Science & Education Report

MS Fridtjof Nansen

Grand Greenland:
The Icy Giants of Disko Bay

24 June 2026 – 04 July 2026

Science & Education Programme

As we sailed along the Greenland coast, we journeyed together through landscapes shaped by sea, weather, wildlife, history, and time.

Through lectures, workshops, time on deck, and moments ashore, we explored coastlines, fjords, islands, seabirds, whales, plants, clouds, and plankton — and the forces shaping this polar route — while contributing to Citizen Science along the way.

We hope these shared experiences deepened your connection to the places we visited and inspired you to keep observing, recording, and caring for the natural world beyond this voyage.

History & Culture

We discovered Greenlandic settlements and received a warm welcome from every community we visited. Through engaging lectures and discussions with Sidsel, Kasper and Chef Inuunguaq, we gained a deeper understanding of Greenlandic traditions, cuisine, daily life, and the deep connection between people and nature. We also learned about the challenges and opportunities of living in the Arctic and were introduced to basic Greenlandic words, enriching our understanding of Greenland's unique culture and way of life.

NASA's GLOBE Cloud Observer

During our voyage, we conducted four Cloud Observation sessions, comparing what we saw overhead with satellite data passing above.

Every observation helps scientists refine cloud classification, weather forecasting, and climate models — small notes from the deck that feed a much larger picture.

Ready to keep contributing from home? Continue observing through the GLOBE Observer app.

View our data on the global map

iNaturalist

Throughout this voyage, guests played a vital role in documenting the biodiversity of Greenland.

Together, we gathered:

- 775 observations
- 189 species identified
- 7 observers participating

On this voyage, we recorded the hybrid dryas even further south than documented last year — almost 2° latitude (220 km) beyond the previous record.

Every observation helps scientists build a clearer picture of biodiversity and the changes underway in Arctic and sub-Arctic regions.

View our data submitted on our iNaturalist project

Red-tipped lousewort — *Pedicularis flammea*

Golden Arctic willow — *hybrid dryas*

Woolly lousewort — *Pedicularis lanata*

Golden Arctic willow — *hybrid dryas*

Science Boat

Over 10 science boat sessions, you moved beyond observation and took part in hands-on exploration of the waters along our route.

Using the plankton net, CTD, and Secchi disk, you collected samples and measurements to better understand the hidden world beneath the surface, from tiny drifting organisms to water conditions and clarity.

Together with our guest scientist Tammy, you also collected various data including water samples for the Iceberg Ecosystems project. These samples will help to understand how the increase of meltwater and the presence of icebergs impact the ecosystems.

View our data submitted to the Secchi Disk Project

CTD

Beneath the surface, the ocean holds important clues about change.

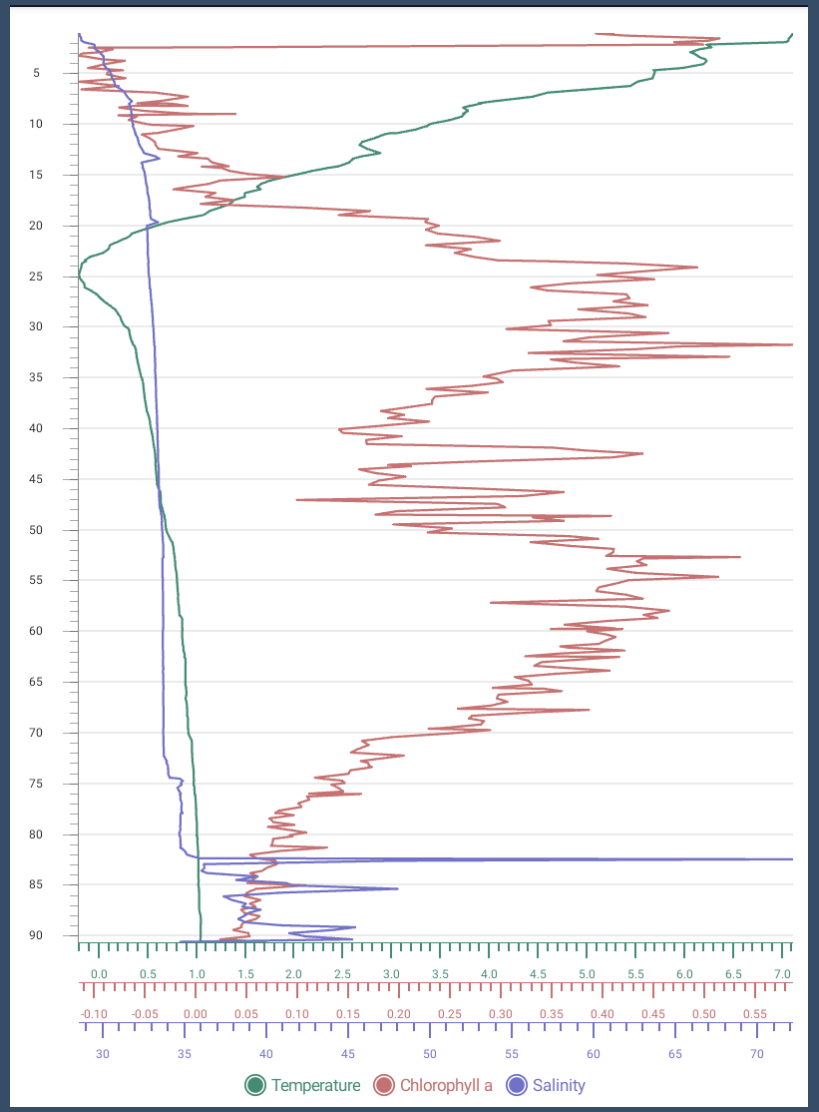
With the CTD, you measured temperature, salinity, and depth, helping us better understand water conditions along our route.

