

A photograph of a polar bear and its cub walking across a fragmented ice floe in the Arctic. The ice is broken into many small, irregular pieces, and the water between them is a deep blue. The sky is a pale, overcast white. The polar bear is in the center, walking towards the left, and the cub is following it from behind on the right. The text "Science & Education Report" is overlaid in the center in a dark blue font. A large, semi-transparent "IX" is also visible in the background.

Science & Education Report

MS Spitsbergen

23 June – 05 July 2026

Circumnavigating Svalbard
– The Ultimate Expedition





Science & Education Programme

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

Together we explored the natural beauty, exceptional wildlife, and rich history of this destination. We ran lectures and interactive activities on board and set out to discover our surroundings during landings, nature walks, and from the water.

History & Culture

We cruised to remote regions with a short but complex history.

We learned about the unusual international and political standing of Svalbard, shaped by the Svalbard Treaty 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 trapping era.

Scattered across the landscape stood huts — some still maintained and in use — alongside abandoned traps and weather-bleached whale bones. Each relic offered a vivid glimpse into the human history that once shaped these remote shores.





Ny-Ålesund

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

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

Geology

The Alkefjellet cliffs, composed of dark basalt and white limestone, rise up to 100 metres high and showcase the region's ancient volcanic activity. The cliffs' unique geological structure, formed during the Jurassic or early Cretaceous period, features a dark dolerite intrusion. The dolerite intrusion, which is Jurassic or Lower Cretaceous in age, was uncovered by erosion. The intrusion sits in Permian limestone that was metamorphosed into marble near the contact zone.



Sea Ice

Sea ice plays a vital role in regulating the climate and supporting marine life across both the Arctic and Antarctic. It reflects sunlight back into space, helping to cool the planet and insulate the ocean below.

In recent decades, however, both the extent and thickness of sea ice have declined as the climate warms.

Monitoring sea ice is therefore essential for understanding the impacts of a changing climate and for managing the risks of increased human activity across the Arctic.



