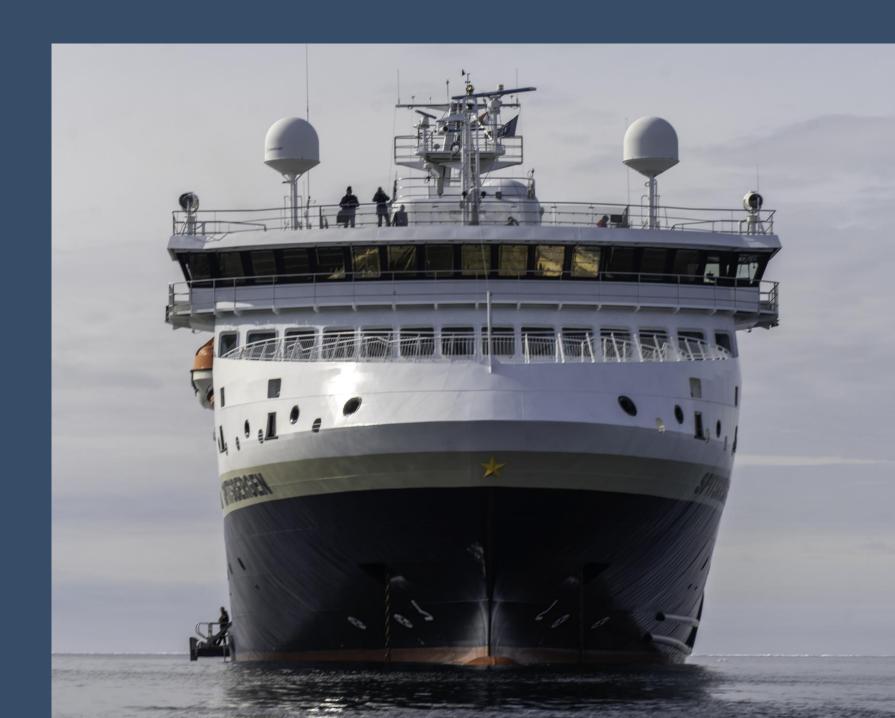
Science & Education Report

MS Spitsbergen 03 - 10.06.2025

Svalbard in the Spring – Return of the Sun

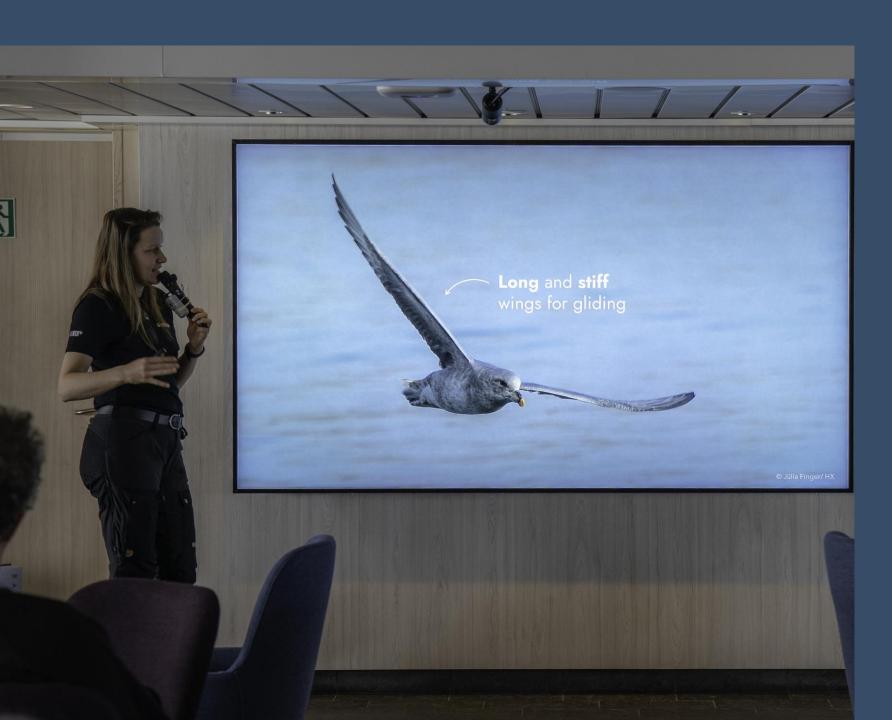




Science & Education Program

Our Science and Education Team accompanied you during your expedition to the remote nature of the North East Atlantic.

We had the opportunity to explore Svalbard's natural snow-covered beauty, exceptional wildlife, and rich history. We enjoyed lectures and interactive activities onboard and explored our destinations from Land and the Sea.