Each profile added useful data on how freshwater, currents, and ocean layers shape these waters, one measurement at a time.

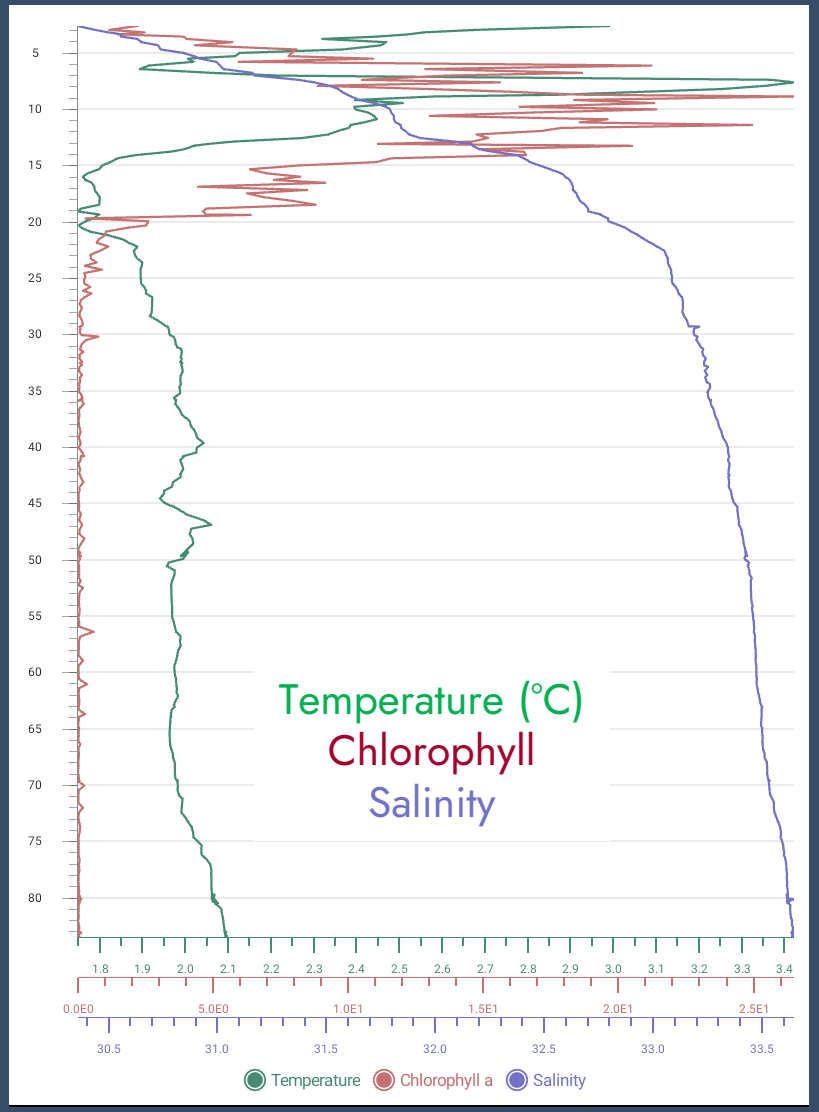
All the CTD data you collected are downloaded to the European Marine Observation and Data Network (EMODnet)

