

A photograph of a polar bear and its cub walking across a vast, fragmented expanse of sea ice. The ice consists of numerous white, irregular floes separated by dark blue water. The polar bear is in the center-right, walking towards the left, with its cub following closely behind it. The scene is set in a bright, overcast environment, typical of the Arctic.

Science & Education Report

MS Spitsbergen

05.07 – 14.07.2026

Circumnavigating Spitsbergen
– In the Realm of the Polar Bear





Science & Education Programme

Our Science and Education Team accompanied you during your expedition to the remote nature of the Svalbard archipelago.

We had the opportunity to explore our destination's natural beauty, exceptional wildlife, and rich history. We organized lectures and interactive activities onboard and explored our destinations during landings, guided walks, and from the water.

History & Culture

We landed in remote areas with a relatively short, but complex, history.

We learned about the unique international and political situation of Svalbard thanks to the Svalbard Treaty that was signed in 1920.

Whalers, trappers, miners, researchers and explorers shaped the culture of the Archipelago.



Svalbard

During our landings in Svalbard, we encountered traces of the region's history.

This was exceptionally the case in Virgohamna, on the northwest coast of Danskoya, which is one of the most historically charged sites in the archipelago. This small natural harbour was the launch point for two legendary and doomed attempts to reach the North Pole by air: Salomon Andree's 1897 balloon expedition, whose tragic fate remained unknown until wreckage was found on Kvitoya Island in 1930, and Walter Wellman's airship attempts a few years later. A landing here gave us the opportunity to see the remains of the hangars and hydrogen tanks, seeing firsthand just how far humanity was willing to go, often recklessly, in the race to explore the planet's last unmapped corners.





Ny-Ålesund

Our voyage included a key stop that highlights the scientific character of the Arctic.

Ny-Ålesund, the world's northernmost civilian settlement is a unique international research hub where eleven nations collaborate under the Svalbard Treaty. Together, these sites illustrate how the High Arctic serves as a natural laboratory for understanding climate, ecosystems, and long-term environmental change.

Geology

At Alkefjellet the birds have found a perfect nesting place. The rocks are made by dark, hard Dolerite or Diabase which is resistant to erosion and naturally forms pillar like structures with small shelves in a columnar manner. This is one of many Dolerite intrusions or sills in Svalbard that formed when magma intruded older Permian rocks during the Cretaceous as part of the opening of the Arctic Ocean.



Sea Ice

Sea ice plays a vital role in regulating the climate and supporting marine life in both Arctic and Antarctic environments. It reflects sunlight, thereby helping to cool the planet and insulate the ocean below. However, the extent and thickness of sea ice have been declining due to climate change. Monitoring sea ice is therefore essential for understanding the impacts of climate change and managing the risks associated with increased human activity in the Arctic region.