Lectures & Workshops

We had a wonderful time onboard with a diversity of lectures and workshops. Together we learned about the history, geology, animals and birds of Svalbard. In total we had 7 lectures, 4 tiny talks, 7 workshops, and 3 art sessions!

History

Over the course of this trip, we were able to view the domestic and industrial relics of those who were in Svalbard during the last 400 years. Vast piles of whale bones bore witness to the whaling and sealing history; huts showed us how these hunters and trappers lived. Rotting boats and rusting machinery provided evidence of the intensity and breadth of the economies which boomed then collapsed within this archipelago.



Culture

Svalbard is a place without an endemic population for most of its history. It presents a fascinating case study of a place formed and shaped fairly recently by a multitude of diverse and different cultures. Settlements such as Ny-Alesund show us how people of varied backgrounds and cultures call this archipelago home, whilst united in a common pursuit of scientific research – for the greater good.



Bellsund, tectonic structures

Geology

Svalbard's dramatic geological story only peaked through the blanketed the landscape. The archipelago's ancient sedimentary rocks, formed over millions of years from tropical seas to polar conditions, were visible in the steep mountain faces, exposed cliff sections and intertidal areas. Much later they were compressed violently by the converging continents while forming the Caledonian Mountain Range, until the rocks yielded, either breaking or folding. All this happened long before the ice took care of the final sculpting of the landscape. Stacked sediments, broken & repeated Same sediments, folded

Beautiful cirrus clouds, photographed over 79° north above the island of Moffen. The name cirrus is derived from a Latin word meaning "lock of hair", due to their wispy appearance. They allow the sun's heat to penetrate our lower atmosphere, but prevent the energy from escaping back into space. Thanks to them, the weather on May 25 was as warm as it can be at this very high latitude!

NASA Globe Cloud Observer

Together with our Environmental Scientist Jeanne you observed the clouds and submitted your observations to NASA GLOBE Observer on 3 occasions.

These cloud observations can help NASA improve our understanding of Earth's atmosphere and climate by providing valuable data for scientific research and climate modelling.

You conducted two NASA Globe Cloud Observer citizen science projects. That means three submissions went to NASA for climate study in areas you visited, at sea, along our voyage. Below is a link to our data.

<u>View our data</u> on the global map

iNaturalist

Throughout our expedition, we documented the flora and fauna of Svalbard and uploaded all our findings to the iNaturalist platform.

During our voyage, we submitted 69 observations of 40 different species. This effort contributes to the creation of a comprehensive understanding of the current distribution of species in the archipelago and can aid researchers in their ongoing studies and conservation efforts to protect these species.

View our data submitted on our <u>iNaturalist</u> project



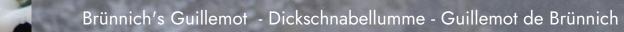
Wildlife « « List - Birds

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Little Auk – Krabbentaucher – Mergule nain



