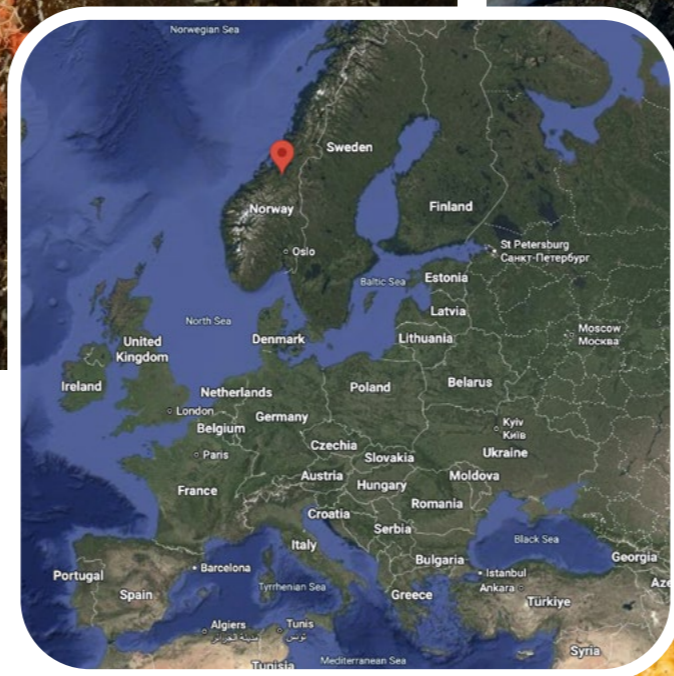




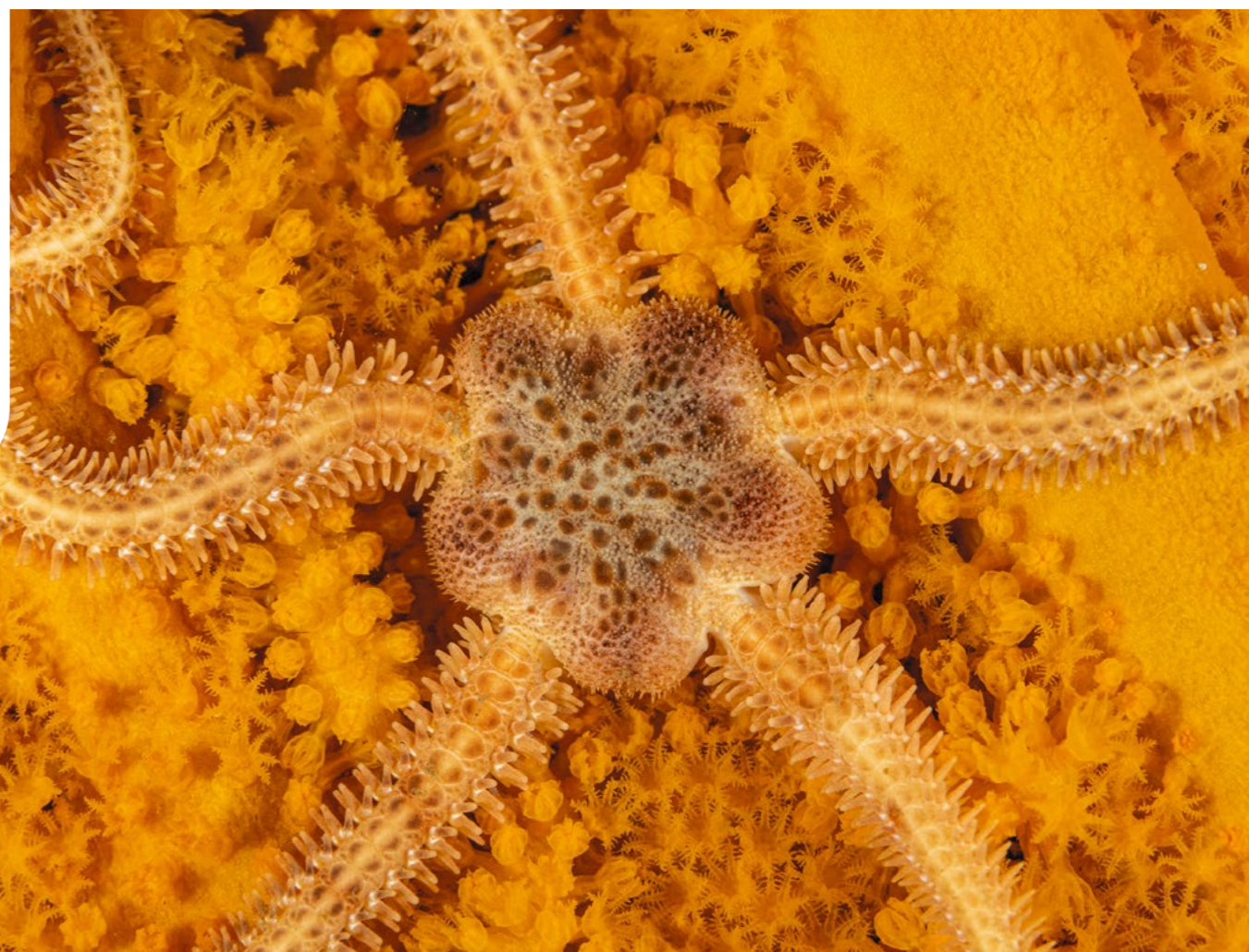
Trondheim Fjord

A Nordic Diving Adventure Into the Depths

Text and photos by Steffen Schmitt



IMAGERY ©2025 NASA, MAP DATA ©2025 GOOGLE



Tree bubblegum coral (*Paragorgia arborea*) with Gorgon's head basket stars (*Gorgonocephalus caputmedusa*); Location of Trondheim on map of Europe (right); Gorgon's head basket star on gorgonian, Skarnsundet (previous page)

More than twenty years after a conversation with a Norwegian diving friend first sparked the idea, German technical diver and underwater photographer Steffen Schmitt made the trek north to explore the mysterious depths of Norway's Trondheim Fjord.

It was late evening when I rolled onto the ferry in Frederikshavn, Denmark. The hum of the engines and the salty breeze signalled the start of a long-awaited expedition. As the ferry glided towards Gothenburg, Sweden, I sank into my reclining chair, my mind drifting back to a conversation with a Norwegian diving friend over two decades ago. His tales of the fjords had sparked a dream,

and now, I was chasing it.

By 2 a.m., I reached Gothenburg, but the journey was far from over. Ten more hours of driving lay ahead. A sudden crossing of deer on the road north of the city reminded me that nature ruled here—and that sleep was non-negotiable.