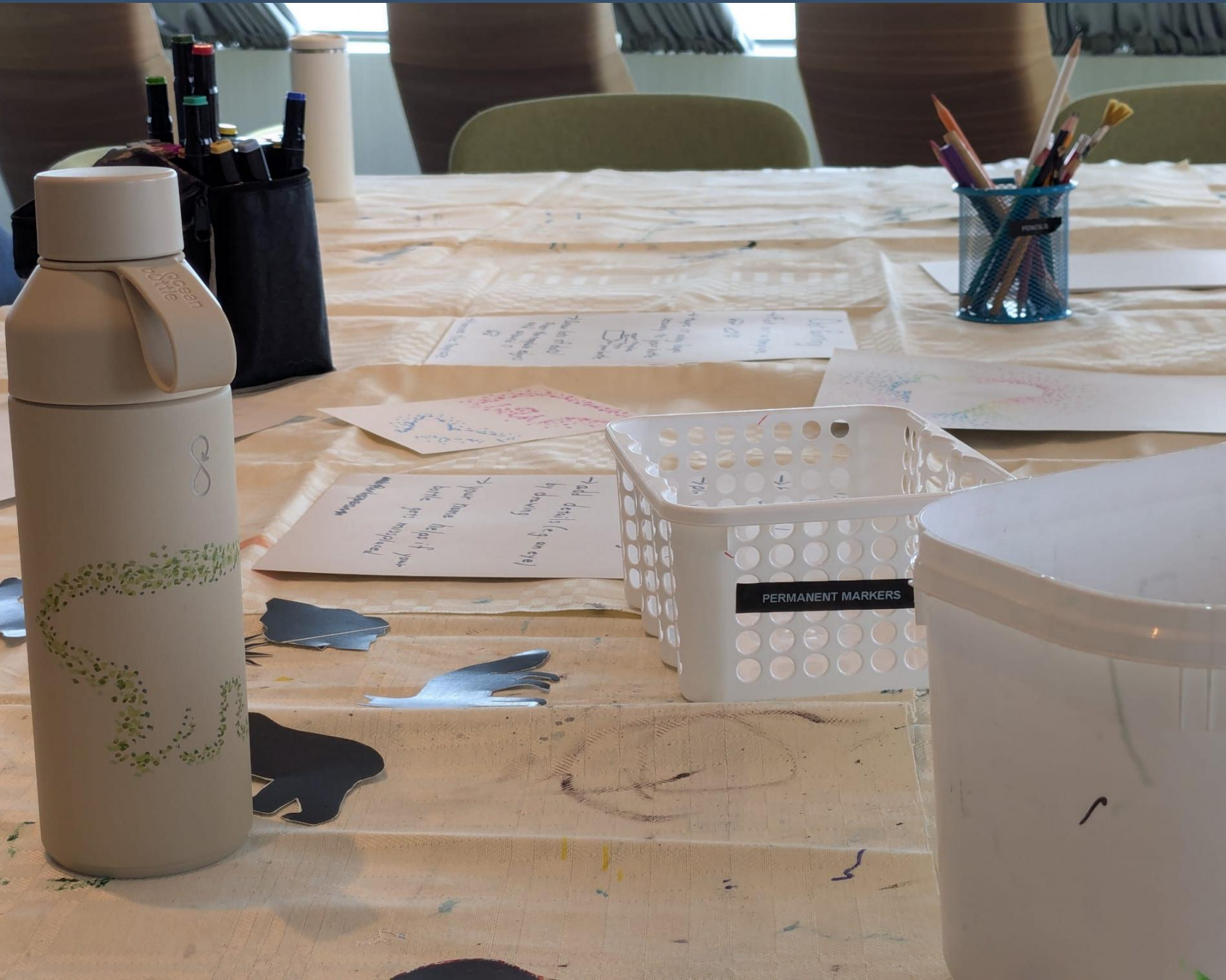
Workshops

Throughout this voyage we offered a variety of workshops and discovery sessions to deepen your understanding of the environments surrounding us, and get hands on!

Some of you joined to learn how to get the most out of your binoculars, or joined in the science centre to zoom in on the structures of different types of feather. And many were very keen to see what they had collected on their science boats, discovering the microscopic world of plankton.

We also held a hands-on session where we learned about the essential equipment packed into our stranding bags; vital gear that accompanies every landing to ensure safety and preparedness in the event of unexpected delays ashore.





Arts & Crafts

Many of you embraced the creative side of the voyage. Our main project this trip was crafting small clay polar bears; a hands-on, playful way to create a personalised keepsake inspired by the wildlife around us.