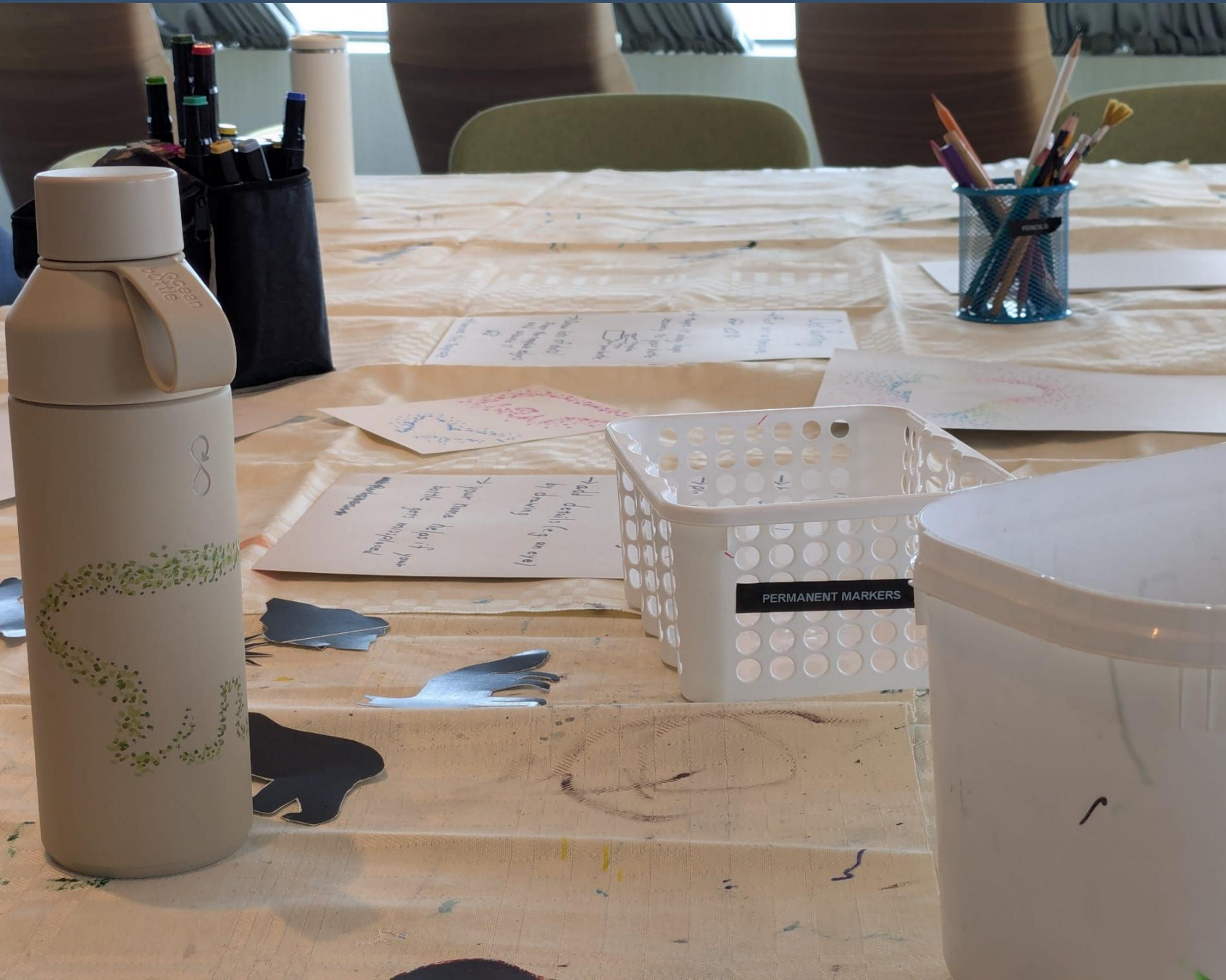
Workshops

Throughout the voyage we ran a pair of practical workshops designed to deepen your understanding of field skills relevant to Arctic travel and documentation.

We held a focused photography session on birds in flight, working through techniques for capturing fast-moving wildlife in challenging polar light.

We also ran a hands-on session on the contents of our stranding bags — the essential gear that accompanies every landing to keep guests safe and prepared in the event of an unexpected delay ashore.





Arts & Crafts

Many of you embraced the creative side of the voyage. Our main project was crafting small clay polar bears — a hands-on, playful way to take home a personal keepsake inspired by the wildlife around us.

Earlier in the voyage, we also decorated water bottles, turning everyday gear into colourful reminders of our time in the Arctic.



NASA's GLOBE Cloud Observer

Together with our Environmental Scientist, Jean, you observed the clouds and submitted your observations to NASA's GLOBE Cloud Observer on one occasion.

These cloud observations help NASA improve our understanding of Earth's atmosphere and climate, feeding directly into scientific research and climate modelling.