Refreshed, I continued through Sweden's endless forests, crossing into Norway, where snow-capped peaks greeted me under a radiant sun. I rendezvoused with my two companions, fellow adventurers from Hamburg, and together, we wound our way towards the legendary Trondheim Fjord.

Where mountains meet the sea

Stretching over 130km inland from the Norwegian

Crevice brittle star (*Ophiopholis aculeata*) on gorgonian (*Paramuricea placomus*), Verrasundet (above); Snow-capped peaks of Dovrefjell under the radiant sunshine on the drive through Norway (top right)





Trondheim

Dive gear on the beach close to Hindrum Marina at sunset over Trondheim Fjord (far left); Northern stone crab (*Lithodes maja*) with edible sea urchins (*Echinus esculentus*), Trondheim Fjord (left)

2ND ROW, left to right: Orange-clubbed sea slug (*Limacia clavigera*), Trondheim Fjord; Aeolid nudibranch, most likely *Facelina* sp., feeding on hydroids, Trondheim Fjord; Sea spider (*Nymphon gracile*), Vangshylla; A tiny *Iphimedia obesa* amphipod resting on coral, Skarnsundet



3RD ROW, left to right: Aeolid nudibranch (possibly *Fjordia browni*), Skarnsundet; Skeleton shrimp (*Pseudoprotella phasma*) on thecate hydroid (*Kirchenpaueria pinnata*), Trondheim Fjord; Aeolid nudibranchs (possibly *Fjordia lineata* and *Fjordia browni*) with colony of hydroids (*Tubularia indivisa*), Trondheim Fjord

Sea, Trondheim Fjord is a masterpiece carved by ancient glaciers. Towering cliffs, scattered rocky islands and hidden bays whisper stories of ice ages past. In places, the fjord plunges to over 600 metres—an abyss teeming with secrets.