Northern Fulmar – Eissturmvogel - Fulmar boréal

Wildlife List – Seabirds

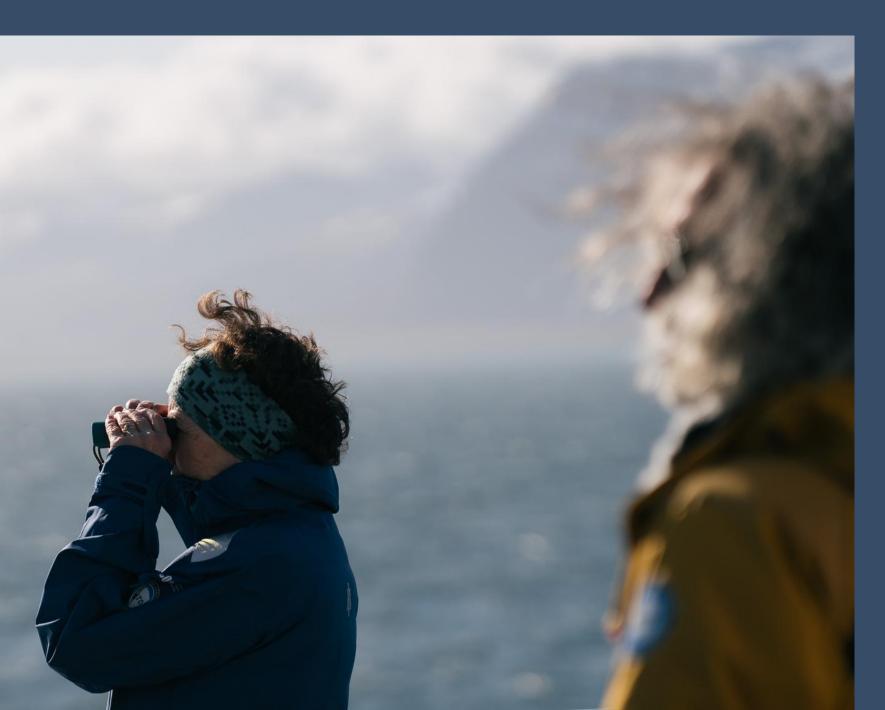
SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Fulmarus glacialis	Northern Fulmar	Eissturmvogel	Fulmar boréal
Stercorarius skua	Great Skua	Große Raubmöwe	Grand Labbe
Stercorarius parasiticus	Arctic Skua (Parasitic Jaeger)	Schmarotzerraubmöwe	Labbe parasite
Stercorarius longicaudus	Long-tailed Skua (Long-tailed Jaeger)	Falkenraubmöwe	Labbe à longue queue
Rissa tridactyla	Black-legged Kittiwake	Dreizehenmöwe	Mouette tridactyle
Larus hyperboreus	Glacous Gull	Eismöwe	Goéland Bourgmestre
Sterna paradisaea	Arctic Tern	Küstenseeschwalbe	Sterne Arctique
Alle alle	Little Auk	Krabbentaucher	Mergule nain
Fratercula arctica	Atlantic Puffin	Papageitaucher	Macareux moine
Cepphus grille	Black Guillemot	Gryllteiste	Guillemot à miroir
Uria lomvia	Brünnich's Guillemot (Thick-billed Murre)	Dickschnabellumme	Guillemot de Brünnich

Shorebirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Anser brachyrhynchus	Pink-footed Goose	Kurzschnabelgans	Oie à bec court
Branta leucopsis	Barnacle Goose	Weißwangengans	Bernache nonnette
Somateria mollissima	Common Eider	Eiderente	Eider à duvet
Somateria spectabilis	King Eider	Prachteiderente	Eider à tête grise
Clangula hyemalis	Long-tailed Duck	Eisente	Harelde kakawi
Gavia stellata	Red-throated Diver (Red-throated Loon)	Sterntaucher	Plongeon catmarin
Charadrius hiaticula	Common Ringed Plover	Sandregenpfeifer	Pluvier grand-gravelot
Calidris maritima	Purple Sandpiper	Meerstrandläufer	Bécasseau violet
Calidris alpina	Dunlin	Alpenstrandläufer	Bécasseau variable
Calidris alba	Sanderling	Sanderling	Bécasseau sanderling

Land birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Plectrophenax nivalis	Snow Bunting	Schneeammer	Bruant des neiges
Lagopus muta	Rock Ptarmigan	Alpenschneehuhn	Lagopède alpin



eBird

During our Wildlife Watches, our team conducted detailed seabird surveys, recording observations for the citizen science platform eBird. We recorded 27 different species of birds in 21 checklists.

This initiative helps contribute valuable data to global bird conservation efforts, enhancing our understanding of seabird populations and their habitats.

Vildlife List - Marine Mammals

Wildlife List – Marine Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Balaenoptera acutorostrata	Common minke whale	Zwergwal	Rorqual à museau pointu
Erignathus barbatus	Bearded seal	Bartrobbe	Phoque barbu
Delphinapterus leucas	Beluga Whale	Weißwal	Béluga
Phoca vitulina	Harbour Seal	Seehund	Phoque commun
Odobenus rosmarus	Walrus	Walross	Morse
Ursus maritimus	Polar bear	Eisbär	Ours polaire

Species Spotlight

At the historic whaling site of Smeerenburg, at first it seemed as if the local walrus were not at home. However a splash and a dark shape told us otherwise. Then before our eyes, five walrus foraged along the shoreline, snoozing on sandbanks for a few minutes between snacks. Then, as we were heading back to the ship, these charismatic emblems of the high arctic began to haul out on shore. To ensure peace and quiet for this splendid animals, we closed our operation and headed back to the ship. From the decks of Spitsbergen we were able to watch through our binoculars and see them settle down for a snooze. However as an extra treat, we also enjoyed a more intimate look through the ship's GSS high magnification camera!

Photo Timo Heinz



Wildlife List - Land Mammals

Wildlife List – Land mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Rangifer tarandus platyrhynchus	Svalbard Reindeer	Rentier	Renne du Spitzberg
Vulpes lagopus	Arctic Fox	Polarfuchs	Renard Arctique

Thank you for joining us!