

The background of the slide features a deep blue underwater scene with two whales. A large, semi-transparent watermark consisting of the Roman numerals 'IX' is positioned on the left side of the image. The text 'Science & Education Report' is centered horizontally across the middle of the image.

Science & Education Report

Circumnavigating Svalbard – The Ultimate Expedition

MS Fram

11 – 23 August 2026



History & Culture

Ny-Ålesund

At nearly 79°N, Ny-Ålesund is the world's northernmost year-round research station — once a coal-mining outpost, now an international hub for Arctic science. In 1926, Roald Amundsen, American Lincoln Ellsworth, and Italian Umberto Nobile took the Norge airship over the North Pole from here; Amundsen's mooring mast and bronze bust still honour Svalbard's exploration legacy.



Science Boat

During this voyage, we conducted seven scientific surveys by boat, travelling from Hornsund in the south of Spitsbergen to the northernmost points of Chermsideøya and Phippsøya, where a snowy morning welcomed us. We took additional samples at the ice edge during our ice landing. While the rest of the archipelago was teeming with zooplankton, the far northern community was characterised by a diverse phytoplankton population.



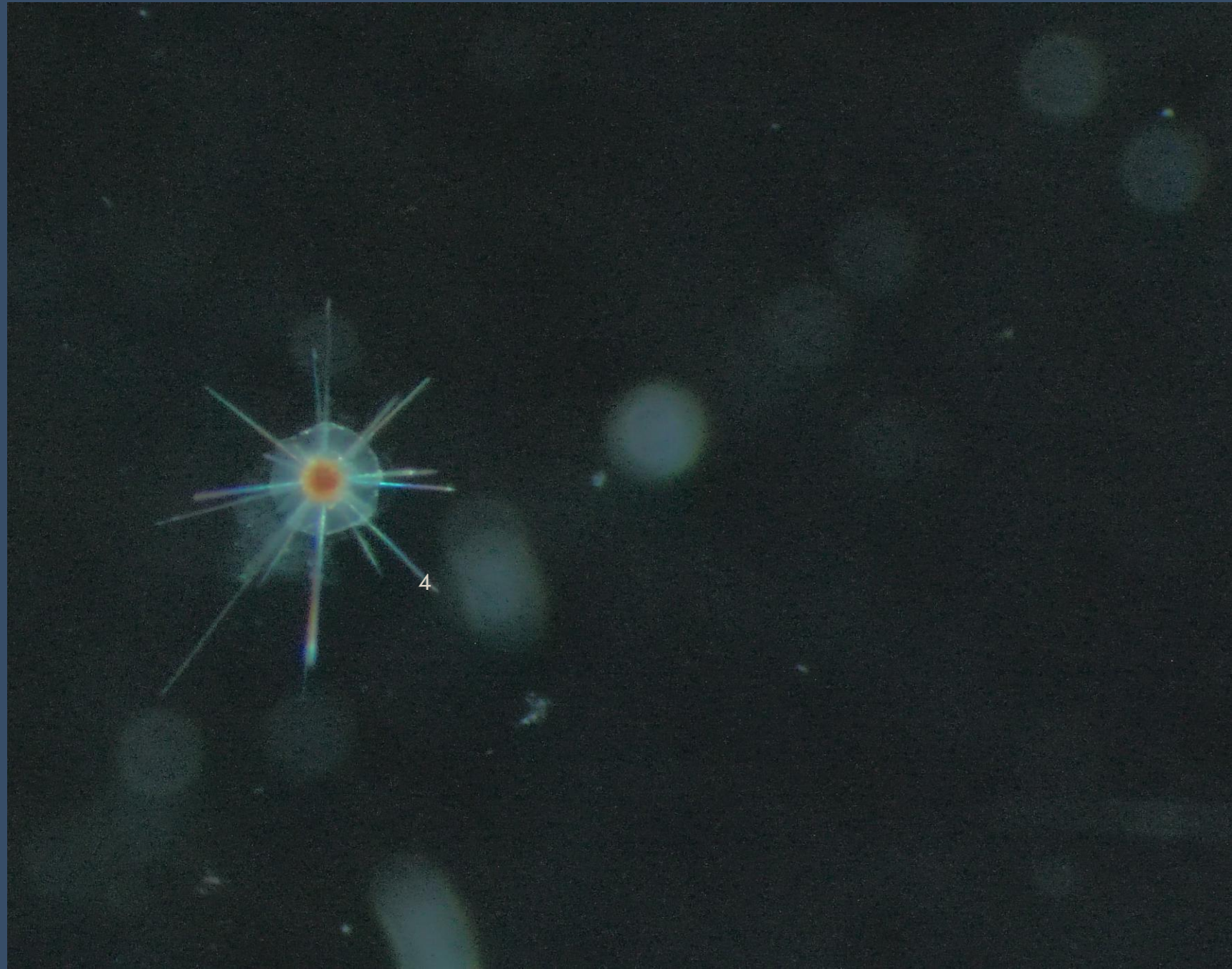
Science Boat

We performed CTD measurements, collected water samples, and launched our hydrophone to record the underwater soundscapes. Among our results, we observed megalopa larvae of crustaceans, larval sea worms and copepods, as well as adult individuals. We detected a bloom of zooplankton (copepods) all around the archipelago while phytoplankton bloomed along the ice edge. Together, these results will help us better understand the ongoing changes in the Arctic Ocean through the living platform and network of [EMODnet](#), where our data will be submitted at the end of this voyage.