But we were not chasing depth. We were chasing life. Armed with JJ rebreathers and custom gas mixes, we were completely self-sufficient. No dive centres, no guides. Just us, our gear and the open road in our motorhome. This

was rebreather diving at its finest: freedom, silence and immersion. **The kelp kingdom of Garten** Our first descent was off Garten Island, where the fjord meets the sea. It was early May, and the kelp forests

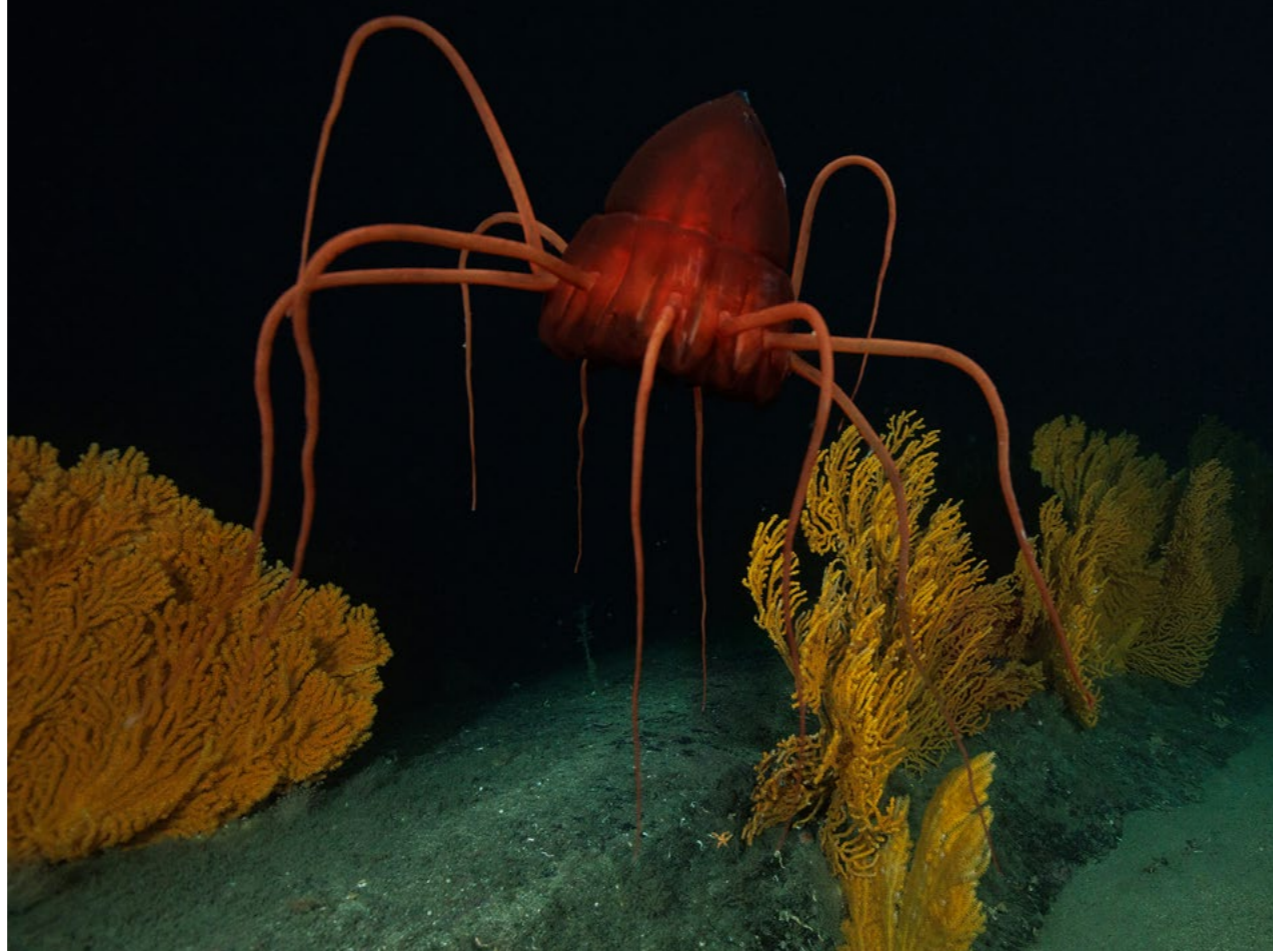
were awakening. Sunlight pierced the water, illuminating a lush, underwater jungle. At 30 metres, we found scattered rock formations, alive with nudibranchs—tiny, flamboyant sea slugs that rivalled tropical reefs in colour and diversity.

Stone crabs (*Lithodes maja*) scuttled between rocks, gobies darted through the sand, and flounders lay in wait. It was a dive recommended by local “nudibranch nerds”, and they were not wrong. The biodiversity here was astonishing.

