



**Science & Education Report**

# MS Spitsbergen

20.05. – 27.05.2025

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.

# History

In Svalbard, wildlife was high on the agenda of everyone. Wildlife is intrinsically bound to the human history of this archipelago. As we travelled, we observed much evidence of how those hunting and trapping lived from over 400 years ago, even to the present day. We also saw how the mineral mining industry, especially coal, shaped the lives of hundreds of people and fuelled the furnaces of mainland industry.



# Culture

Svalbard has been a source of animal and mineral gain for centuries. However at Ny Alesund in Kongsfjord, we appreciated the huge shift in focus from human gain to human conservation. Not only did we see the conserved buildings from the coal mining era in the 20<sup>th</sup> century, but also the different international research stations. In this northern-most settlement in the world, scientists work year round on climate change and the natural sciences.



# 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. We witnessed the powerful forces of glacial carving that have shaped these valleys, and learnt how to recognize glacial landforms.



View on the striking snow-free cliffs of Burgerbukta in Hornsund (May 21)

Iceberg and sea ice in front of Bjørnfjorden glaciers inside of Smeerenburgfjorden (May 24)

# Glaciology and ice

Snow-covered glaciers descended from the mountain peaks into the fjords we navigated, their crevassed surfaces and seracs telling stories of flow, compression, and constant movement even in the apparent stillness of the polar spring. We cruised by clear ice forming striking turquoise blue icebergs in front of the tidewater glaciers. We were lucky enough to observe firsthand impressive sea ice breaking apart and even cruised close to the multiyear sea ice edge, a very important habitat for organisms forming the basis of the foodchain, over 80° North!





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

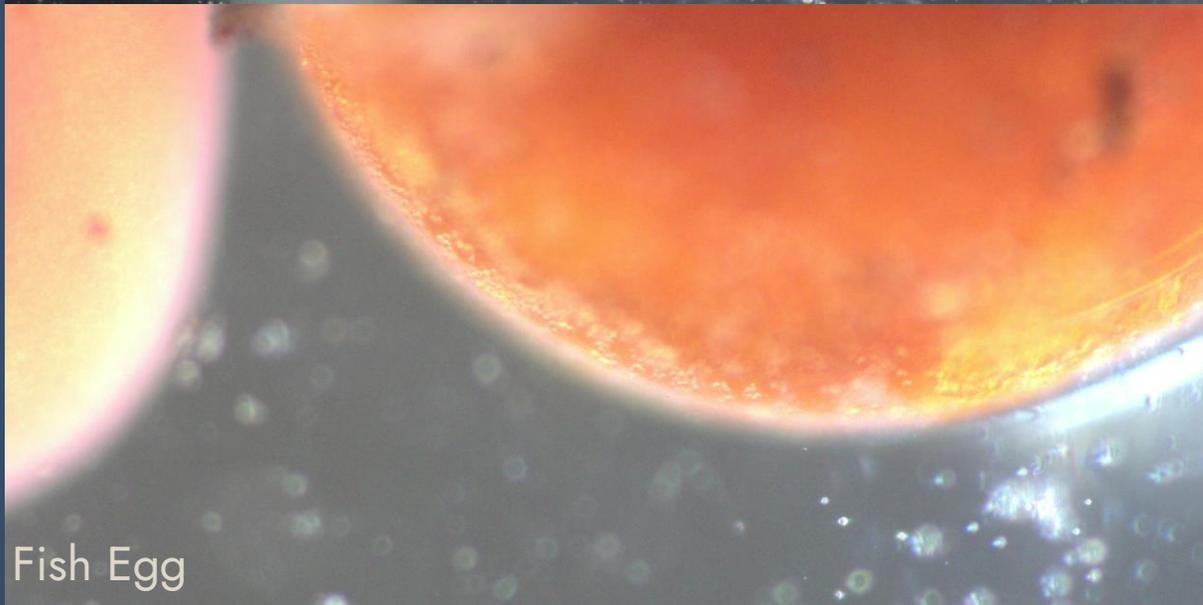
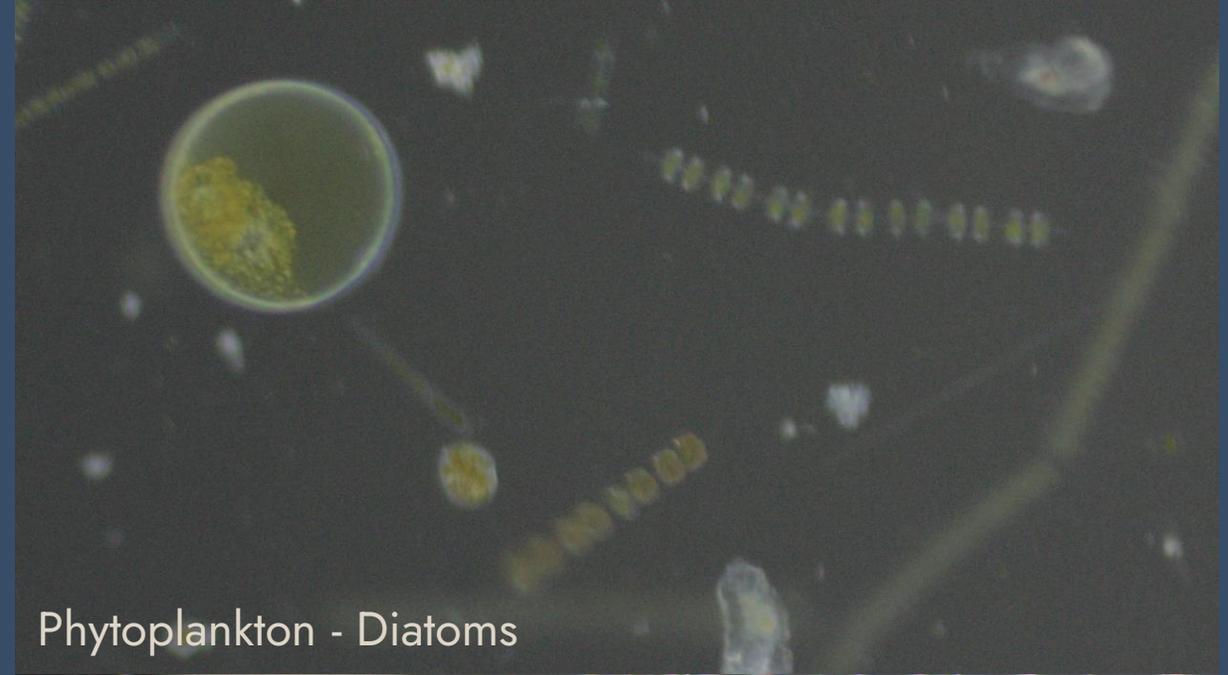
Together with our Environmental Scientist Jeanne you observed the clouds and submitted your observations to NASA GLOBE Observer on 2 occasions.