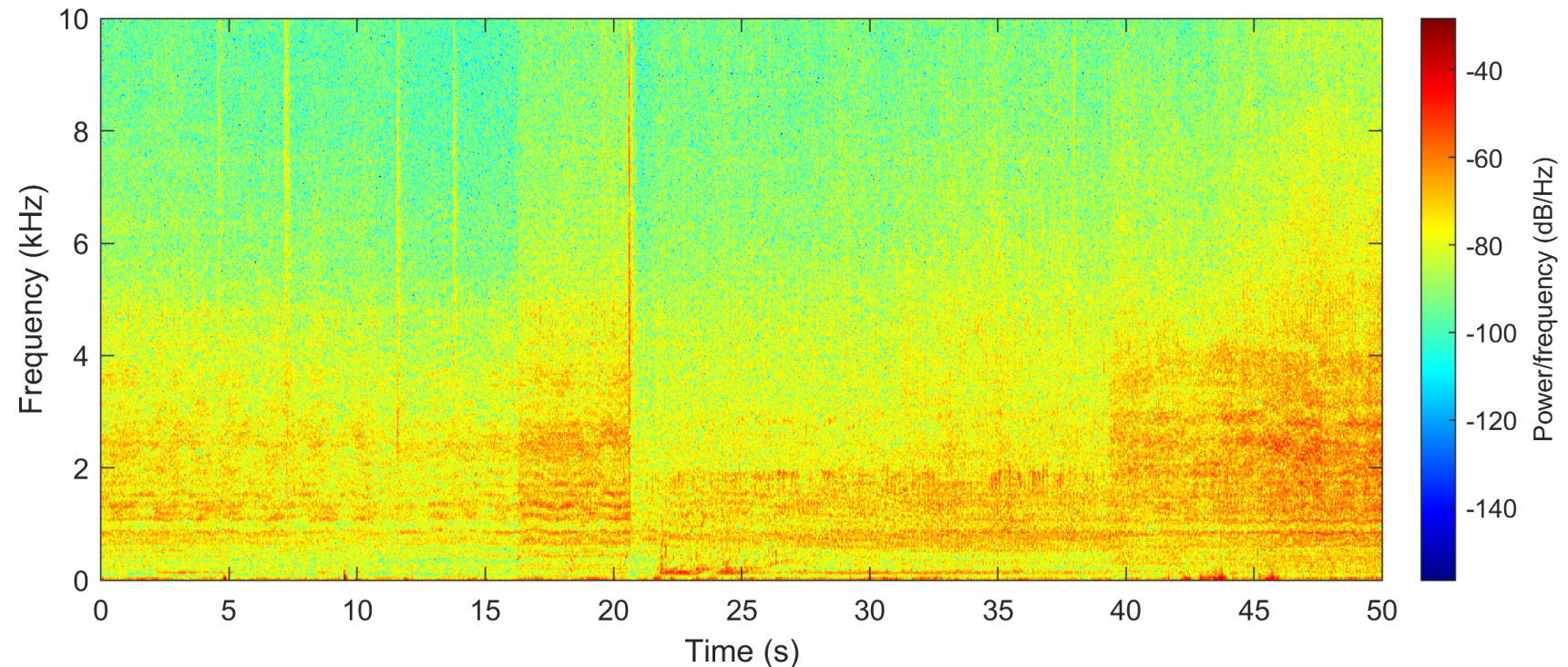
Science Boat

This photo, taken under our microscope, shows a sample of plankton from the edge of the ice, teeming with phytoplankton. The sample also contained radiolarians: tiny single-celled organisms known for their geometric shapes and silica skeletons. Their beauty has inspired many artists, including the naturalist Ernst Haeckel, whose illustrations remain celebrated today.



Science Boat

Using our hydrophone, we listened to the underwater world and learned that it is far from silent. Among other sounds reminiscent of murmuring cascades and rainfall, we could make out the signature of the ship, represented in this spectrogram — a visual representation of sound — by the red colours at the bottom. This audio data contributed to the overall monitoring of the Arctic Ocean and will be submitted to the [EMODnet](#) platform.



Underwater Drone

We deployed our underwater drone in Chermsideøya and recorded the presence of kelp (*Laminaria* & *Saccharina* spp.) in shallow waters (6 m depth), covered by fine sediments from the surrounding glaciers. Soft sediment bottoms are also the preferred habitat for sea cucumbers and other deposit-feeding organisms such as marine worms and brittle stars.

Kelp forests are vital ecosystems found in temperate and polar waters that can thrive in harsh environments such as glacial areas. Help save the kelp.

View the highlights from our underwater drone footage [on YouTube](#).



iNaturalist