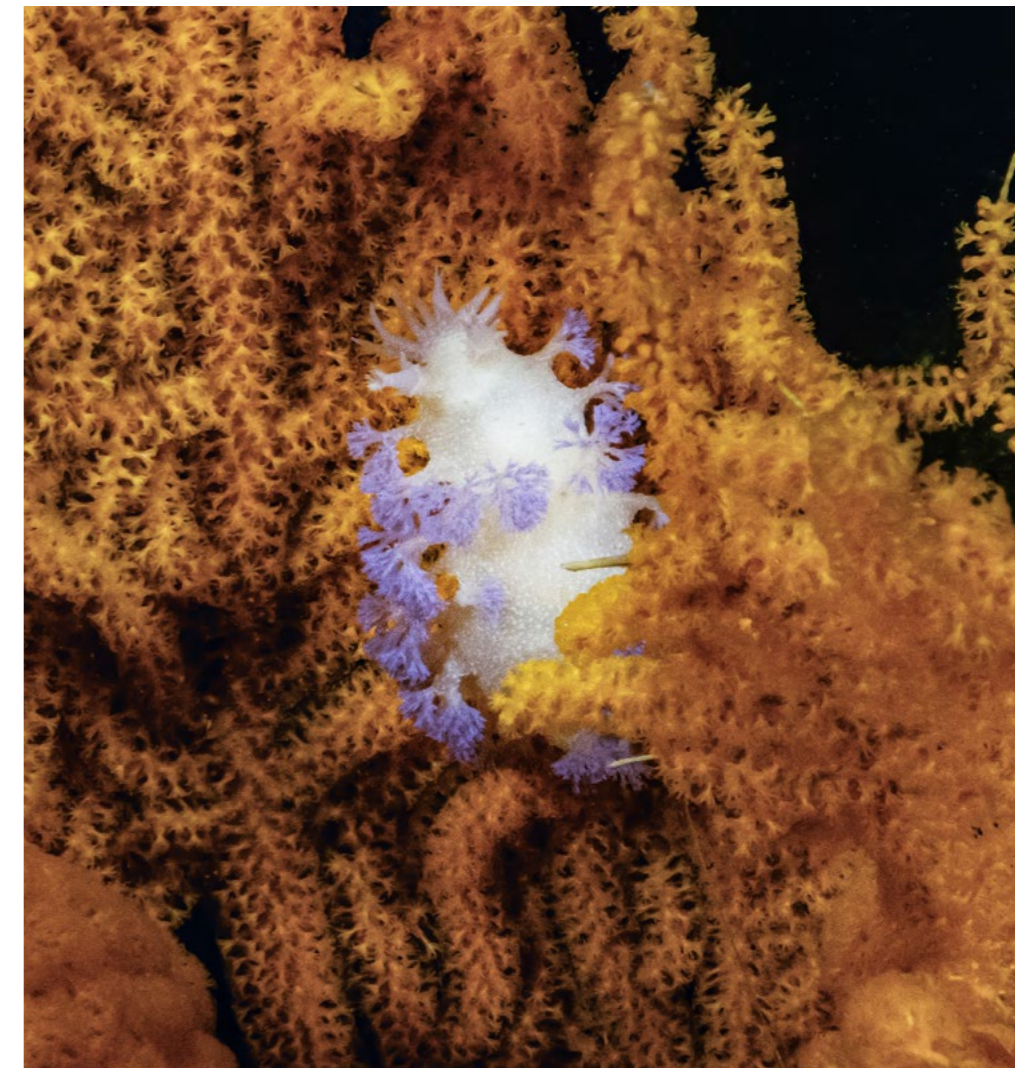


1ST ROW, left to right: Helmet jellyfish (*Periphylla periphylla*) with flattened sea fan coral (*Paramuricea placomus*), Vangshylla; Diver with tree bubblegum coral and red tree or rice coral (*Primnoa resedaeformis*), Skarnsundet

2ND ROW, left to right: Helmet jellyfish, Trongsundet; Helmet jellyfish with flattened sea fan coral, Vangshylla; Hyperiid amphipods on helmet jellyfish, Trongsundet; Grieg's tritonia nudibranch (*Tritonia griegi*) on flattened sea fan coral, Verrasundet



Trondheim



Back on land, we feasted on freshly grilled scallops and sipped cold beer, gazing across the fjord as the mountains blushed in the evening light.

Into the veins of the fjord: Verrasundet and Skarnsundet

The next few days took us deeper into the fjord's narrow arms—Verrasundet and Skarnsundet—where tides ruled with surprising force. Here, planning was everything.

A miscalculation in currents could leave us stranded, as steep coastlines separated the few accessible bays.

But these currents were also life-givers. They brought nutrients and oxygen, transforming these waters into a haven for creatures usually found in the deep sea.