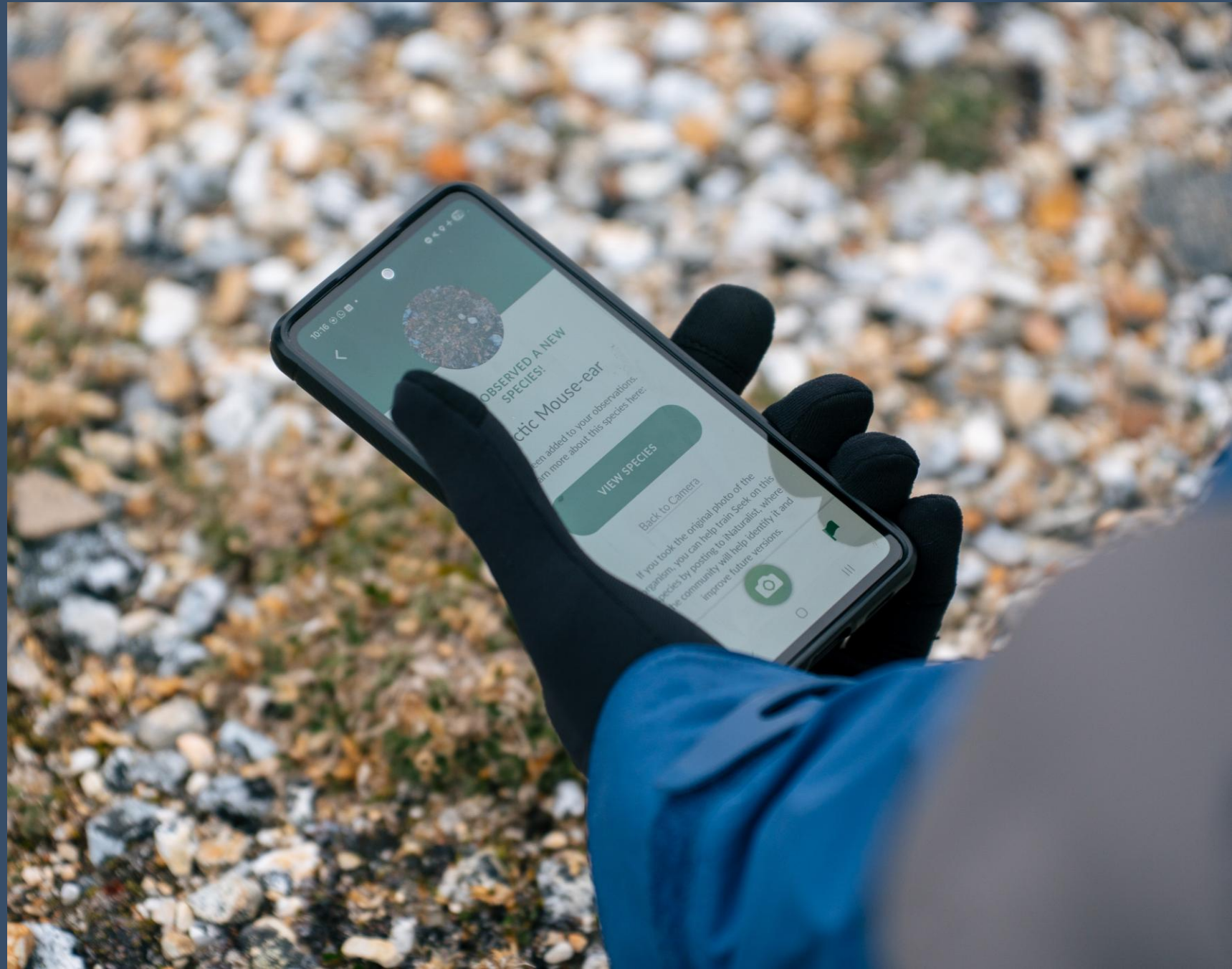
We also decorated water bottles early in the voyage, turning everyday gear into colourful mementos of our time in the Arctic.