CTD

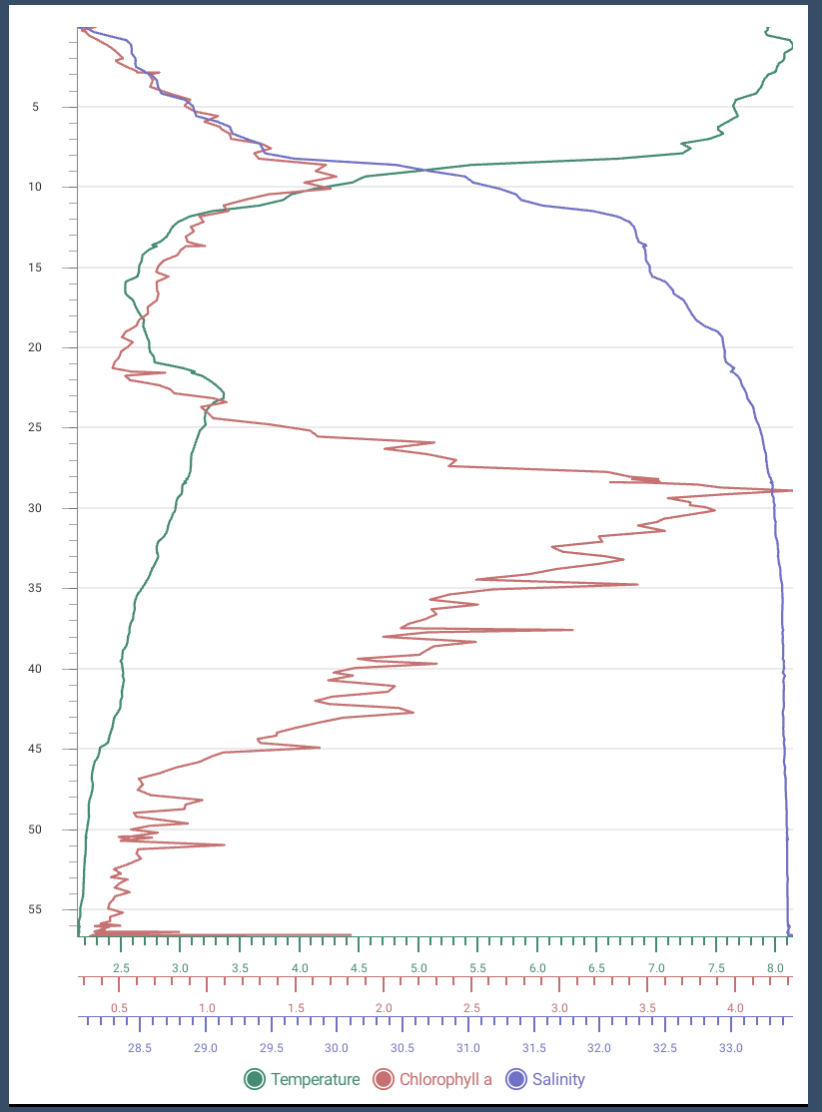
Marmorilik



Eqip Sermia



Evighedsfjord

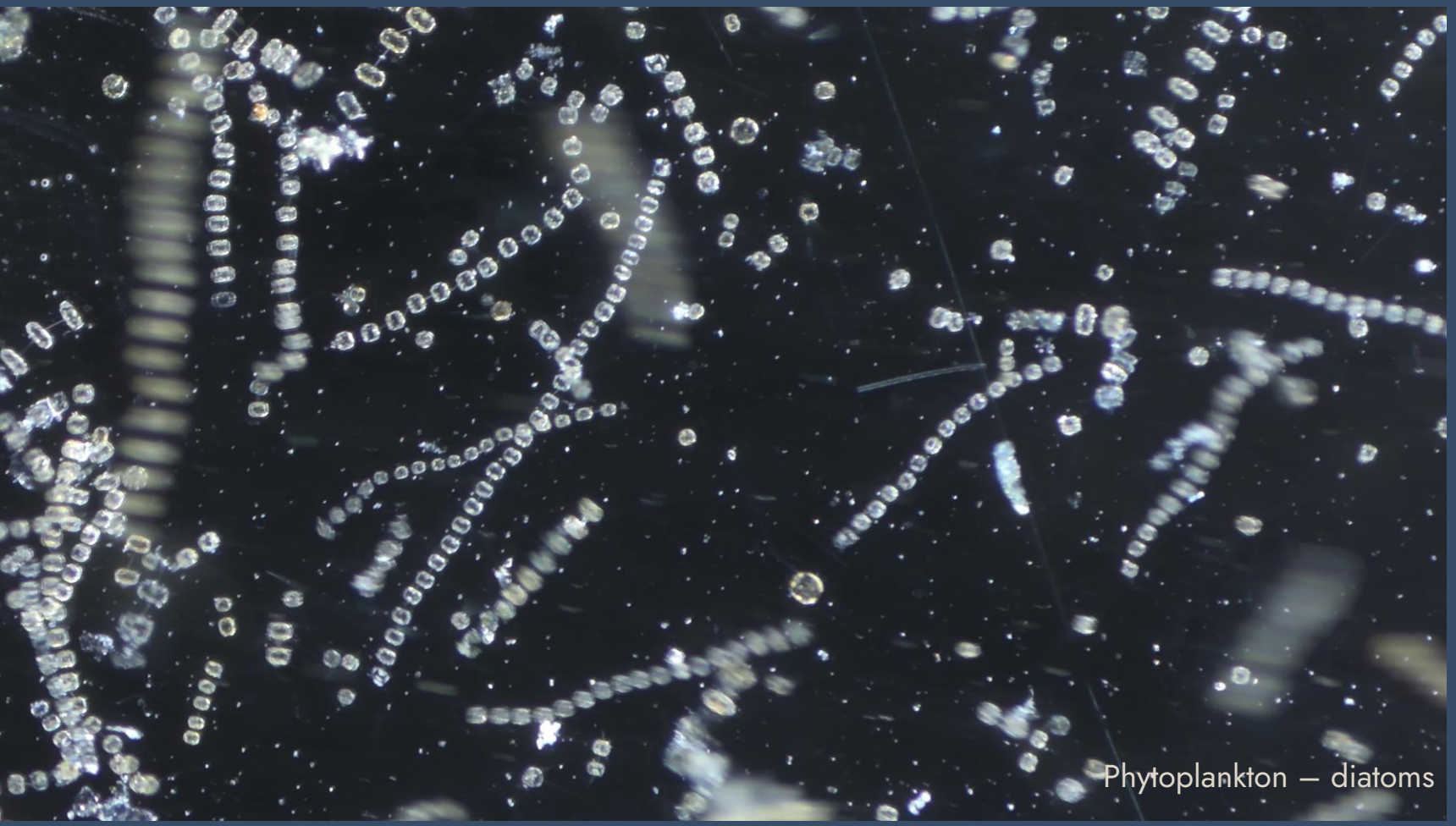


Plankton Samples

Back in the Science Centre, we brought our samples into focus under the microscope, revealing a hidden world of plankton.

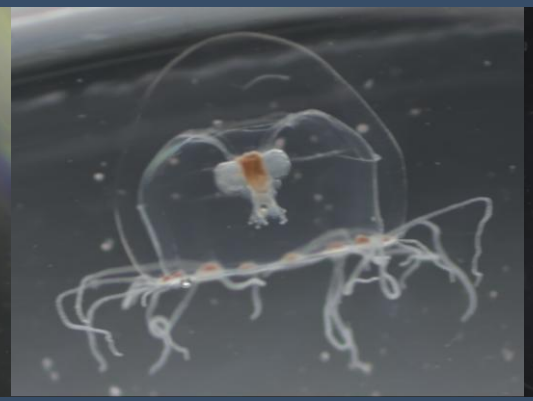
Using the main screen and smaller microscopes, you could explore each drop of water up close.

What appeared invisible to the naked eye quickly became a vivid reminder that these tiny organisms form the foundation of the rich ecosystems we've been travelling through.