We descended through a murky, icy surface layer—just 3°C—fed by glacial meltwater. Below five metres, the water cleared into a surreal, green twilight. Visibility

opened up, revealing black rock walls that plunged into the depths.

Suddenly, helmet jellyfish (*Periphylla periphylla*) drifted past, like glowing UFOs. These deep-sea wanderers, found at depths of up to 7,000m, were here, floating beside us in daylight.

At 40 metres, we discovered forests of yellow-orange sea fans (*Paramuricea placomus*), their tentacles dancing in the current. Shrimp and crustaceans hid among





1ST ROW, left to right: A lovely cove on the small island of Garten at the entry of Trondheim Fjord; Rabbit fish (*Chimaera monstrosa*), Trondheim Fjord

2ND ROW, left to right: Blackmouth catshark (*Galeus melastomus*), Trondheim Fjord; Velvet belly lanternsharks (*Etmopterus spinax*) with flattened sea fan coral, Vangshylla; Velvet belly lanternshark with flattened sea fan coral, Vangshylla; Diver with rabbit fish, Trondheim Fjord
BOTTOM RIGHT: Underside of a velvet belly lanternshark, Trondheim Fjord. Growing up to 60cm long, lanternsharks are typically found on night dives, searching for prey on soft bottoms at depths between 200–900m.



the coral branches. Then, a flash of purple. It was a 10cm nudibranch, *Tritonia griegi*, resting like a living gemstone on its host gorgonian.

Yet not all was pristine. Some gorgonians were tangled in torn fishing lines, a sobering reminder of human impact. Local divers work tirelessly to clean these sites, but without broader support, this fragile paradise remains at risk.

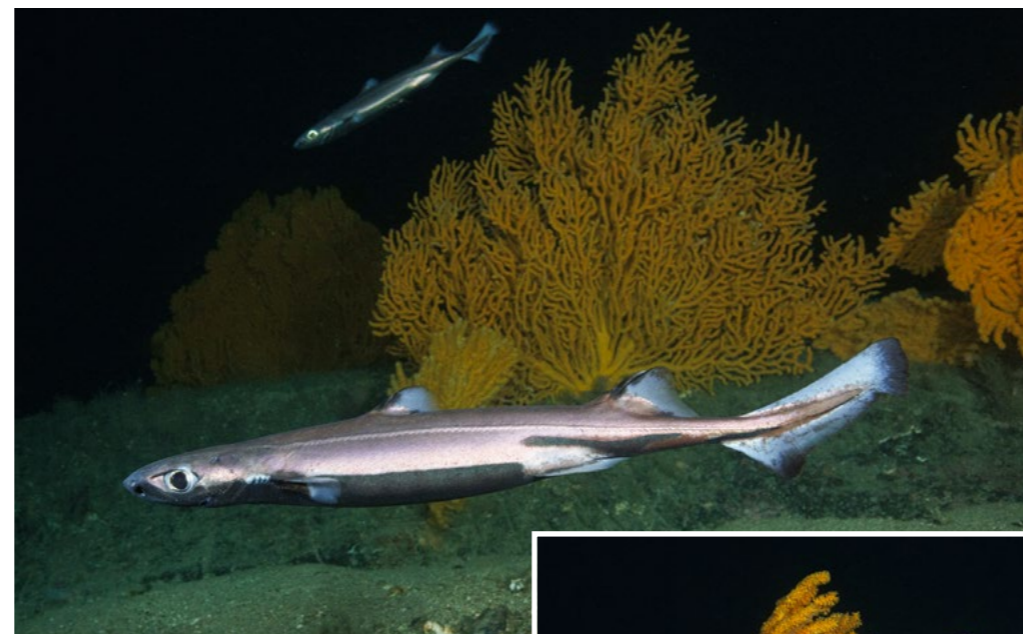
Nightfall mysteries

As darkness fell, the fjord revealed its nocturnal wonders. Our lamps caught flickers of green cast by rabbit fish,

Chimaera monstrosa, emerging from the depths to hunt. These ghostly cartilaginous fish, up to a metre long, glided silently over the sand.

Then, the stars of the night: velvet belly sharks (*Etmopterus spinax*). These lantern sharks shimmered with bioluminescent organs, glowing blue-green beneath their bellies. Shy and elusive, they vanished into the dark at the slightest light.

Hagfish, the ocean's cleanup crew, slithered through the silt, feeding on discarded fish waste. It was a haunting, mesmerising world—one few ever witness.

