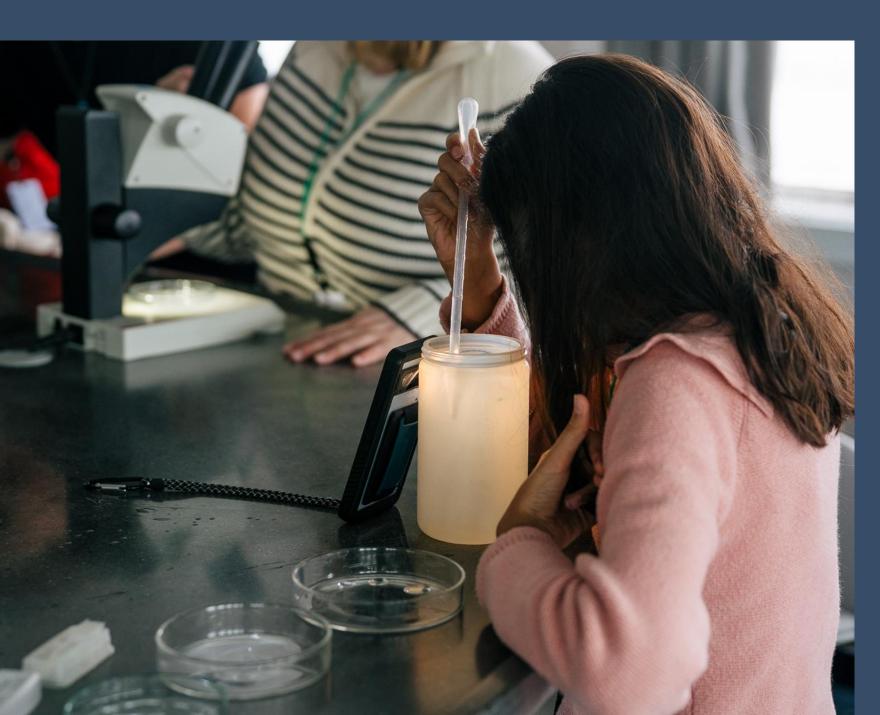
Science & Education Report

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, guests were able to view the skeletal and ruinous structures left behind by industries and peoples who were in Svalbard long ago. The weight of history was great in such places. The vast piles of whale bones, the elaborate and copious structural remains, and even the twisted tracks of railways, all provided evidence of the intensity and breadth of industry which once blossomed in these islands.



Culture

Through its somewhat unique status as a land void of endemic culture for much of its history, Svalbard presents a fascinating case study of a place formed and shaped fairly recently by a multitude of diverse and different cultures. Places such as Ny-Alesund typified this, and showed the way in which people of all backgrounds and cultures simultaneously call this archipelago home, whilst united in a common and culture-bridging pursuit of scientific research.



Inner Kongsfjord

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.

Permian / Carboniferous sediments in the Inner Kongsfjord, partly layered, partly folded. Much later eroded by ice. Above: Altocumulus clouds, partly Cumulonimbus (rain) 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 – Seabirds

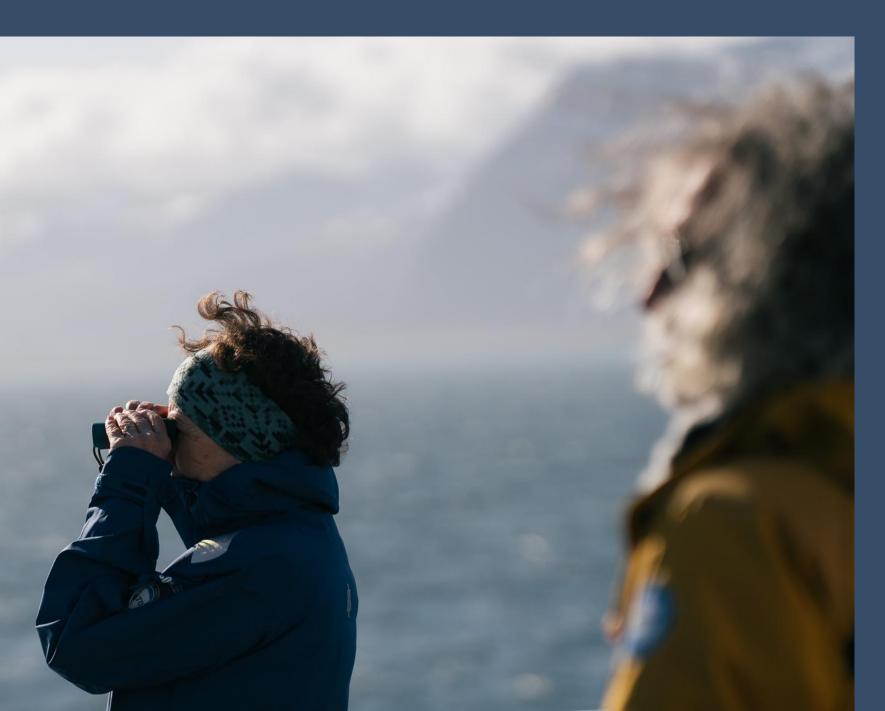
SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Fulmarus glacialis	Northern Fulmar	Eissturmvogel	Fulmar boréal
Stercorarius skua	Great Skua	Große Raubmöwe	Grand Labbe
Stercorarius parasiticus	Arctic Skua (Parasitic Jaeger)	Schmarotzerraubmöwe	Labbe parasite
Rissa tridactyla	Black-legged Kittiwake	Dreizehenmöwe	Mouette tridactyle
Larus hypervoreus	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

Wildlife List – Shore birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Anser brachyrhynchus	Pink-footed Goose	Kurzschnabelgans	Oie à bec court
Branta leucopsis	Barnacle Goose	Weißwangengans	Bernache nonnette
Branta bernicla	Brent Goose	Ringelgans	Bernache cravant
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 canutus	Red Knot	Knutt	Bécasseau maubèche
Calidris maritima	Purple Sandpiper	Meerstrandläufer	Bécasseau violet
Calidris alpina	Dunlin	Alpenstrandläufer	Bécasseau variable
Calidris alba	Sanderling	Sanderling	Bécasseau sanderling

Wildlife List – Land birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Plectrophenax nivalis	Snow Bunting	Schneeammer	Bruant des neiges



e-Bird

During our Wildlife Watches, our Team conducted detailed seabird surveys, recording observations for the citizen science platform eBird. We recorded 23 different species of birds in 19 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
Delphinapterus leucas	Beluga whale	Weißwal	Béluga
Erignathus barbatus	Bearded seal	Bartrobbe	Phoque Barbu
Odobenus rosmarus	Walrus	Walross	Morse
Ursus maritimus	Polar bear	Eisbär	Ours polaire

Species Spotlight

We were sailing through the scenic Smeerenburgfjorden when the announcement "Polar Bear!" was heard around the ship. On the ice was a healthy specimen of the majestic and charismatic emblem of the Arctic. Although we were at least a kilometre away, we saw a fine healthy polar bear walking away from their shoreside evening feast of seal. We watched him with binoculars and cameras for some distance along the shore until he was out of sight. Then, moments later, an arctic fox ran in the opposite direction across the ice causing us to look away from our first bear. We were rewarded, not only with our little fox who'd also been feasting on the remains of the seal, but up on a ridge was a second bear, sleeping off their meal. As an extra treat, we also were able to a closer look at the whole encounter on the ship's GSS high magnification camera!



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!