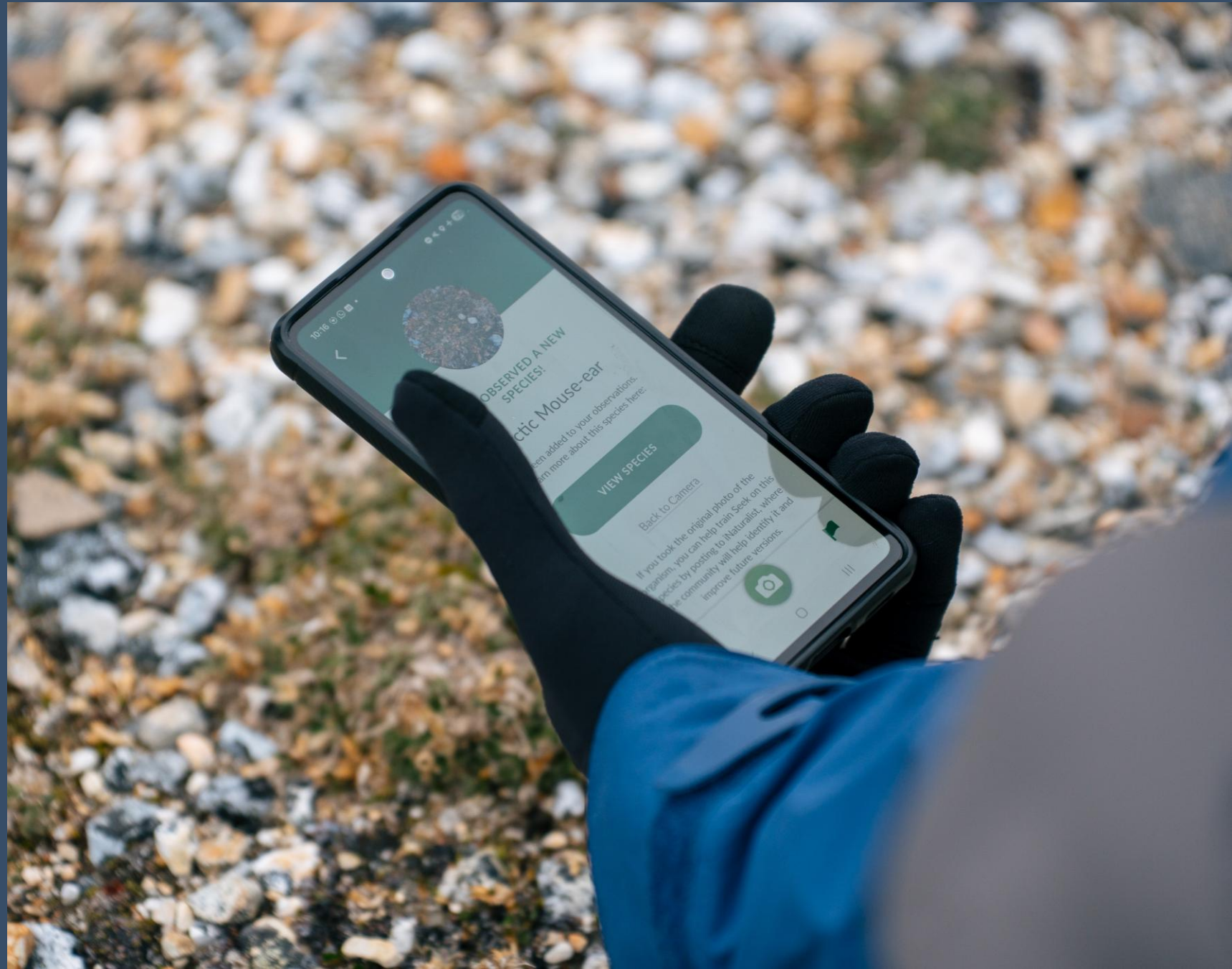
[View our data](#) on the global map

iNaturalist

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

During the voyage, we submitted 428 observations across 91 species. This effort builds a clearer picture of species distribution across the archipelago and supports researchers in their ongoing studies and conservation work.

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





Science Boat

Twenty-five eager participants joined our seven science boat outings at Gravneset, the Ice Edge, Texas Bar, Torellneset, and Gnålodden to study plankton and the hydrography of the region.

You helped monitor ocean clarity through the Secchi Disk Citizen Science study, contributing to research on the distribution of phytoplankton blooms.

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



Plankton Samples

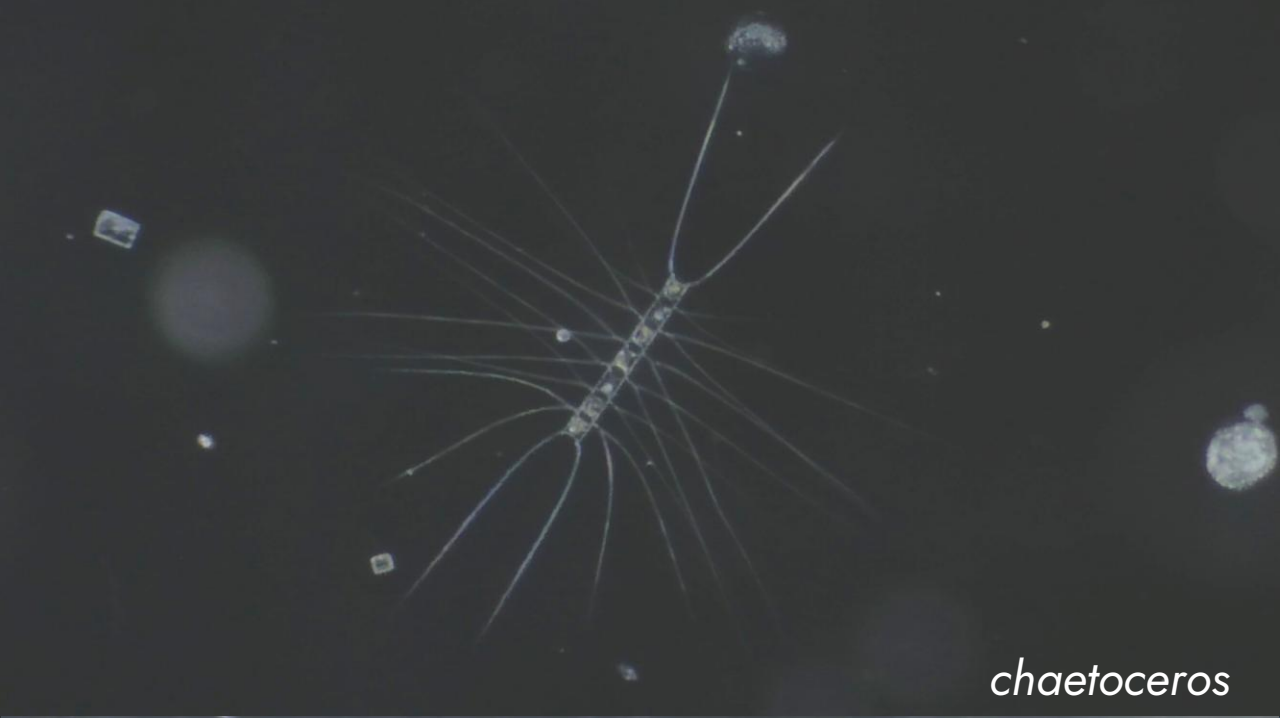
We explored the microscopic world of plankton — the tiny drifting organisms that fill the water column beneath us.

