| <i>Caltha sagittata</i> | arrow-leaved marigold |
| <i>Senecio littoralis</i> | Falkland wooly daisy (endemic) |
| <i>Nassauvia gaudichaudii</i> | coastal nassauvia (endemic) |
| <i>Bolax gummifera</i> | balsam bog |
| <i>Leucheria suaveolens</i> | vanilla daisy (endemic) |
| <i>Blechnum cordatum</i> | tall fern |
| <i>Blechnum penna-marina</i> | small fern |
| <i>Senecio vulgaris</i> | groundsel (introduced) |
| <i>Rumex acetosella</i> | sheep sorrel (invasive) |
| <i>Ulex europaeus</i> | gorse (invasive) |
| <i>Ulva</i> sp | sea lettuce |
| <i>Iridaea cordata</i> | iridescent alga |
| <i>Macrocystis pyrifera</i> | giant kelp |
| <i>Durvillea antarctica</i> | bull kelp (cochayuyo) |

Guest Scientists — ORCA

We had the privilege of hosting Nikki and Karen from ORCA, one of the UK's leading whale and dolphin conservation charities. They have been on board conducting exciting whale research for a project that is monitoring recovering whale populations in the Southern Ocean. Nikki and Karen have been carrying out their scientific surveys from the bridge of the ship and the data collected will help better understand the abundance and distribution of large whales around South Georgia and the Antarctic Peninsula. During their surveys a total of 1,330 individual animals were recorded from eleven different whale and dolphin species, almost beating the previous record on MS Fram of 1,357 individuals!

You can contribute to the ORCA project by visiting their [website](#) and helping them gather more data through [donation](#).



Guest Scientists — Penguin Watch

We had the privilege of hosting Craig and Liz from Penguin Watch, a penguin monitoring project based at Oxford Brookes University on MS Fram. Zoe and Craig conducted research for this project across the Falkland, South Georgia, South Shetland, and the Antarctic Peninsula. They conducted drone surveys for population counts over 15 colonies (seabirds and seals) over this trip, serviced three existing timelapse cameras, and deployed one new tripod with cameras that look at penguin behaviour and biology. Their highlights this trip were keeping a long-standing time-series alive at Georges Point, surveying an Adélie colony for the first time this season at Yalour Island, and surveying Rugged Rocks, which hadn't been monitored in several years because it is so difficult to get to! They will need time to analyze the results, and we look forward to hearing more about their research.



Guest Scientists — BAS

During our voyage, we collaborated with the British Antarctic Survey (BAS) to transport scientists to and from the Signy Scientific Research Station. Nicoletta, Mauro, and Derren joined us from the start of the journey to Signy, collecting samples of endemic plants and observing birdlife from the bridge and during the wildlife watch.

Later, Stacey and Richard came aboard for the leg from the Signy Research Station to Punta Arenas, after spending nearly two months at the station. Through this logistical collaboration, HX Expeditions continues to bridge the gap between science and society, while providing essential support to the scientific community.



| What data? | How much data? |
|-----------------------------------|--|
| CTD for SAERI | 3 profiles |
| Secchi depth | 7 measurements |
| GLOBE Cloud observations for NASA | 7 observations, 7 matches |
| iNaturalist | 120+ observations |
| eBird | 65 checklists, 72 species |
| Cetacean sightings for ORCA/IAATO | 1,300++ observations, 72+ hrs of effort survey |
| Happywhale | 31 registered encounters |
| Penguin Watch | 32 aerial drone surveys 4 cameras serviced, 1 new built |

In Summary

Our voyage stood out for the data it yielded for ORCA, Penguin Watch, eBird, and Happywhale, thanks to the dedication and passion of our Guest Scientists and Expedition Team members. These initiatives account for the most observations and direct submissions to their respective projects, fueling the scientific community with the crucial data needed for research. Daily, one to five scientific publications are produced from eBird and iNaturalist. This combined data helps us better understand diversity and distribution patterns of mobile species and monitor the arrival of invasive species. Our journey across three distinct bioregions allowed us to cross the Antarctic Polar Front — the Antarctic Convergence — twice, travel through calm waters, and experience the Drake Passage on our return to Punta Arenas. In the Chilean fjords, we were awe-struck by the pristine landscapes that characterize this region of the world. Our encounters with the majestic blue whale around South Georgia was a true highlight of this voyage.

Thank You!

The MS Fram Science and Education Team, along with our Guest Scientists, extends heartfelt thanks for choosing HX Expeditions to explore some of the most remote places on Earth. Your participation not only supports the ongoing work of our researchers but also enables them to join our voyages, carry out meaningful studies, and access essential logistical resources that are often difficult to secure.

We are deeply appreciative of your genuine curiosity and shared enthusiasm for the natural world — from birds and marine mammals to ice, lichens, mosses, and even the microscopic life found in a drop of water.

It was a true joy to exchange ideas, reflect on history over coffee, and marvel together at the pristine ecosystems we encountered. We hope this journey will remain among your most treasured memories.





IX

Connect with your
inner scientist