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 237 observations of 72 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 [iNaturalist project](#)

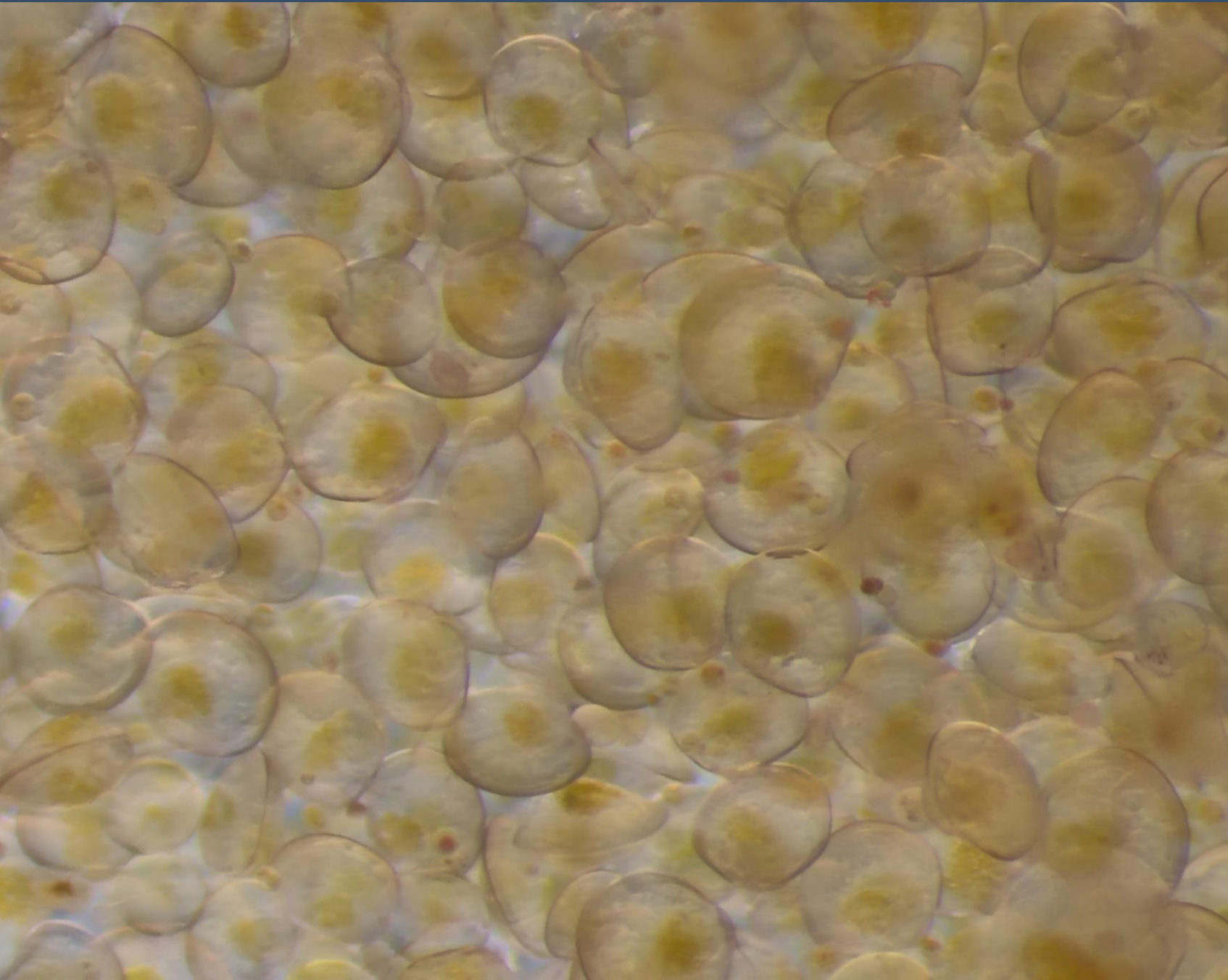




Science Boat

24 eager participants joined our 3 Science Boats in Virgohamna, the Ice Edge, and Mushamna, to study plankton and the hydrography of our destination.

