

Science & Education Report



MS Roald Amundsen 29-08.01. 2024

Highlights of Antarctica





Science & Education Program

We had great Workshops and Science Sessions ranging from bone clone discovery to Phytoplankton from the ocean water. Rock samples and Geology, Feathers, Birds, Ice and much more !



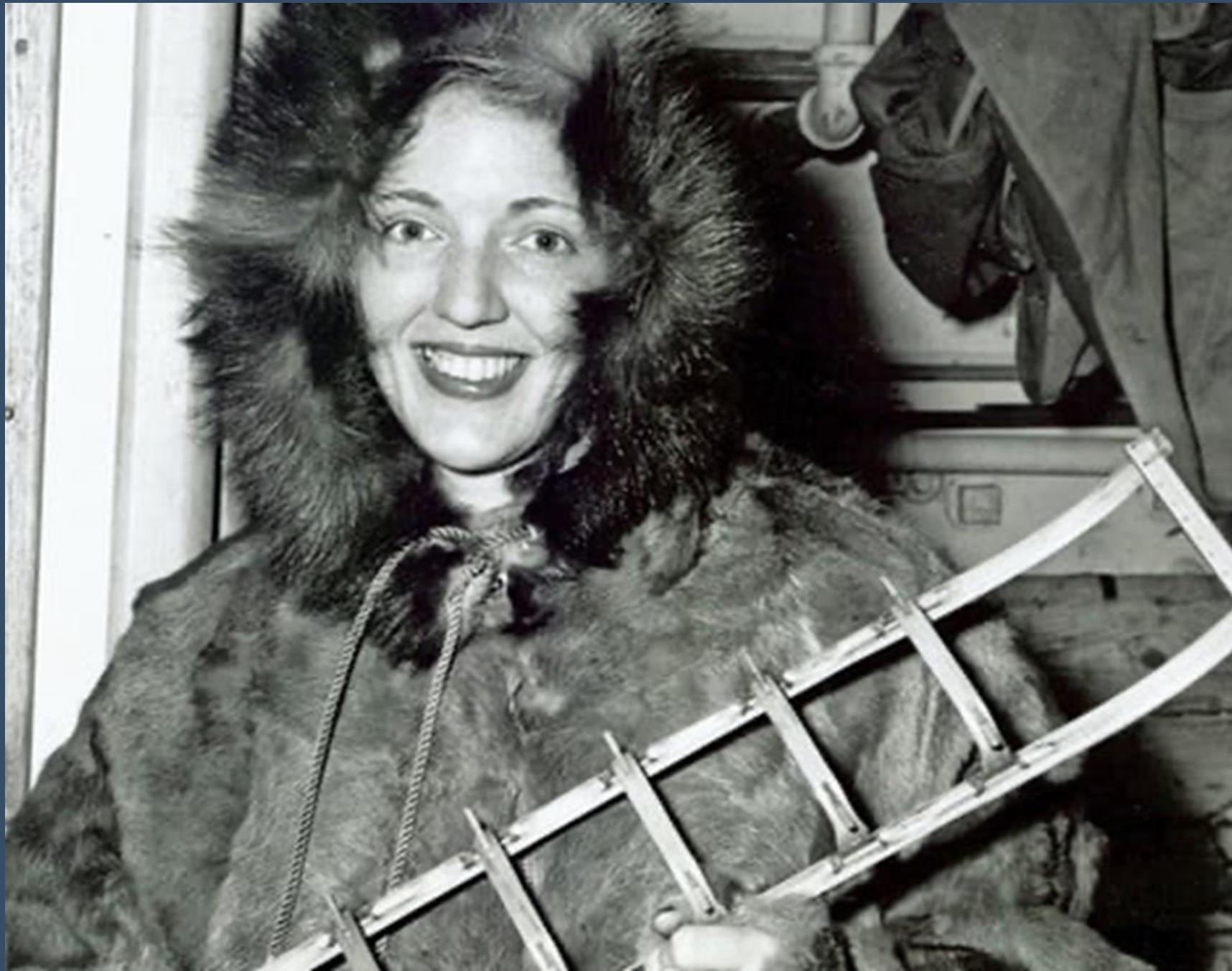
Photo © Ted Gatlin/HX

Example: Whale Workshop

We learned what different Whales are eating and how using our onboard bone clones to demonstrate as seen in the photo here with Fritz and Matthew.