In the plankton samples collected from our seven science boat outings, we observed a wide diversity of organisms. Alongside copepods, the larvae of seafloor animals were particularly abundant, a reminder of how central early summer is to Arctic life cycles.

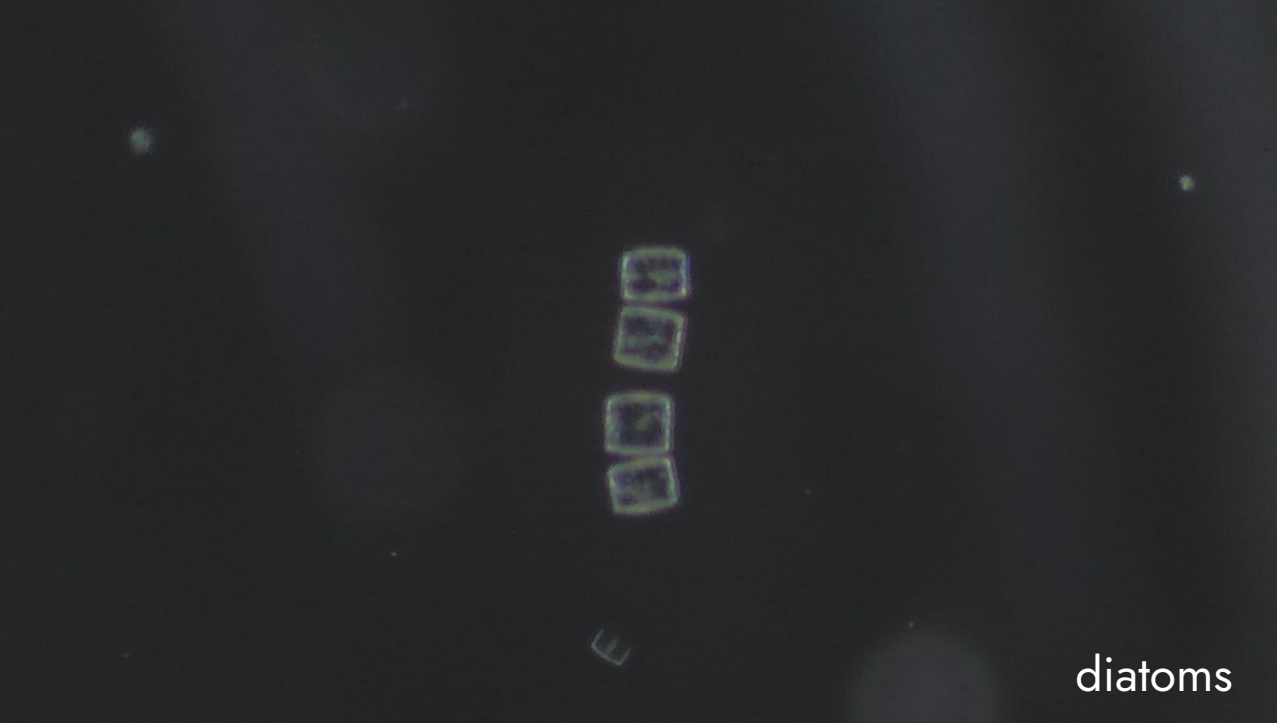
Head of an arrow worm



crab larvae



chaetoceros



diatoms



echinoderm larva



Beach Clean-up

Over the course of our voyage, we joined the Clean Up Svalbard initiative.

At Chermsideøya, we collected 44 kg of litter together — ropes, packaging bands, fragments of plastic packaging, and much more.

Our efforts fed directly into the Clean Up Svalbard project, helping to preserve Arctic ecosystems and support a cleaner, healthier future for the region.

Thank you for helping care for the places we visit.