Thanks to your efforts, we recorded over 2,000 opportunistic observations representing nearly 150 species. Summer is drawing to a close in the Arctic, but plants are still flourishing. They represent around 40% of our observations, followed by molluscs, other animals, and fungi.

By sharing your data on iNaturalist, you are contributing to a global, open-access database that fuels scientific research and conservation monitoring. These records are vital tools for researchers tracking species distribution and assessing ecosystem health.

You can view the project and upload your observations from our voyage [by clicking here.](#)



Event in progress



FRGRE2618 Circumnavigating Spitsbergen - In the ...

Aug 11, 2026 - Aug 23, 2026

About

Leave 7

Summary of the wildlife observations from expedition team members and guests on-board MS FRAM during our summertime navigation along the coast of Svalbard.

[Read More >](#)

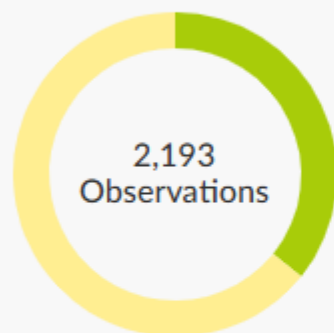
[Your Membership](#)

Project Members Only

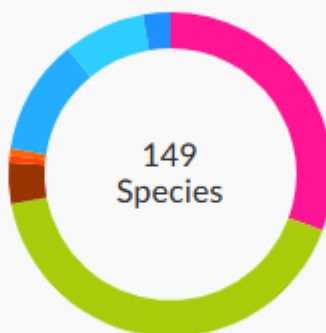
[Project Journal](#)



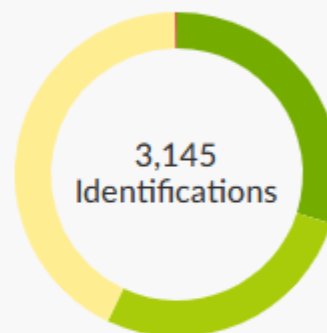
Stats



● Research Grade
● Needs ID
● Casual



● Unknown
● Protozoans
● Fungi
● Plants
● Chromista
● Mollusks
● Insects
● Arachnids
● Ray-Finned F...
● Amphibians
● Reptiles
● Birds
● Mammals
● Other Animals



● Improving
● Supporting
● Leading
● Maverick



NASA's GLOBE Cloud Observer

We collected two observations for NASA, one of them giving us a match on 19 August with the NASA PACE satellite, where we spotted very isolated clouds.