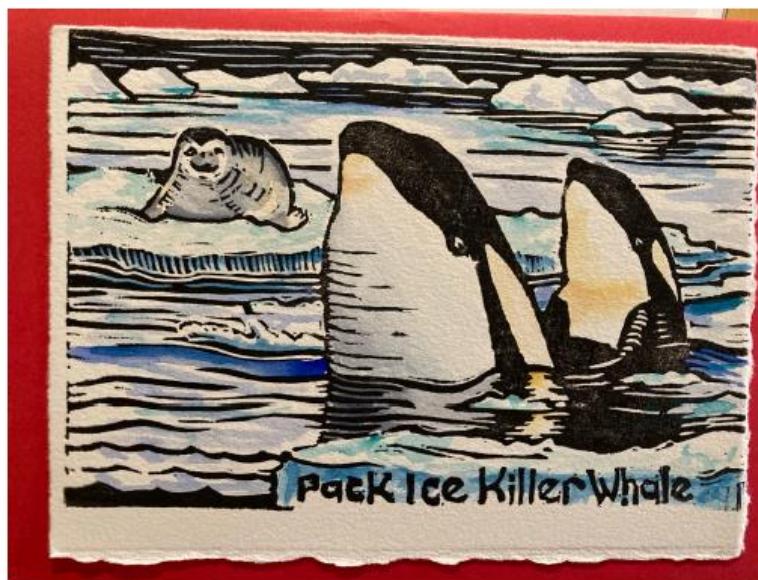
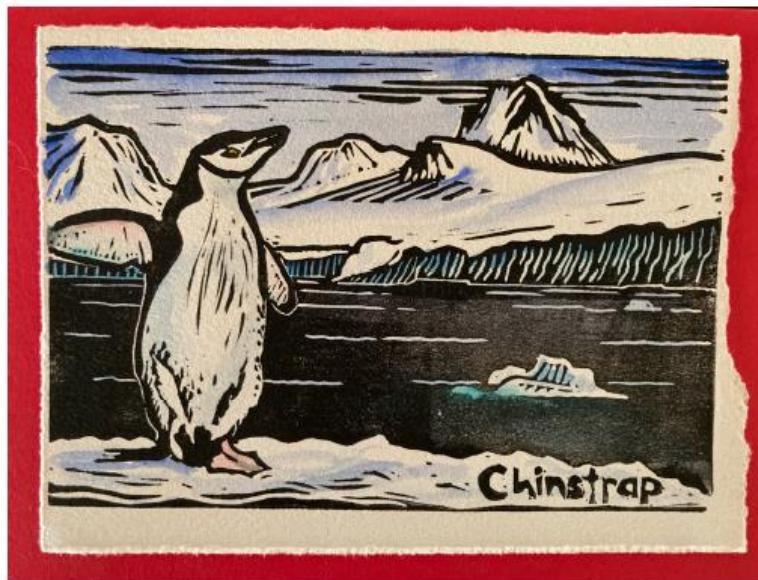
History & culture

Photo from 1935 showing Caroline Mikkelsen, the first woman to set foot in Antarctica / © Reddit



Arts & crafts

With our Artist onboard we did print our own cards and we painted our Waterbottles.



Arts & crafts



Foto © Ted Gatlin/HX



Foto © Ted Gatlin/HX

NASA cloud observer

We did several observations on deck with our Expedition team. See here our results from our observation out on deck.