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 two submissions went to NASA for climate study in areas you visited, at sea, along our voyage. Below is a link to our data.

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

# Plankton – Drifters of the Ocean



# Wildlife List - Birds





# Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Fulmarus glacialis</i>	<b>Northern Fulmar</b>	Eissturmvogel	Fulmar boréal
<i>Stercorarius parasiticus</i>	<b>Arctic Skua (Parasitic Jaeger)</b>	Schmarotzerraubmöwe	Labbe parasite
<i>Rissa tridactyla</i>	<b>Black-legged Kittiwake</b>	Dreizehenmöwe	Mouette tridactyle
<i>Larus hypervoreus</i>	<b>Glacous Gull</b>	Eismöwe	Goéland Bourgmestre
<i>Sterna paradisaea</i>	<b>Arctic Tern</b>	Küstenseeschwalbe	Sterne Arctique
<i>Alle alle</i>	<b>Little Auk</b>	Krabbentaucher	Mergule nain
<i>Fratercula arctica</i>	<b>Atlantic Puffin</b>	Papageitaucher	Macareux moine
<i>Cephus grille</i>	<b>Black Guillemot</b>	Gryllteiste	Guillemot à miroir
<i>Uria aalge</i>	<b>Common Guillemot (Common Murre)</b>	Trottellumme	Guillemot marmette
<i>Uria lomvia</i>	<b>Brünnich's Guillemot (Thick-billed Murre)</b>	Dickschnabellumme	Guillemot de Brünnich

# Wildlife List – Shore birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Anser brachyrhynchus</i>	<b>Pink-footed Goose</b>	Kurzschnabelgans	Oie à bec court
<i>Branta leucopsis</i>	<b>Barnacle Goose</b>	Weißwangengans	Bernache nonnette
<i>Branta bernicla</i>	<b>Brent Goose</b>	Ringelgans	Bernache cravant
<i>Somateria mollissima</i>	<b>Common Eider</b>	Eiderente	Eider à duvet
<i>Somateria spectabilis</i>	<b>King Eider</b>	Prachteiderente	Eider à tête grise
<i>Clangula hyemalis</i>	<b>Long-tailed Duck</b>	Eisente	Harelde kakawi
<i>Gavia stellata</i>	<b>Red-throated Diver (Red-throated Loon)</b>	Sternaucher	Plongeon catmarin
<i>Charadrius hiaticula</i>	<b>Common Ringed Plover</b>	Sandregenpfeifer	Pluvier grand-gravelot
<i>Calidris maritima</i>	<b>Purple Sandpiper</b>	Meerstrandläufer	Bécasseau violet

# Wildlife List – Land birds



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Lagopus muta</i>	Rock Ptarmigan	Alpenschneehuhn	Lagopède alpin
<i>Plectrophenax nivalis</i>	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 8 different species of birds in 3 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 - Marine Mammals



# Wildlife List – Marine Mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Baleioptera acutostrata</i>	Minke whale	Zwergwaal	Rorqual à museau pointu
<i>Ursus maritimus</i>	Polar Bear	Eisbär	Ours polaire
<i>Phoca vitulina</i>	Harbour seal	Seehund	Phoque commun
<i>Odobenus rosmarus</i>	Walrus	Walross	Morse
<i>Erignathus barbatus</i>	Bearded seal	Bartrobbe	Phoque barbu
<i>Delphinapterus leucas</i>	Beluga	Weißwal	Beluga

# Species Spotlight

We were lucky enough to encounter the charismatic walrus of Svalbard on several occasions during our voyage. During the zodiac cruise through Bjornfjorden, some of us were lucky enough to see the walrus resting on the ice floe. We enjoyed the sights, sounds and fragrances of Smeerenburg. In Moffen, we could observe the walrus not only on the beach, but there were also several groups in the water who approached our ship, full of curiosity.



# Wildlife List - Land Mammals



# 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

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Thank you for  
joining us!