Do not hesitate to continue looking at the sky back home, since every contribution helps scientists.

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



Beach clean-up

MS Fram is on a mission to collect ocean waste in the isolated locations we visit.

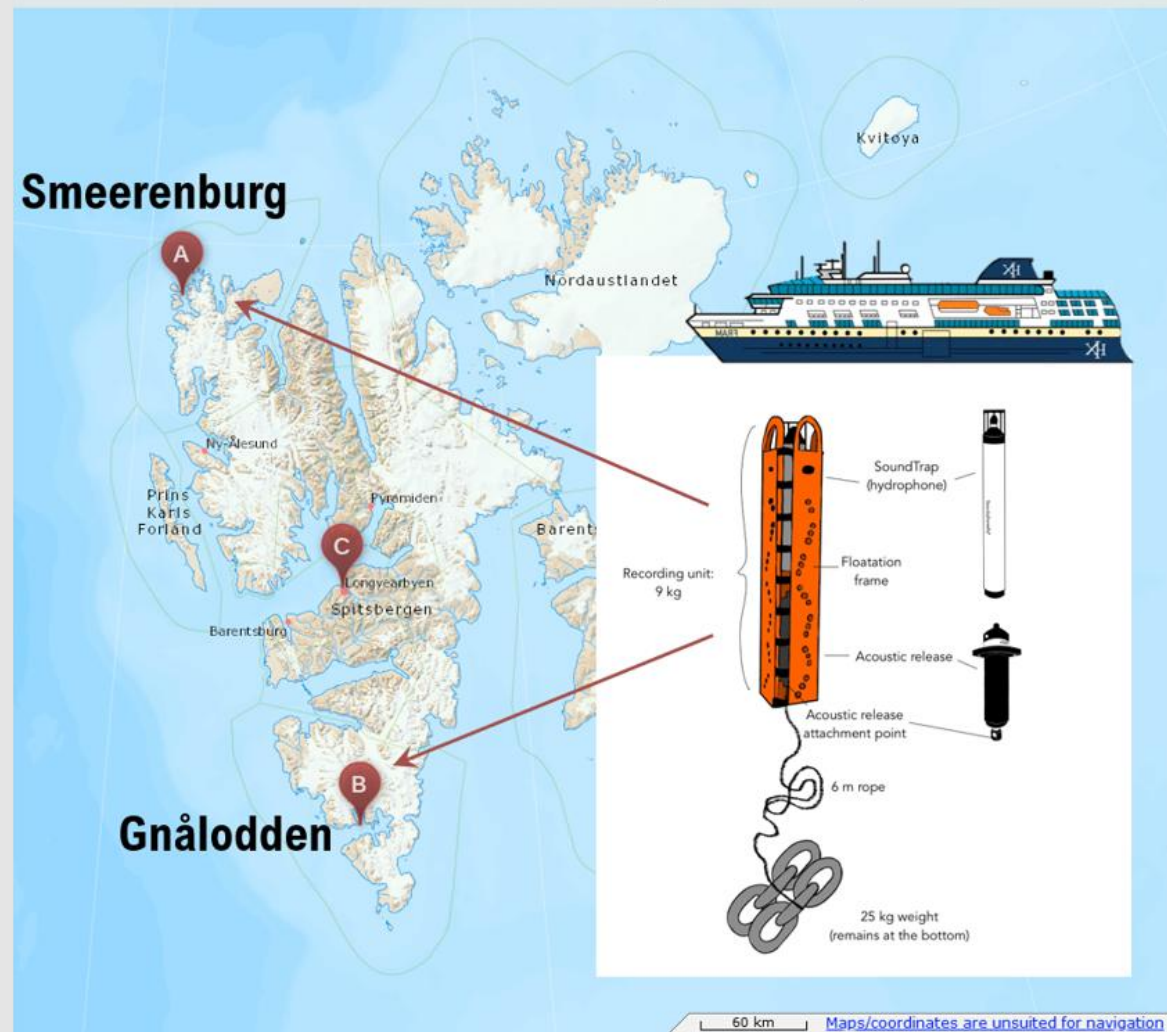
We collected 6.510 kg of ocean waste during our voyage, most of it at Smeerenburg.