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



Science Boat



Foto © Ursula Enzenhofer / HX

Science Boat

We investigated the underwater world in 9 Science Boat sessions in the following locations:

- Near Holdfast Point
- Pleneau Island
- Nelson Island
- Orne Harbour
- Damoy Point, Antarctica

We deployed a plankton net to collect phytoplankton and zooplankton, used a CTD to create a physical profile of the water column, and took measurements of turbidity.



Science Boat

With our guest scientist Jay Barlow we listened to the sounds of the ocean using a hydrophone. We heard Lepard seals, Ice crashing and Humpback Whales.

Penguin Watch

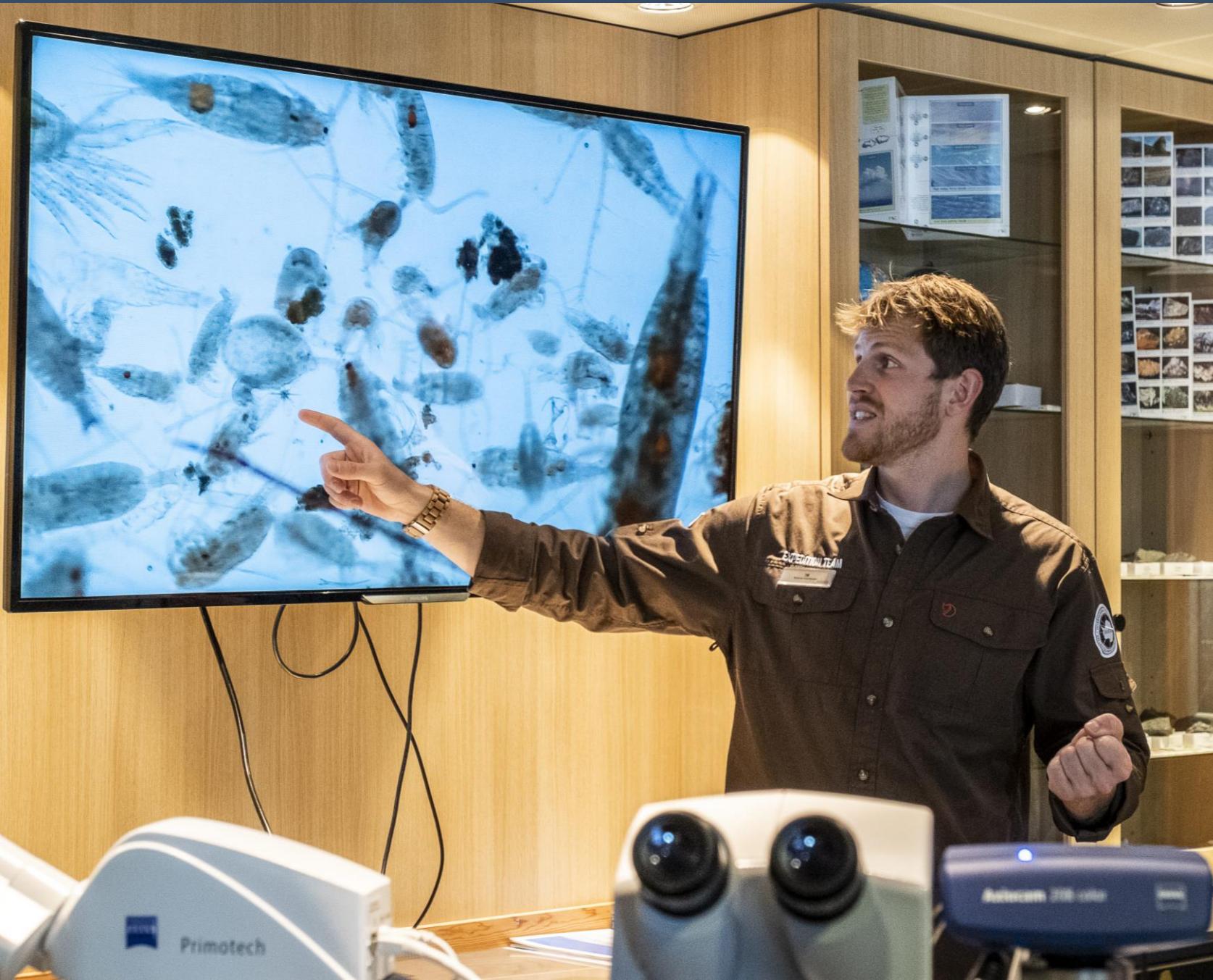
Our two guest scientists from penguin watch could finish 3 aerial surveys of colonies as well as replace their timelapse cameras at two sites. With our support they are able to study the penguin colony dynamics such as reproduction success and help understand and protect the species in Antarctica!