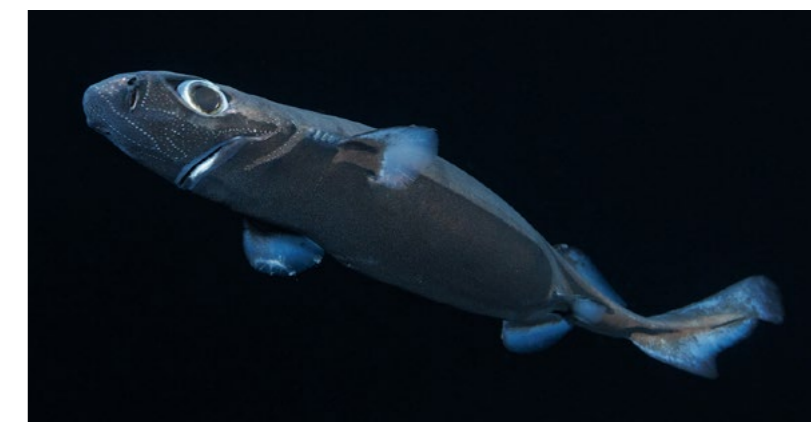


The dream dive: Tautra Reef

During a surface break, I mentioned a cold-water coral reef I had heard about years ago, Tautra Reef, hidden beneath the fjord. My buddies' eyes lit up. The next morning, one of them grinned and announced, "I've got the boat and crew."

It was a stroke of luck. Weather, tides and logistics aligned perfectly. We set sail with two boats and a group of curious fishing tourists, briefed the night before.

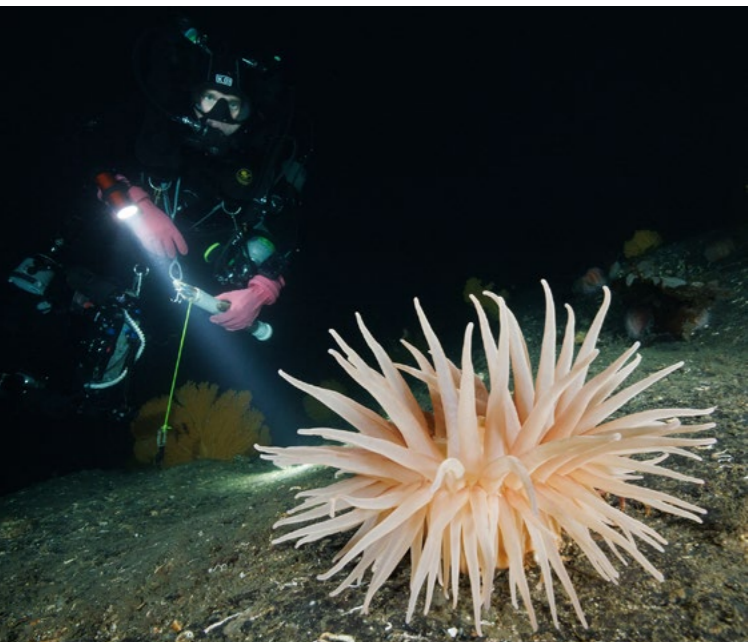
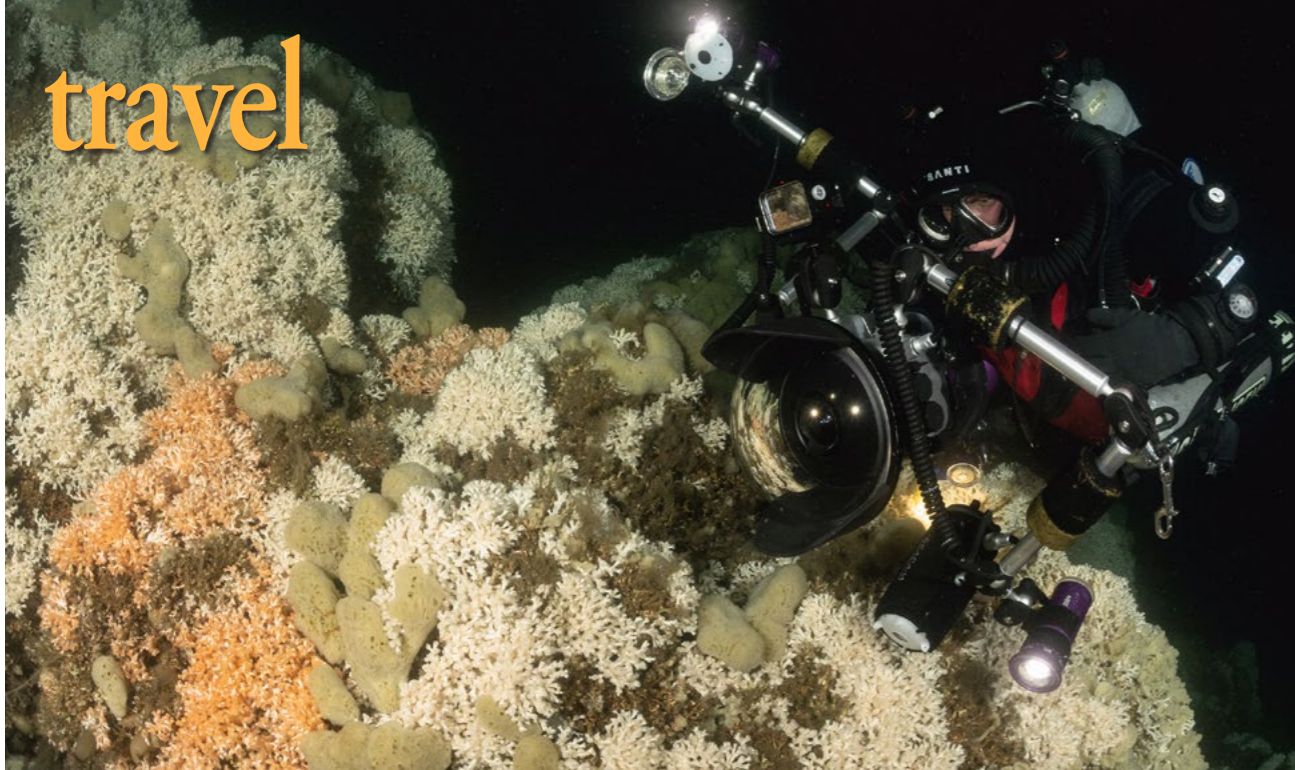
We dropped a shot line—no anchoring on this delicate reef. As we descended, the brown surface layer faded, and at