Phytoplankton – diatoms

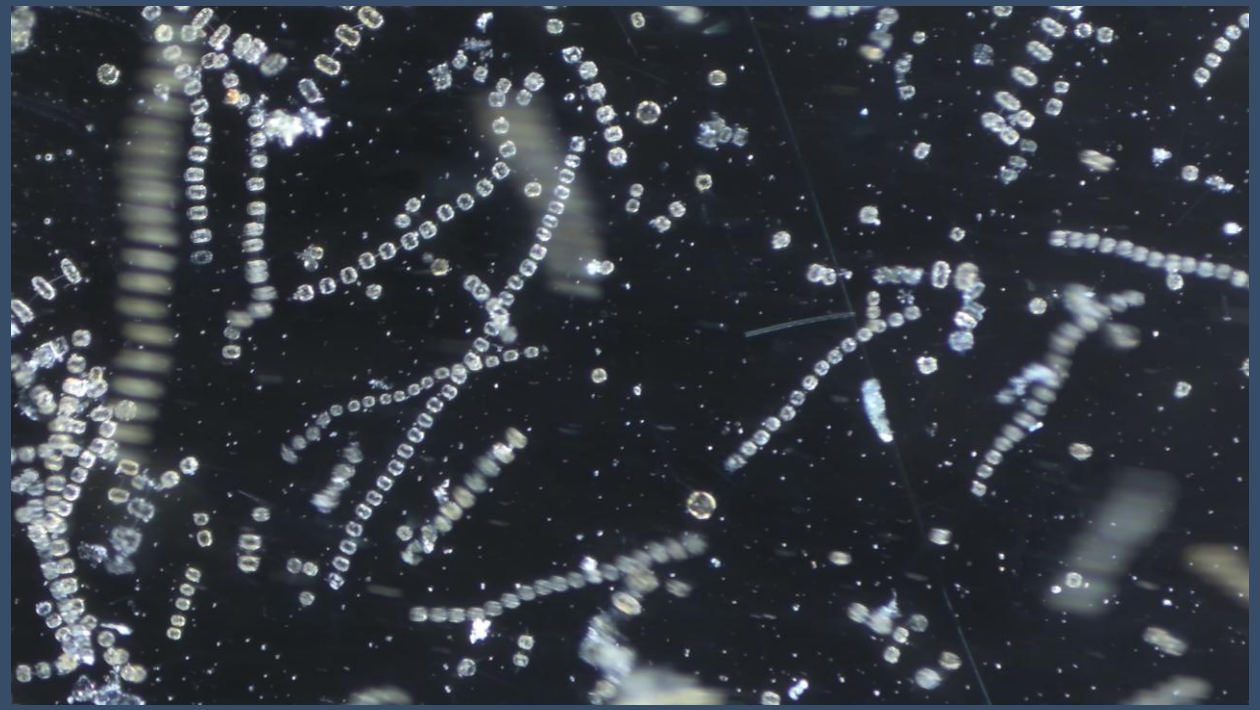
Zooplankton Larvae



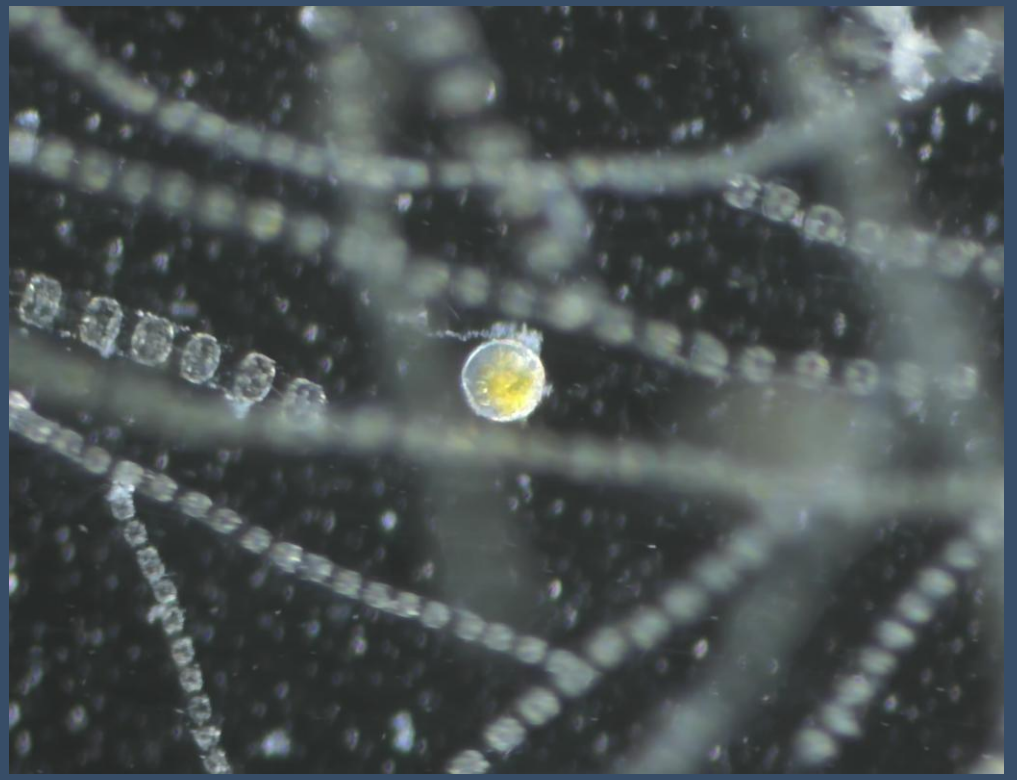
Jellyfish

Amphipod

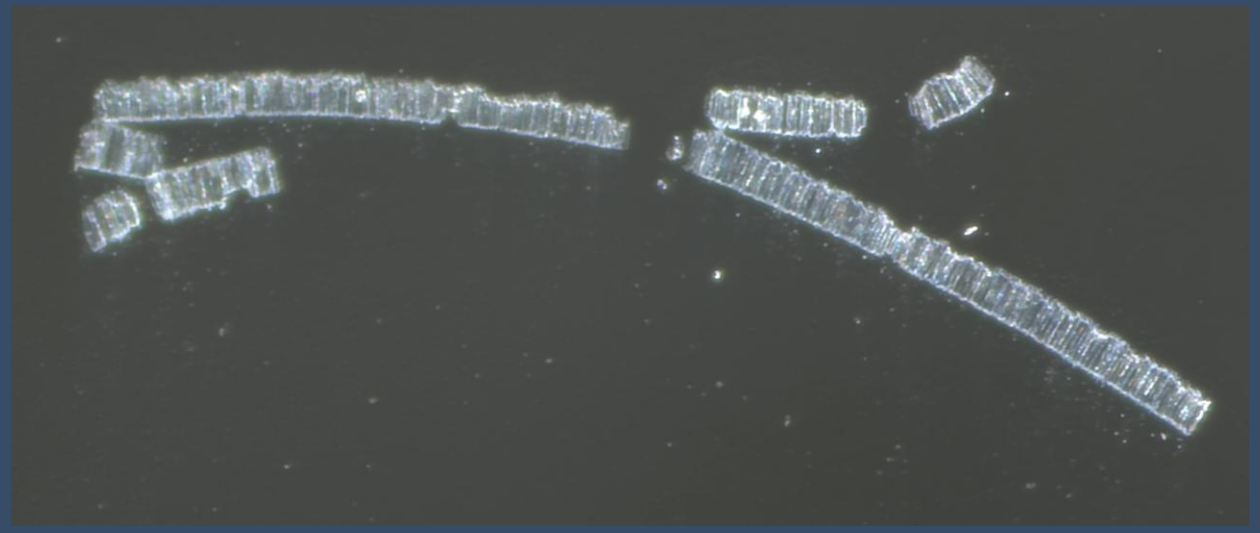
Phytoplankton



Diatoms



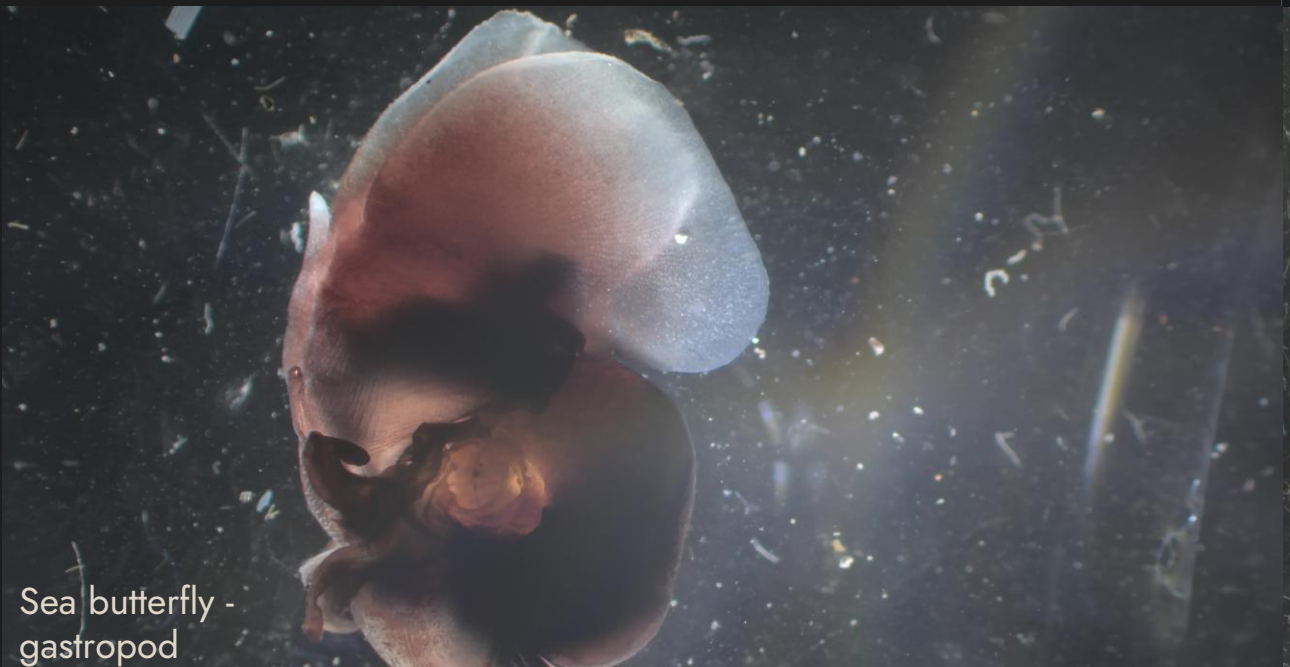
Dinoflagellate



Zooplankton

Ostracod

Amphipod



Sea butterfly - gastropod

Chaetognatha

Guest Scientist

Dr Tammy Russell joined us on board for the Iceberg Ecosystems project, led by the Scripps Institution of Oceanography. The project sets out to understand how iceberg abundance and meltwater shape the ecosystems of Greenland.