**PENGUIN
WATCH**



Foto © Penguin Watch



Plankton samples

We looked at Plankton samples from various sites!

Fjordphyto

In Antarctica, we collected samples and oceanographic data for our partners at Fjordphyto while on the Science Boat.

FjordPhyto sampling is designed to understand: (1) where and when do we see freshwater from melting glaciers? (2) what types of phytoplankton do we see throughout the season? and (3) how is freshwater from melting glaciers influencing the types of phytoplankton seen? These measurements and samples, paired with data from NASA satellites, will help us understand how melting glaciers influence the types of phytoplankton we observe.

To keep updated on the history, future progress, and results from this study, follow @FjordPhyto on social media or visit their [website](#).





EBIRD

Our onboard ornithologists were constantly surveying the birdlife we encountered along our route. Including 10 formal Wildlife Watches, we recorded 28 species across 23 eBird checklists. Through the eBird platform, the data we collected is available for scientists around the world.

View our data for this trip here:
<https://ebird.org/tripreport/187641>

iNaturalist

View our data submitted on our iNaturalist project!:

<https://www.inaturalist.org/projects/29-dec-8-jan-2023-highlights-of-antarctica-on-the-amundsen>

As of voyage's end, we had 33 observations of 21 species submitted to our iNaturalist project!

We hope to see this number grow over the coming weeks.



Happywhale

We encountered humpback, and fin whales during our time in the Southern Ocean. We submitted 6 photos of humpback individuals to Happywhale to add to their catalogue of identified whales across the world, and will hopefully hear back soon if we get any positive matches!

Here is one of the ID pictures from Martha Strait we submitted.

[View our submissions](#) to Happywhale



Photo © Ted Gatlin/HX

Guest scientist

On our trip we had four guest scientists. Two from Penguin Watch and two from Barlow Acoustics.

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



Wildlife List - Birds



Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Larus dominicanus</i>	Kelp Gull	Dominikanermöwe	Goéland dominicain	Taremåke
<i>Leucophaeus scoresbii</i>	Dolphin Gull	Blutschnabelmöwe	Goéland de Scoresby	Magellanmåke
<i>Sterna hirundinacea</i>	South American Tern	Falklandseeschwalbe	Sterne hirundinacée	Svaleterne
<i>Sterna vittata</i>	Antarctic Tern	Antarktikseeschwalbe	Sterne couronnée	Sørhavsterne
<i>Stercorarius antarcticus</i>	Brown Skua	Subantarktikskua	Labbe antarctique	Sørhavsjø
<i>Stercorarius maccormicki</i>	South Polar Skua	Antarktikskua	Labbe de McCormick	Sørjo
<i>Diomedea epomophora</i>	Southern Royal Albatross	Südkönigsalbatros	Albatros royal	Kongealbatross
<i>Diomedea exulans</i>	Snowy Albatross	Wanderalbatros	Albatros hurleur	Vandrealbatross
<i>Phoebetria palpebrata</i>	Light-mantled Albatross	Graumantelalbatros	Albatros fuligineux	Gråalbatross
<i>Thalassarche chrysostoma</i>	Grey-headed Albatross	Graukopfalbatros	Albatros à tête grise	Gråhodealbatross
<i>Thalassarche melanophrys</i>	Black-browed Albatross	Schwarzbrauenalbatros	Albatros à sourcils noirs	Svartbrynalbatross
<i>Fregetta tropica</i>	Black-bellied Storm Petrel	Schwarzbauch-Sturmschwalbe	Océanite à ventre noir	Svartbukstormsvale
<i>Oceanites oceanicus</i>	Wilson's Storm Petrel	Buntfuß-Sturmschwalbe	Océanite de Wilson	Wilsonstormsvale
<i>Ardenna grisea</i>	Sooty Shearwater	Dunkler Sturmtaucher	Puffin fuligineux	Grålire
<i>Daption capense</i>	Cape Petrel	Kapsturmvogel	Damier du Cap	Flekkpetrell
<i>Fulmarus glacialisoides</i>	Southern Fulmar	Silbersturmvogel	Fulmar argenté	Sørhavhest

Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Halobaena caerulea</i>	Blue Petrel	Blausturmvogel	Prion bleu	Blåpetrell
<i>Macronectes giganteus</i>	Southern Giant Petrel	Riesensturmvogel	Pétrel géant	Sørkjempepetrell
<i>Pachyptila belcheri</i>	Slender-billed Prion	Dünnschnabel-Sturmvogel	Prion de Belcher	Smalnebbhvalfugl
<i>Pachyptila desolata</i>	Antarctic Prion	Taubensturmvogel	Prion de la Désolation	Antarktishvalfugl
<i>Pagodroma nivea</i>	Snow Petrel	Schneesturmvogel	Pétrel des neiges	Snøpetrell
<i>Procellaria aequinoctialis</i>	White-chinned Petrel	Weißenkinn-Sturmvogel	Puffin à menton blanc	Hvithakepetrell
<i>Pygoscelis adeliae</i>	Adelie Penguin	Adeliepinguin	Manchot d'Adélie	Adeliepingvin
<i>Pygoscelis antarcticus</i>	Chinstrap Penguin	Kehlstreifpinguin	Manchot à jugulaire	Ringpingvin
<i>Pygoscelis papua</i>	Gentoo Penguin	Eselspinguin	Manchot papou	Bøylepingvin
<i>Spheniscus magellanicus</i>	Magellanic Penguin	Magellanpinguin	Manchot de Magellan	Magellanpingvin
<i>Eudyptes chrysophalus</i>	Macaroni Penguin	Goldschopfpinguin	Gorfou doré	gulltoppingvin
<i>Pelecanoides urinatrix</i>	Common Diving Petrel	Subantarktis-Lummensturmvogel	Puffinure plongeur	smalnebbdykkpetrell
<i>Leucocarbo atriceps</i>	Imperial Shag	Kaiserscharbe	Cormoran impérial	Knoppskarv
<i>Leucocarbo bransfieldensis</i>	Antarctic Shag	Antarktikscharbe	Cormoran antarctique	Antarktisskarv
<i>Phalacrocorax magellanicus</i>	Rock Shag	Felsenscharbe	Cormoran de Magellan	Magellanskurv

Wildlife List - Marine Mammals



Wildlife List – marine mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Megaptera novaeangliae</i>	Humpback whale	Buckelwal	Baleine à bosse	Knølhval
<i>Balaenoptera physalus</i>	Fin whale	Finnwal	Rorqual commun	Finhval
<i>Lagenorhynchus cruciger</i>	Hourglass dolphin	Stundenglasdelfin	Lagénorhynque sablier	Timeglassdelfin
<i>Leptonychotes weddellii</i>	Weddell seal	Weddelrobbe	Phoque de Weddell	Weddellsel
<i>Lobodon carcinophaga</i>	Crabeater seal	Krabbenfresser	Phoque crabier	Krabbeetersel
<i>Mirounga leonina</i>	Southern elephant seal	Südlicher See-Elefant	Eléphant de mer austral	Sydlig sjøelefant
<i>Hydrurga leptonyx</i>	Leopard seal	Seeleopard	Léopard de mer	Leopardsel



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