Since the beginning of the Svalbard season, we have collected 73.510 kg of waste in total, all carefully disposed of in Longyearbyen.

During this voyage

Successful recovery of summer data

→ Capturing the summer soundscape, focusing on acoustic characteristics of expedition operations



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Sound-Cruising

Guest Scientists
Heidi Ahonen & Eeva Ylinen

During this voyage, Heidi Ahonen and Eeva Ylinen successfully recovered two underwater recorders (SoundTraps) located in Smeerenburg and Gnålodden, Hornsund. These recorders had collected continuous data over the summer period, and we will incorporate this data into the ongoing analysis of ship noise characteristics and noise budgets associated with local cruise activities to identify parameters that might suggest prolonged, repeated and/or cumulative noise exposure for marine mammals. Results will advise and aid decision-making on whether operational changes, technical, and regulatory measures to reduce underwater noise from cruise operations and similar activities in the fjords around Svalbard are necessary.

Sound-Cruising is a research project by the Norwegian Polar Institute, Aarhus University, and AECO in collaboration with HX. The project spans two operational seasons (2025–2026) and is funded by the Svalbard Environmental Protection Fund.



NMBU – Rare Plant Species Recollection

Guest Scientists
Siri Fjellheim & Astrid Sinnes

During two weeks of fieldwork, Siri and Astrid have sampled a total of 78 plant species that will be analysed for the presence of the winter antifreeze carbohydrate fructan, and secured a plant of *Pleuropogon sabinei* that will have its entire genome sequenced.



Wildlife

List — Marine Mammals

Wildlife List – Marine Mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH
<i>Balaenoptera acutorostrata</i>	common minke whale	Zwergwal
<i>Balaenoptera physalus</i>	fin whale	Finnwal
<i>Megaptera novaeangliae</i>	humpback whale	Buckelwal
<i>Lagenorhynchus albirostris</i>	white-beaked dolphin	Weißschnauzendelfin
<i>Ursus maritimus</i>	polar bear	Eisbär
<i>Phoca vitulina</i>	harbour seal, common seal	Seehund
<i>Pagophilus groenlandicus</i>	harp seal	Sattelrobbe
<i>Pusa hispida</i>	ringed seal	Ringelrobbe
<i>Odobenus rosmarus</i>	walrus	Walross



Happywhale

During this voyage, we submitted four humpback whale photos to Happywhale: dorsal fins of a mother and calf, and three flukes. Two were registered as new individuals — HW-MN0200874 and HW-MN0200875 — a new addition to the monitoring of whales visiting Svalbard during the feeding season. The photo here shows HW-MN0200875 in a feeding frenzy as we left Hornsund.

We also spotted minke whales, fin whales, walruses, and polar bears. Keep your eyes on the horizon once you are back home — we may see you on board again soon. Thanks for travelling with HX.