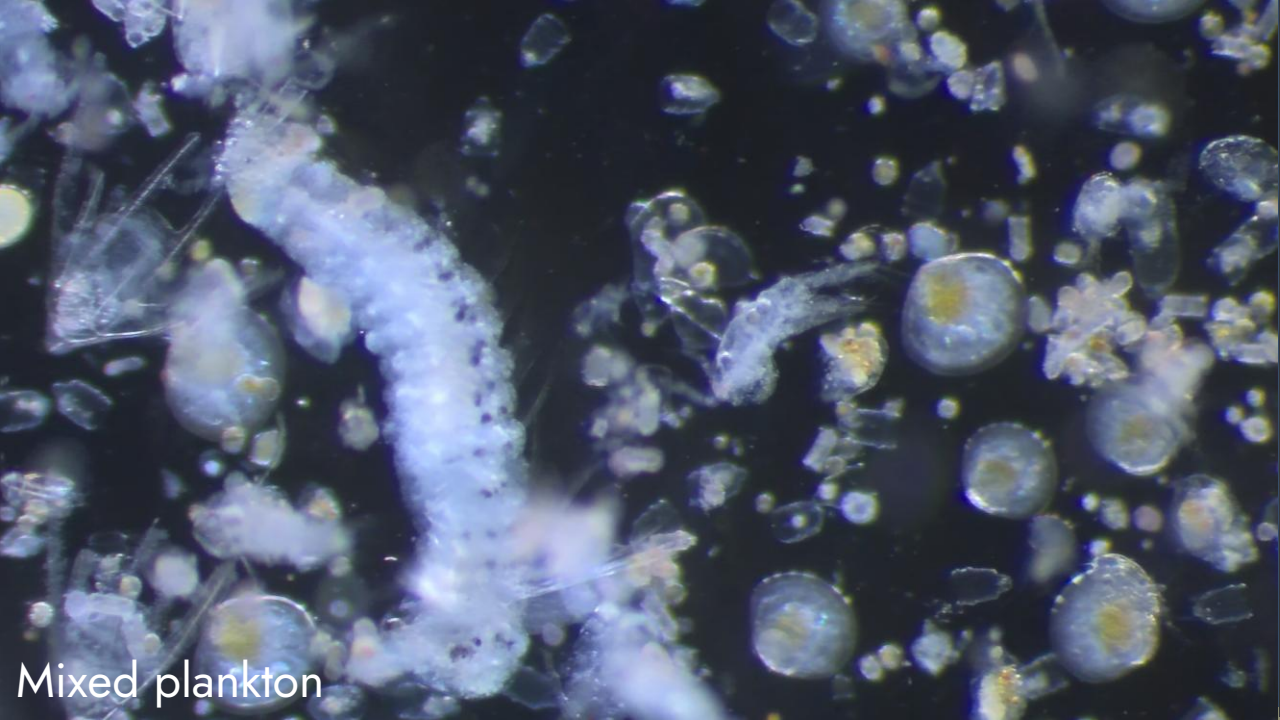
They helped monitor ocean clarity through participation in the Secchi Disk citizen science study, contributing to important research on the distribution of phytoplankton blooms.



Plankton Samples

We explored the microscopic world of plankton, the tiny organisms that drift in our ocean.

In the plankton samples collected from 3 science boats we observed a wide diversity of organisms. Along with copepods, larvae of sea floor animals were particularly abundant, reflecting the importance of spring in Arctic life cycles.



Mixed plankton



Echinoderm larva



Dinoflagellate



Crab larva



Beach Clean-up

Over the course of our voyage, we participated in the Clean up Svalbard initiative.

Together, we collected a total of 1.3 kg of beach litter! This included ropes, packaging bands, fragments of plastic packaging and much more.

Our efforts in the Clean up Svalbard project contributed directly to the preservation of Arctic ecosystems, enhancing environmental sustainability and fostering a cleaner, healthier future for the region.

