

THE
IVY
LEAGUE

Science & Education Report



MS Spitsbergen

31 Jan – 7 Feb 2026

**Ultimate Norway –
Arctic Expedition
under the Northern
Lights**





Science & Education Programme

Our Science and Education Team accompanied you during your voyage along the European Atlantic coast.

Together, we had the opportunity to explore our destinations' rich history, culture, natural beauty, and exceptional wildlife. We organized lectures and interactive activities on board and explored our destinations on land and from the sea.

History

Our voyage through Northern Norway followed a coastline shaped by exploration, fishing, and resilience. We began in Tromsø, the historic 'Gateway to the Arctic', which from the 19th century served as a base for Arctic hunting, scientific research, and famous expeditions, including those of Roald Amundsen.

We visited Lofoten, famous for its winter cod fishery that runs from January to late April. Each year, thousands of fishermen gather to harvest the migrating skrei – Arctic cod – that return to Lofoten to spawn.

The Vikings started to hang the cod up to dry so they could use it for food during their journeys. Cod is still being dried on racks today, just like the Vikings did.



Årøya

Årøya is just one of the interesting places we visited. It is scattered with old foundation walls and traces of long-gone settlements, silent evidence of centuries of farming, trade, and defence. The island later became military property in the 1950s, and for decades – until 2006 – civilians were completely barred from entering.

Human activity here stretches far back. Iron Age travellers are believed to have landed at nearby Bunkholmen for ceremonial bear burials, suggesting Årøya was known and visited even then.

The first written records appear in the early 1600s, when the local sheriff collected taxes for the Swedish king – payments in eiderdown, cod-liver oil, furs, and dried fish. By the late 17th century, the island had several users, including the parish priest of Karlsøy. In the 18th century, Årøya became a lively stop in the Russian Pomor trade. Grain arrived from the east, fish went the other way, and the harbour grew into a bustling little trading post.



Culture

Over this seven-day voyage, we have immersed ourselves in nature through what Norwegians call *friluftsliv*. More than simply spending time outdoors, *friluftsliv* is about actively engaging with nature and recognising our place within it. Throughout the journey, we embraced this philosophy firsthand.

In Lofoten, we explored both landscape and history, learning about the famous winter cod fishery that takes place from January to April. First practiced by the Vikings over a thousand years ago, this fishery continues today, drawing fishermen from across Norway and remaining a cornerstone of coastal life.



Ulvøya

We also visited Ulvøya, just opposite from Trollfjord, which contains the ruins of a house build by Swedish soldiers who were sent to Lofoten to check out the area on the order of the Swedish king.

Local legend tells of a tragic romance on Ulvøya. Barbro was captured by Swedish soldiers, and their lieutenant tried to force her into marriage. Her lover, Sven, crossed the water at night with explosives, hoping to free her. He destroyed the house — unaware Barbro was inside.

At sunrise he found both her and the lieutenant dead, with several soldiers injured. Sven lived into his nineties but never married, carrying the weight of that night for the rest of his life.

This is just one of the many stories of we tell to remember the perseverance, passion, and people who survived and thrived in Norway in the generations before us.



Geology

Norway has an ancient and complex geological history. Mountains in this part of the country are composed of Precambrian rocks. These rocks are exposed in basement windows, where erosion and tectonic processes have revealed the deeply buried crystalline basement. The basement mainly consists of granitic gneisses as well as mangerite and charnockite that are about 1.8 billion years old. Later, during the Caledonian Orogeny 400 million years ago, a continental collision between two paleo-continents caused significant mountain building and uplifted these geological terrains. Subsequent erosion erased much of the Caledonian cover. During glacial/interglacial times over the past two million years, a combination of sea level, isostatic rebound, and erosion enhanced the relief, forming today's landscape: jagged mountains, fjords, and sounds.



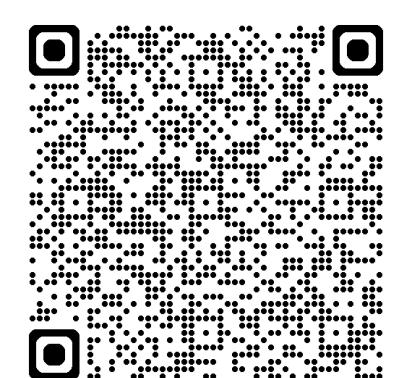
iNaturalist

Throughout our expedition, we documented the flora and fauna of Northern Norway and uploaded all our findings to the Citizen Science biodiversity platform iNaturalist.

Though much of the plant life was covered in snow and frost, we collected 48 observations of 32 species!

This effort contributes to a more comprehensive understanding of biodiversity and can aid researchers in their ongoing studies and conservation efforts to protect these species.

You can view the data submitted on our project by scanning the QR code.

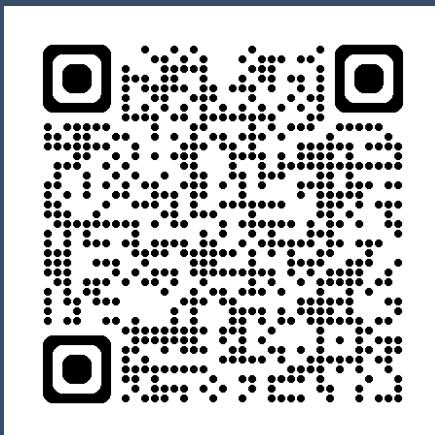


Underwater Drone

We used a Blueye Pioneer underwater drone to explore the underwater world of Northern Norway on the island of Tranøya.

