

A polar bear and its cub are walking across a vast expanse of broken sea ice. The ice floes are white and blue, floating in a dark blue sea. The sky is a pale, overcast blue. The bear is in the center, walking towards the left, with its cub following closely behind it to the right. The text 'Science & Education Report' is overlaid in the center in a dark blue, sans-serif font. A large, semi-transparent white 'I' is on the left side of the image, and a large, semi-transparent white 'X' is in the center, partially overlapping the text.

Science & Education Report



MS Fram

19th July to 1st
August 2024

Spitsbergen, Jan Mayen,
Greenland, Iceland – Arctic
Islands Discovery





Science & Education Program

Guests discovered Arctic wildlife during wildlife watches, landings, small boat cruises, and microscope sessions. Deeper levels of understanding were attained with regards to Svalbard's past, through engaging talks on history and geology. Guests were also introduced to the present and future changes besetting the Arctic when they joined lectures and workshops, and even contributed to scientific research with our citizen science projects. Our consistent aim is to offer you a full overview of Svalbard, Greenland and the Arctic ecosystems.



NASA Globe Cloud Observer

Together with our Environmental Scientist, Linda, you submitted 5 cloud observations to NASA using the GLOBE observer app

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

iNaturalist

We submitted a total of 243 observations of plants, fungi and animals using the citizen science app iNaturalist.

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





Science Boat

On our voyage, we conducted a total of 11 science boats in Alicehamna, Bjørnfjorden, Magdalena Fjord, Signehamna, Hurry Inlet and Sydkap. We collected water samples to observe the microscopic oceanic wildlife under the microscope, and measure secchi depths and several water parameters with the CTD (Conductivity/salinity, Temperature, Depth). We also used the hydrophone to listen to underwater soundscapes and noise pollution.

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

Listen to our soundscapes in [Soundcloud](#).

Plankton Samples

In most of our samples we found a lot of copepods, also called “energy bars” of the Arctic because they are very rich in lipids. We also observed Chaetoceros (phytoplankton) especially in a sample in Greenland as well as krill, sea butterflies, worms, jellyfish and comb jelly.



Arctic copepods *Calanus hyperboreus*,



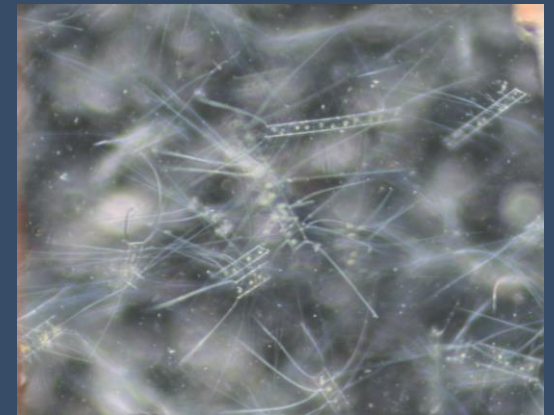
Calanus sp. Copepods



Sea butterfly, *Limacina helicina*



Krill, *Calanus* copepod and a worm *Chaethognath*



Phytoplankton *Chaetoceros*



Beach Clean-up

Thanks to your help, we collected 24.5 kg of plastic and various rubbish on our landings. These rubbish will be treated in Iceland. Thanks again for your contribution to protect the Arctic!

Wildlife List - Birds



Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Branta leucopsis</i>	Barnacle Goose	Weißwangengans	Bernache nonnette	Hvitkinngås
<i>Anser brachyrhynchus</i>	Pink-footed Goose	Kurzschnabelgans	Oie à bec court	Kortnebbgås
<i>Somateria mollissima</i>	Common Eider	Eiderente	Eider à duvet	Ærfugl
<i>Clangula hyemalis</i>	Long-tailed Duck	Eisente	Harelde kakawi	Havelle
<i>Mergus serrator</i>	Red-breasted Merganser	Mittelsäger	Harle huppé	Siland
<i>Gavia stellata</i>	Red-throated Loon	Sterntaucher	Plongeon catmarin	Smålom
<i>Fulmarus glacialis</i>	Northern Fulmar	Eissturmvogel	Fulmar boréal	Havhest
<i>Ardenna gravis</i>	Great Shearwater	Großer Sturmtaucher	Puffin majeur	Storlire
<i>Charadrius hiaticula</i>	Common Ringed Plover	Sandregenpfeifer	Pluvier grand-gravelot	Sandlo
<i>Calidris maritima</i>	Purple Sandpiper	Meerstrandläufer	Bécasseau violet	Fjæreplytt
<i>Rissa tridactyla</i>	Black-legged Kittiwake	Dreizehenmöwe	Mouette tridactyle	Krykkje
<i>Xema sabini</i>	Sabine's Gull	Schwalbenmöwe	Mouette de Sabine	Sabinemåke
<i>Larus marinus</i>	Great Black-backed Gull	Mantelmöwe	Goéland marin	Svartbak
<i>Larus hyperboreus</i>	Glaucous Gull	Eismöwe	Goéland bourgmestre	Polarmåke
<i>Sterna paradisaea</i>	Arctic Tern	Küstenseeschwalbe	Sterne arctique	Rødnebbterne

Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Stercorarius skua</i>	Great Skua	Skua	Grand Labbe	Storjo
<i>Stercorarius parasiticus</i>	Parasitic Jaeger	Schmarotzerraubmöwe	Labbe parasite	Tyvjo
<i>Stercorarius longicaudus</i>	Long-tailed Jaeger	Falkenraubmöwe	Labbe à longue queue	Fjelljo
<i>Alle alle</i>	Little Auk	Krabbentaucher	Mergule nain	Alkekonge
<i>Uria lomvia</i>	Thick-billed Murre	Dickschnabellumme	Guillemot de Brünnich	Polarlomvi
<i>Uria aalge</i>	Common Murre	Trottellumme	Guillemot marmette	Lomvi
<i>Alca torda</i>	Razorbill	Tordalk	Petit Pingouin	Alke
<i>Cephus grylle</i>	Black Guillemot	Gryllteiste	Guillemot à miroir	Teist
<i>Fratercula arctica</i>	Atlantic Puffin	Papageitaucher	Macareux moine	Lunde
<i>Corvus corax</i>	Northern Raven	Kolkrabe	Grand Corbeau	Ravn
<i>Oenanthe oenanthe</i>	Northern Wheatear	Steinschmätzer	Traquet motteux	Steinskvett
<i>Plectrophenax nivalis</i>	Snow Bunting	Schneeammer	Plectrophane des neiges	Snøspurv
<i>Morus bassanus</i>	Northern Gannet	Basstölpel	Fou de bassan	Havsule
<i>Ardenna grisca</i>	Sooty shearwater	Dunkelsturmtaucher	Puffin fuligineux	Grålire
<i>Stercorarius skua</i>	Great Skua	Skua	Grand Labbe	Storjo



e-Bird

Together with our onboard ornithologist, George, you identified and counted 31 different species of birds and submitted 51 checklists to Ebird.

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

A polar bear is walking across a dark, rocky shoreline. In the background, there is a large body of blue water with several icebergs floating on the surface. The sky is clear and blue. The text "Wildlife List - Marine Mammals" is overlaid on the left side of the image in white, bold font.

Wildlife List - Marine Mammals

Wildlife List – marine mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Balaenoptera musculus</i>	Blue whale	Blauwal	Rorqual bleu, baleine bleue	Blåhval
<i>Balaenoptera physalus</i>	Fin whale	Finnwal	Rorqual commun	Finhval
<i>Balaenoptera acutorostrata</i>	Common minke whale	Zwergwal	Rorqual à museau pointu	
<i>Physeter macrocephalus</i>	Sperm whale, cachalot	Pottwal	Cachalot	Spermhval
<i>Lagenorhynchus albirostris</i>	White-beaked dolphin	Weißschnauzendelfin	Lagénorhynque à bec blanc	Kvitnos
<i>Orcinus orca</i>	Killer whale, orca	Schwertwal, Orca	Orque	Spekkhogger
<i>Phocoena phocoena</i>	Harbour porpoise	Schweinswal	Marsouin commun	Nise
<i>Pagophilus groenlandicus</i>	Harp/Greenland seal	Sattelrobbe	Phoque du Groenland	Grønlandssel
<i>Pusa hispida</i>	Ringed seal	Ringelrobbe	Phoque annelé	Ringsel
<i>Phoca vitulina</i>	Harbour seal, common seal	Seehund	Phoque veau-marin	Steinkobbe
<i>Odobenus rosmarus</i>	Walrus	Walross	Morse	Hvalross
<i>Ursus maritimus</i>	Polar bear	Eisbär	Ours blanc	Isbjørn

Wildlife

List - Land Mammals



Wildlife List – Land mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Alopex lagopus</i>	Arctic fox	Polarfuchs	Renard arctique	Polarrev
<i>Ovibos moschatus</i>	Musk ox	Moschusochse	bœuf musqué	Moskus
<i>Lepus arcticus</i>	Arctic hare	Polarhase	Lièvre arctique	Polarhare
<i>Rangifer tarandus p.</i>	Svalbard reindeer	Spitzbergen rentier	Renne de Spitzberg	Svalbardrein

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