Across four science boat sessions, we collected:

- Bird, ocean colour, and iceberg observations
- 14 meltwater samples
- 7 phytoplankton samples for identification and abundance
- 7 samples for nutrient analysis

Read more about the IceECo project

Visit our Science & Education Hub online
to find out more

Wildlife List — Birds

Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Alle alle	little auk	Krabbentaucher	mergule nain
Cepphus grylle	black guillemot	Gryllteiste	guillemot à miroir
Fulmarus glacialis	northern fulmar	Eissturmvogel	fulmar boréal
Larus fuscus	lesser black-backed gull	Heringsmöwe	goéland brun
Larus glaucoides	Iceland gull	Polarmöwe	goéland arctique
Larus hyperboreus	glaucous gull	Eismöwe	goéland bourgmestre
Larus marinus	great black-backed gull	Mantelmöwe	goéland marin
Phalacrocorax carbo	great cormorant	Kormoran	grand cormoran
Rissa tridactyla	black-legged kittiwake	Dreizehenmöwe	mouette tridactyle
Sterna paradisaea	Arctic tern	Küstenseeschwalbe	sterne arctique
Uria lomvia	Brünnich's guillemot	Dickschnabellumme	guillemot de brünnich

Wildlife List – Water birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Anas platyrhynchos	mallard	Stockente	canard colvert
Branta canadensis	Canada goose	Kanadagans	bernache du Canada
Calidris maritima	purple sandpiper	Meerstrandläufer	bécasseau violet
Gavia stellata	red-throated diver	Sterntaucher	plongeon catmarin
Mergus serrator	red-breasted merganser	Mittelsäger	harle huppé
Phalaropus lobatus	red-necked phalarope	Odinshühnchen	phalarope à bec étroit
Somateria mollissima	common eider	Eiderente	eider à duvet

Wildlife List – Land birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Acanthis flammea	redpoll	Birkenzeisig	sizerin flammé
Calcarius lapponicus	Lapland longspur	Spornammer	plectrophane lapon
Corvus corax	common raven	Kolkrabe	grand corbeau
Lagopus muta	rock ptarmigan	Alpenschneehuhn	lagopède alpin
Oenanthe oenanthe	northern wheatear	Steinschmätzer	traquet motteux
Plectrophenax nivalis	snow bunting	Schneeammer	plectrophane des neiges

eBird

Bird-watching is more than a pastime — it is a working tool for science. eBird, a global Citizen Science platform, lets bird enthusiasts record and share sightings, feeding valuable data into research and conservation.

During our voyage, our onboard Ornithologists completed 34 checklists and recorded 23 bird species along the way.

Every entry adds to a growing database that helps scientists track migration patterns, monitor populations, and understand bird behaviour across Greenland.

View our data on our eBird trip report

Wildlife List — Marine Mammals

Wildlife List – Marine Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Balaenoptera physalus	fin whale	Finnwal	rorqual commun
Megaptera novaeangliae	humpback whale	Buckelwal	baleine à bosse

Happywhale

By submitting photos to Happywhale, we help scientists follow individual animals through their lives — building a clearer picture of migration routes and population health.

On this voyage, we had a handful of distant encounters with both fin whales and humpback whales. We submitted two photos of whales sighted near Qeqertarsuaq and are now waiting to hear whether these individuals are already known in the catalogue.

Ready to add more to the record? If you have additional photos from this voyage or previous ones, we encourage you to submit them and follow your whales' journeys.