Under the surface, we discovered forests of seaweed, numerous hermit crabs, and even some bottom-dwelling (benthic) fish and shrimp species.

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



Plankton Sample

During the polar night season, the levels of plankton in the fjords are very low. But upon the return of the sun, we are able to see life returning to the fjords.

On this voyage we took two plankton samples in Ulvøya, one for phytoplankton and one for zooplankton. The plankton nets were towed for an impressive 20 minutes! Then we brought the samples back to the Science Centre and looked at them under the microscope to see what we could find.

We didn't collect too many creatures, but we did manage to find some dinoflagellates, a large number of Copepods, and our most impressive find, a polychaete worm!





Some of our findings:

The top image shows a polychaete worm, also known as a bristle worm. These marine worms are found in a variety of oceanic habitats, with some swimming freely in the open water column and others specialising in living on the seafloor.

The bottom image shows a copepod, a member of the crustacean family. Copepods are a keystone species in Arctic food webs, forming an important part of the diet for many other species living in the ocean. They store their energy largely as lipids (shown by the orange blobs) and are able to detect light and darkness using the photoreceptor on their head (the red, eye-like looking dot).



The Magical World of Moss

During our microscope session we took a closer look at some moss. A basal, non-vascular plant, moss does not contain roots or a stem for the uptake and transport of water. Instead, mosses absorb water over their cell walls, directly from the environment.

We were able to see the cellulose structure of the cell wall under the microscope, while marvelling at the beauty of these often-underappreciated plants.



Wildlife List – Birds





Great tit, © Geraldine Prince/HX



Eider ducks, © Geraldine Prince/HX



Little auk, © Geraldine Prince/HX



White-tailed eagle, © Geraldine Prince/HX

Wildlife List – Seabirds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Phalacrocorax carbo</i>	great cormorant	Kormoran	grand cormoran
<i>Larus marinus</i>	great black-backed gull	Mantelmöwe	goéland marin
<i>Larus argentatus</i>	European herring gull	Silbermöwe	goéland argenté
<i>Alca torda</i>	razorbill	Tordalk	petit pingouin
<i>Alle alle</i>	little auk	Krabbenstaucher	mergule nain
<i>Cephus grylle</i>	black guillemot	Grylleiste	guillemot à miroir

Wildlife List – Water Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Ardea cinerea</i>	grey heron	Graureiher	héron cendré
<i>Cygnus cygnus</i>	whooper swan	Singschwan	cigne chanteur
<i>Anas platyrhynchos</i>	mallard	Stockente	canard colvert
<i>Melanitta nigra</i>	common scoter	Trauerente	macreuse noire
<i>Somateria mollissima</i>	common eider	Eiderente	eider à duvet
<i>Mergus serrator</i>	red-breasted merganser	Mittelsäger	harle huppé
<i>Calidris maritima</i>	purple sandpiper	Meerstrandläufer	bécasseau violet

Wildlife List – Land Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Corvus corax</i>	northern (common) raven	Kolkrabe	grand corbeau
<i>Corvus cornix</i>	hooded crow	Nebelkrähe	corneille mantelée
<i>Pica pica</i>	Eurasian magpie	Elster	pie bavarde
<i>Passer domesticus</i>	house sparrow	Haussperling	moineau domestique
<i>Parus major</i>	great Tit	Kohlmeise	mésange charbonnière
<i>Haliaeetus albicilla</i>	white-tailed eagle	Seeadler	pygargue à queue blanche

Species in the Spotlight: the White-Tailed Eagle

We were hoping to see one of Norway's most iconic birds, the white-tailed eagle!

Once classified as endangered throughout Norway and becoming locally extinct throughout parts of their range, conservation actions in Norway have aided in bringing this species back from the brink on an international scale.

Whether it was from surprise sightings during our time on land or in our expedition boats, or on the eagle safari in Svolvær, we hope you managed to catch a glimpse of this true master of the skies.



Wildlife List – Mammals





Common minke whale, © Geraldine Prince/HX



Harbour seal (common seal), © Lauren Peach / HX

Wildlife List – Mammals

Marine Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Phoca vitulina</i>	harbour seal	Seehund	phoque veau-marin
<i>Balaenoptera acutorostrata</i>	common minke whale	Zwergwal	rorqual à museau pointu
<i>Phocoena phocoena</i>	harbour seal (common seal)	Gewöhnlicher Schweinswal	marsouin commun

Land Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Alces alces</i>	moose	Elch	élan
<i>Lutra lutra</i>	Eurasian otter	Fischotter	loutre vommune



Scat of a moose (*Alces alces*) on Tranøy

Tracing tracks

We do not always have to see the wildlife to know it has been around. Taking note of the tracks and signs left behind by fauna can give us valuable insights into what species have been roaming around the wilderness.

Taking the opportunity to slow down and absorb nature reminds us that if we take the time, there is often more to see than meets the eye.

We hope you enjoyed exploring the more subtle signs of nature with us and continue to embrace this spirit wherever you may explore next on your travels.



Ptarmigan scat, mixed with the scat of a small, carnivore, likely a member of the mustelid group (otter, stoat, mink, etc.), on Sandøya



Bird tracks in the snow, possibly ptarmigan, on Sandøya

THINK



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inner scientist