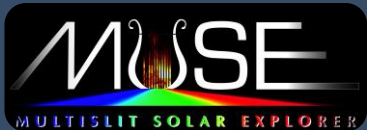
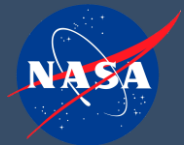
Guest Scientist

Dr Becca Robinson

Becca served as our onboard Heliophysicist, specialising in the study of the Sun and its influence on the Earth.

Her research focuses on the magnetic connection between the Earth and the Sun. She works as the Outreach Director for NASA's Multi-slit Solar Explorer (MUSE) mission, scheduled for launch in 2027. MUSE, along with its predecessor the Interface Region Imaging Spectrograph (IRIS), downlinks daily data to the KSAT SvalSat station in Longyearbyen, where it is passed on to Mission Operations Centres and then distributed to the science teams.

Becca also serves as the Education Director for the SETI Institute, where one of her goals is to strengthen collaboration between the Institute and research bodies in the Arctic. She noted that Svalbard offers exceptional opportunities for planetary science, aerospace technology, and the search for life — all areas central to the SETI Institute's mission.





Space Communications

Dr Becca Robinson

NASA's MUSE and IRIS missions study the Sun's dynamic atmosphere from polar low-Earth orbit. Both missions downlink their observations to the KSAT SvalSat station in Longyearbyen.

SvalSat's high-latitude location makes it ideal for receiving frequent passes from polar-orbiting satellites, so data from both missions reaches mission operations and science teams quickly for analysis and publication.



Midnight Sun

Dr Becca Robinson

Summer in Svalbard is a rare kind of experience. Because Svalbard sits so far north, its midnight sun season lasts for several months — far longer than at more southerly latitudes.

Unlike Svalbard, communities on the Arctic Circle see only a single full day of midnight sun, on the solstice itself. The summer solstice also marks the astronomical beginning of summer.

Wildlife List — Birds



Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Fulmarus glacialis</i>	northern fulmar	Eissturmvogel	fulmar boréal
<i>Stercorarius parasiticus</i>	Arctic skua (parasitic jaeger)	Schmarotzerraubmöwe	labbe parasite
<i>Stercorarius pomarinus</i>	pomarine skua (pomarine jaeger)	Spatelraubmöwe	labbe pomarin
<i>Stercorarius longicaudus</i>	long-tailed skua (long-tailed jaeger)	Falkenraubmöwe	labbe à longue queue
<i>Stercorarius skua</i>	great skua	Große Raubmöwe	grand labbe
<i>Larus hyperboreus</i>	glaucous gull	Eismöwe	goéland bourgmestre
<i>Pagophila eburnea</i>	ivory gull	Elfenbeinmöwe	mouette blanche
<i>Sterna paradisaea</i>	Arctic tern	Küstenseeschwalbe	sterne arctique
<i>Rissa tridactyla</i>	black-legged kittiwake	Dreizehenmöwe	mouette tridactyle
<i>Alle alle</i>	little auk	Krabbentaucher	mergule nain
<i>Fratercula arctica</i>	Atlantic puffin	Papageitaucher	macareux moine
<i>Cephus grylle</i>	black guillemot	Gryllteiste	guillemot à miroir
<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 maritima</i>	purple sandpiper	Meerstrandläufer	bécasseau violet
<i>Arenaria interpres</i>	ruddy turnstone	Steinwälzer	tournepierre à collier
<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>Anser brachyrhynchus</i>	pink-footed goose	Kurzschnabelgans	oie à bec court
<i>Branta leucopsis</i>	barnacle goose	Weißwangengans	bernache nonnette
<i>Cygnus cygnus</i>	whooper swan	Singschwan	cygne chanteur
<i>Somateria mollissima</i>	common eider	Eiderente	eider à duvet
<i>Somateria spectabilis</i>	king eider	Prachteiderente	eider à tête grise
<i>Polysticta stelleri</i>	steller's eider	Scheckente	eider de steller
<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 Ornithologists Julia and Marcus led detailed seabird surveys, logging each sighting for the eBird Citizen Science platform. Together we recorded **27 species** across **22 checklists**.

This work feeds directly into global bird conservation efforts, sharpening our collective picture 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 pontu
<i>Delphinapterus leucas</i>	beluga whale	Weißwal	béluga
<i>Phoca vitulina</i>	harbour seal, common seal	Seehund	phoque commún
<i>Pagophilus groenlandicus</i>	harp seal	Sattelrobbe	phoque du groenland
<i>Odobenus rosmarus</i>	walrus	Walross	morse

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







A photograph of a massive, blue-tinted glacier wall rising from the water. In the foreground, a small zodiac boat with several people in orange gear is on the water. The scene is set in a cold, arctic environment with icebergs floating nearby.

Thanks for your participation!