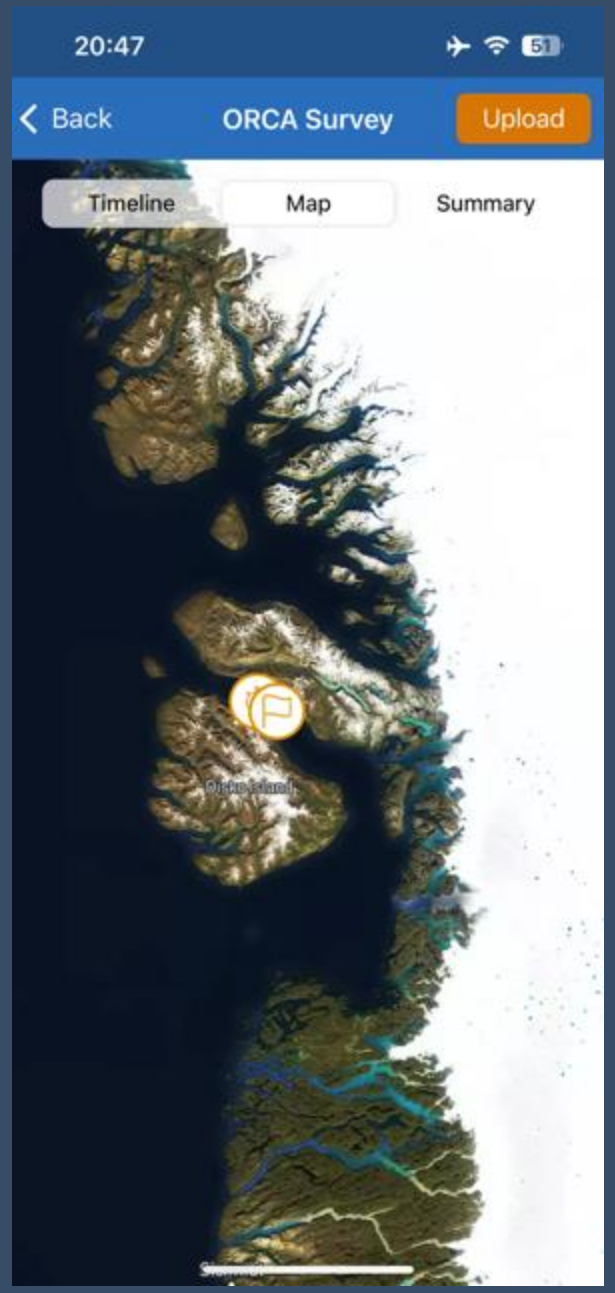
View our submissions to Happywhale

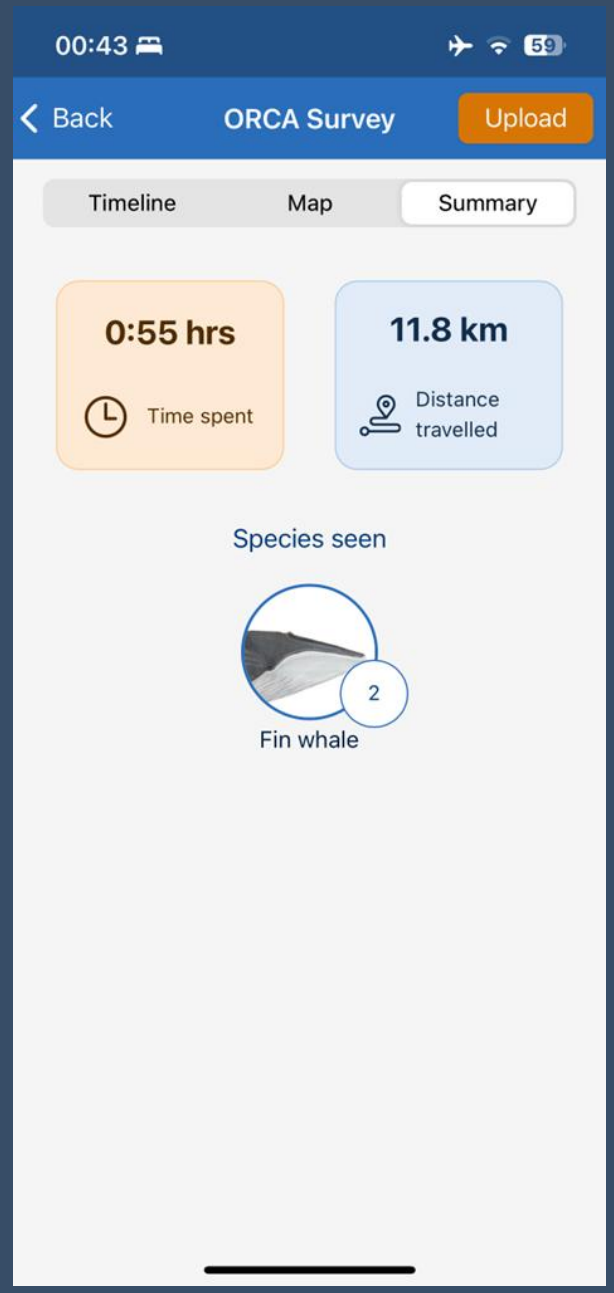
ORCA

While on your journey through West Greenland, you were joined by ORCA Ocean Conservationist Taz, who collected data on whales, dolphins, and porpoises.

The data was gathered through the OceanWatchers App and sent back to ORCA, where it becomes available to organisations working on cetacean conservation. It also feeds into the ORCA website's interactive map — a live picture of what may be seen where.

On this journey, we collected **8 hours** and **32 minutes** of survey data across a distance of **112 km**. **Four** marine mammal species were recorded, with **106 individuals** logged in total.





Wildlife List – Land Mammals

Wildlife List – Land Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
Vulpes lagopus	Arctic fox	Polarfuchs	renard arctique


Thanks for your
participation!