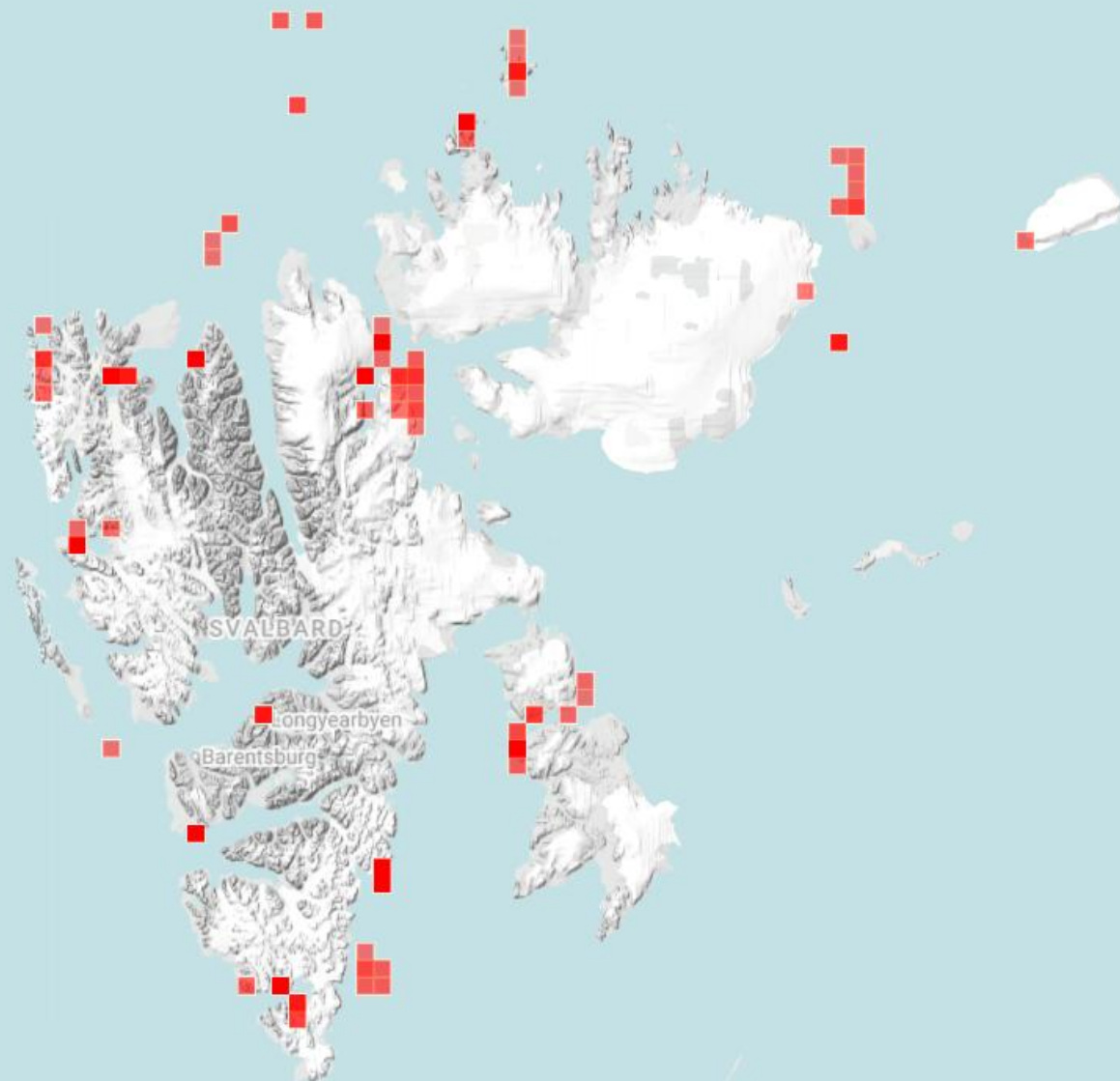
Do not forget to visit MS Fram's profile on Happywhale by [clicking here](#).





Norwegian Polar Institute

Svalbard Visitors' Marine Mammal Sightings Database



Species	Number of individuals
Fin whale	25
Humpback whale	16
Minke whale	13
Beluga	1 (dead)
Polar bear	8
Walrus	80
Harp seal	3
Harbour seal	1
Ringed seal	1

Wildlife List — Land Mammals



Wildlife List – Land Mammals

SCIENTIFIC NAME		ENGLISH	DEUTSCH
<i>Rangifer tarandus</i>		reindeer	Rentier
<i>Vulpes lagopus</i>		Arctic fox	Polarfuchs

Wildlife

List — Birds



Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH
<i>Alle alle</i>	little auk/dovekie	Krabbentaucher
<i>Cephus grylle</i>	black guillemot	Gryllteiste
<i>Fratercula arctica</i>	Atlantic puffin	Papageitaucher
<i>Fulmarus glacialis</i>	northern fulmar	Eissturmvogel
<i>Larus hyperboreus</i>	glaucous gull	Eismöwe
<i>Rissa tridactyla</i>	black-legged kittiwake	Dreizehenmöwe
<i>Stercorarius parasiticus</i>	arctic skua/ parasitic jaeger	Schmarotzerraubmöwe
<i>Stercorarius skua</i>	great skua	Skua
<i>Sterna paradisaea</i>	Arctic tern	Küstenseeschwalbe
<i>Uria lomvia</i>	Brünnich's guillemot / thick-billed murre	Dickschnabellumme
<i>Pagophila eburnea</i>	ivory gull	Elfenbeinmöwe
<i>Stercorarius pomarinus</i>	pomarine skua/jaeger	Spatelraubmöwe
<i>Stercorarius longicaudus</i>	long-tailed skua/jaeger	Falkenraubmöwe