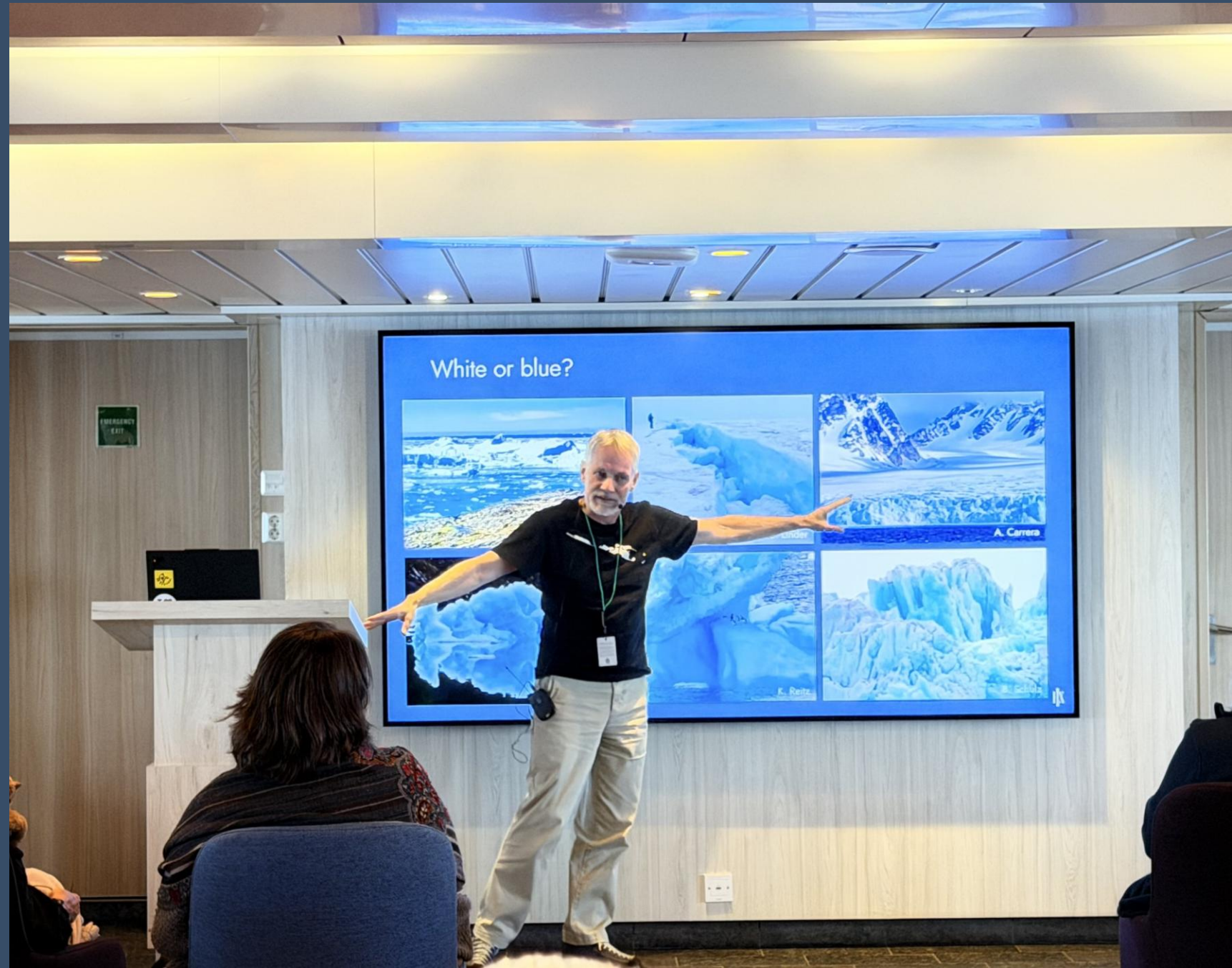
Thank you for helping care for the beautiful places we visit!

Guest Lecturer

Dr. Urs H. Fischer

Urs is a glaciologist specializing in glacier dynamics, glacial hydrology, and geomorphology. Originally majoring in physics, he soon realized there was more to life than laboratory work and decided to apply his skills to cryospheric sciences. His passion for cold places began in 1989 during his first field campaign studying glaciers in the St. Elias Mountains of northern Canada. Fascinated by the endless ice fields, snow-covered landscapes, and sub-zero temperatures, this experience sparked a lifelong dedication to glaciology. Since then, he has conducted research in many incredible locations, including northern Sweden and Norway, the Himalayas, Svalbard, Greenland, and the European Alps.