Wildlife List – Waterbirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH
<i>Anser brachyrhynchus</i>	pink-footed goose	Kurzschnabelgans
<i>Branta leucopsis</i>	barnacle goose	Weißwangengans
<i>Calidris maritima</i>	purple sandpiper	Meerstrandläufer
<i>Branta bernicla</i>	brant goose	Ringelgans
<i>Gavia stellata</i>	red-throated diver/loon	Sterntaucher
<i>Somateria mollissima</i>	common eider	Eiderente
<i>Charadrius hiaticula</i>	common ringed plover	Sandregenpfeifer

Wildlife List — Landbirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH
<i>Plectrophenax nivalis</i>	snow bunting	Schneeammer





eBird

Thanks to Enzo's efforts combined with yours, we recorded around 20 bird species during 13 surveys (checklists).

The most numerous species was the black-legged kittiwake, with 123 individuals observed, followed by the northern fulmar with 65 individuals.

You can review these observations by joining our [Trip Report](#) for this voyage.

Wildlife List — Flora



Wildlife List — Flora

SCIENTIFIC NAME	ENGLISH	DEUTSCH
<i>Flavocetraria cucullata</i>	curled snow lichen	Kapuzenflechte
<i>Bistorta vivipara</i>	alpine bistort	Knöllchen-Knöterich
<i>Cerastium arcticum</i>	Arctic mouse-ear chickweed	Arktisches Hornkraut
<i>Saxifraga cernua</i>	drooping saxifrage	Nickende Steinbrech
<i>Pedicularis hirsuta</i>	hairy lousewort	Behaartes Läusekraut
<i>Xanthoria spp.</i>	elegant sunburst lichen	Zierliche Gelbflechte
	feather mosses	
<i>Silene acaulis</i>	moss campion	Stengelloses Leimkraut
<i>Saxifraga cespitosa</i>	tufted saxifrage	Rasen-Steinbrech
<i>Carex spp.</i>	sedge	
<i>Alaria esculenta</i>	winged kelp	
<i>Fucus vesiculosus</i>	bladder wrack	
<i>Saxifraga hirculus</i>	marsh saxifrage	Moor-Steinbrech
<i>Dryas octopetala</i>	mountain avens	Silberwurz
<i>Oxyria digyna</i>	mountain sorrel	Alpen-Säuerling
<i>Cochlearia officinalis</i>	scurvy-grass	Gebräuchliches Löffelkraut

In Summary

Our summertime expedition around Svalbard was a journey into some of the most remote waters of the Arctic. Our itinerary allowed us to collect valuable data regarding terrestrial flora, fauna, and marine ecosystems. Key scientific highlights included sightings of several polar bears, fin whales, Arctic foxes, and reindeer. Our science boat sessions were popular, alongside our lectures and workshops, helping to bridge the gap between science and understanding of the remote ecosystem we visited.

What data?	How much data?
iNaturalist	2000+ observations, 157 species
Nasa Cloud Globe Observer	2 observations
eBird	13 checklists, 20 species
HappyWhale	4 submissions
CTD profiles	6 submissions
Secchi Disk	2 submissions

Thank you!

The Fram Science and Education Team extends heartfelt thanks for choosing HX to explore the western part of the Svalbard archipelago during springtime. Your participation not only supports the ongoing work of researchers but also enables them to join our voyages, carry out meaningful studies, and access essential logistical resources that are often difficult to secure.

We appreciate your curiosity and enthusiasm for the natural world — from birds and marine mammals to flowers, lichens, mosses, and even the microscopic life found in a drop of water.

It was a joy to exchange ideas, reflect on history over coffee, and marvel together at the diverse ecosystems we encountered. We hope this journey will remain among your most treasured memories.





THX

**Thanks for your
participation!**