During his time onboard, he delivered lectures on his experience as a field glaciologist, fundamentals of glacier dynamics, and answering the age old question – 'why is ice blue?'





Wildlife List — Birds



Wildlife List — Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Fulmarus glacialis</i>	northern fulmar	Eissturmvogel	fulmar boréal
<i>Stercorarius skua</i>	great skua	Große Raubmöwe	grand labbe
<i>Stercorarius parasiticus</i>	Arctic skua (parasitic jaeger)	Schmarotzerraubmöwe	labbe parasite
<i>Stercorarius longicaudus</i>	long-tailed skua (long-tailed jaeger)	Falkenraubmöwe	labbe à longue queue
<i>Rissa tridactyla</i>	black-legged kittiwake	Dreizehenmöwe	mouette tridactyle
<i>Larus hyperboreus</i>	glaucous gull	Eismöwe	goéland bourgmestre
<i>Sterna paradisaea</i>	Arctic tern	Küstenseeschwalbe	sterne Arctique
<i>Alle alle</i>	little auk (dovekie)	Krabbentaucher	mergule nain
<i>Fratercula arctica</i>	Atlantic puffin	Papageitaucher	macareux moine
<i>Cephus grylle</i>	black guillemot	Gryllteiste	guillemot à miroir
<i>Uria aalge</i>	common guillemot (common murre)	Trottellumme	guillemot marmette
<i>Uria lomvia</i>	Brünnich's guillemot (thick-billed murre)	Dickschnabellumme	guillemot de Brünnich



Wildlife List — Shorebirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Charadrius hiaticula</i>	common ringed plover	Sandregenpfeifer	pluvier grand-gravelot
<i>Calidris canutus</i>	red knot	Knutt	bécasseau maubèche
<i>Calidris maritima</i>	purple sandpiper	Meerstrandläufer	bécasseau violet
<i>Calidris alba</i>	sanderling	Sanderling	bécasseau sanderling

Wildlife List — Landbirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Plectrophenax nivalis</i>	snow bunting	Schneeammer	bruant des neiges





Wildlife List — Waterbirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Branta leucopsis</i>	barnacle goose	Weißwangengans	bernache nonnette
<i>Branta bernicla</i>	brent goose	Ringelgans	bernache cravant
<i>Somateria mollissima</i>	common eider	Eiderente	eider à duvet
<i>Clangula hyemalis</i>	long-tailed duck	Eisente	harelde kakawi
<i>Gavia stellata</i>	red-throated diver (red-throated loon)	Sterntaucher	plongeon catmarin





eBird

During our Wildlife Watches, our ornithologist Andres conducted detailed seabird surveys, recording observations for the citizen science platform eBird. We recorded **22** different species of birds in **14** checklists.

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

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

Wildlife List – Mammals



Wildlife List – Marine Mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Ursus maritimus</i>	polar bear	Eisbär	ours polaire
<i>Balaenoptera acutorostrata</i>	common minke whale	Zwergwal	rorqual à museau pointu
<i>Delphinapterus leucas</i>	beluga whale	Weißwal	béluga
<i>Phoca vitulina</i>	harbour seal	Seehund	phoque commun
<i>Pagophilus groenlandicus</i>	harp seal	Sattelrobbe	phoque du Groenland
<i>Odobenus rosmarus</i>	walrus	Walross	morse
<i>Megaptera novaeangliae</i>	humpback whale	Buckelwal	baleine à bosse
<i>Erignathus barbatus</i>	bearded seal	Bartrobbe	phoque barbu

Wildlife List – Land mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Rangifer tarandus platyrhynchus</i>	Svalbard reindeer	Rentier	renne du Spitzberg
<i>Vulpes lagopus</i>	Arctic fox	Polarfuchs	renard arctique







THX

Thanks for your participation!