Trondheim

1ST ROW, left to right: Diver with white stony corals (*Lophelia pertusa*) and common sponge (*Mycale lingua*), Tautra Reef; White stony corals with common sponges *Phakellia robusta* and *Mycale lingua* on Tautra Reef

2ND ROW, left to right: Deeplet sea anemone (*Bolocera tuediae*), Skarnsundet; A diver returns to shore after a dive at Garten Island; White stony corals with Norway redfish (*Sebastes viviparus*), Tautra Reef; Tree bubblegum coral with white stony corals and common sponge, Tautra Reef



20m, the reef appeared like a ghostly apparition. White stony corals (*Lophelia pertusa*) covered 100 square metres, forming a living sculpture garden.

Unlike tropical corals, these cold-water species feed actively, building slow-growing ecosystems that have existed for thousands of years. Redfish and sea cats patrolled the reef, and we floated in awe, reluctant to leave.

But the surface had changed. A storm had rolled in, with waves rising to 1.5

metres, and boarding the boats became a wet, wild challenge. Soaked and exhilarated, we returned to harbour, hearts full.

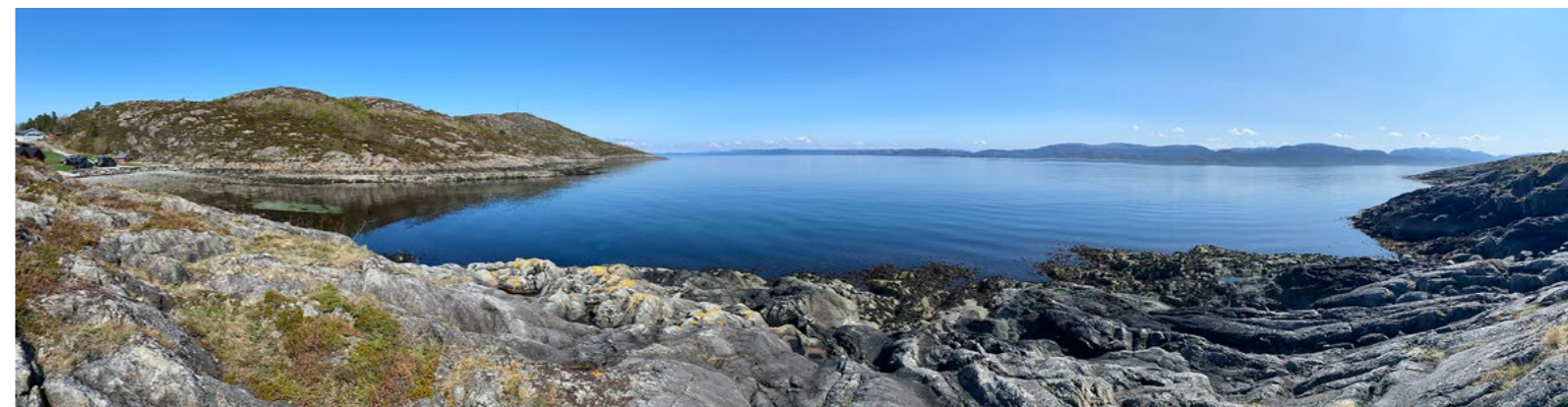
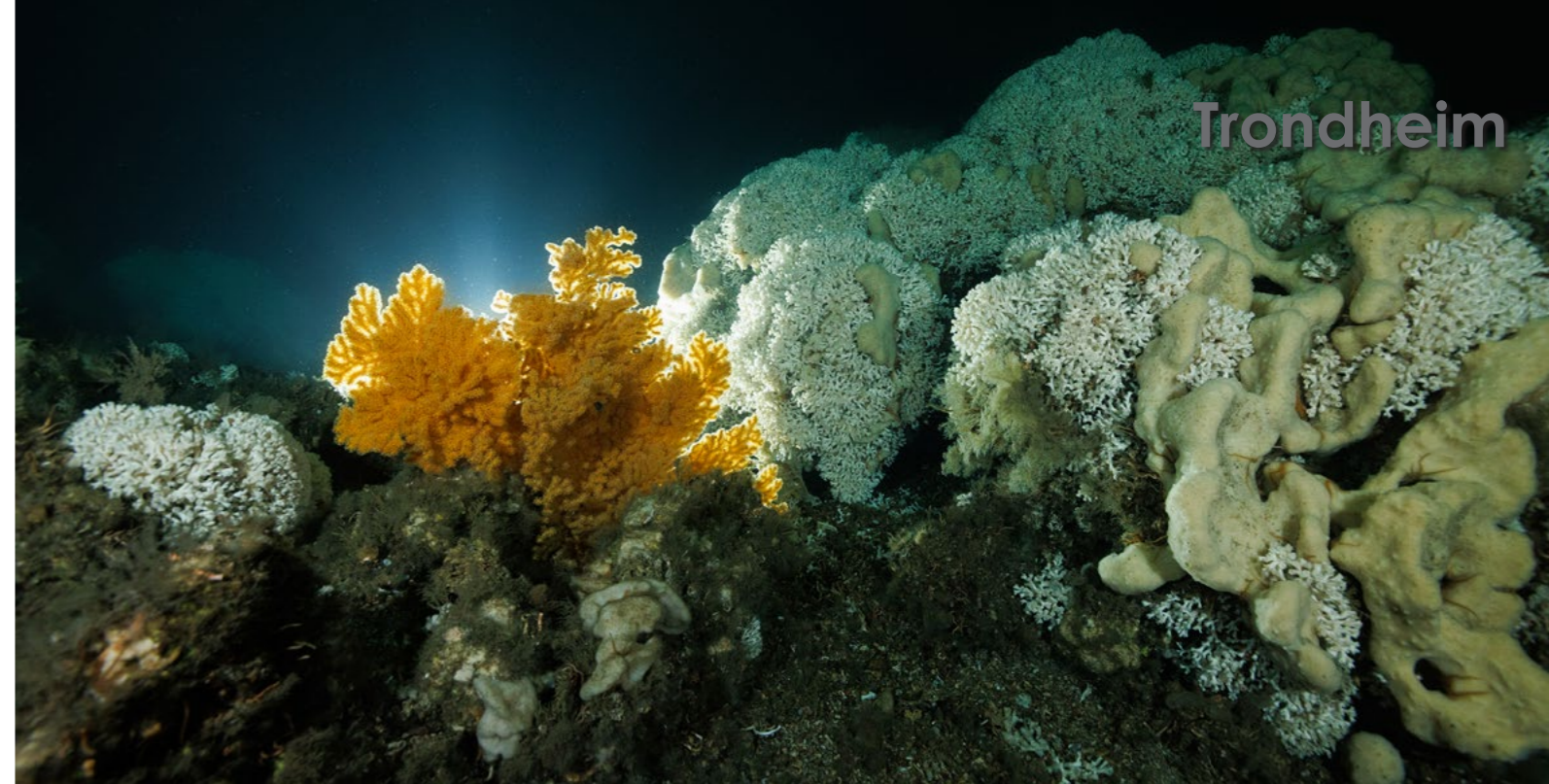
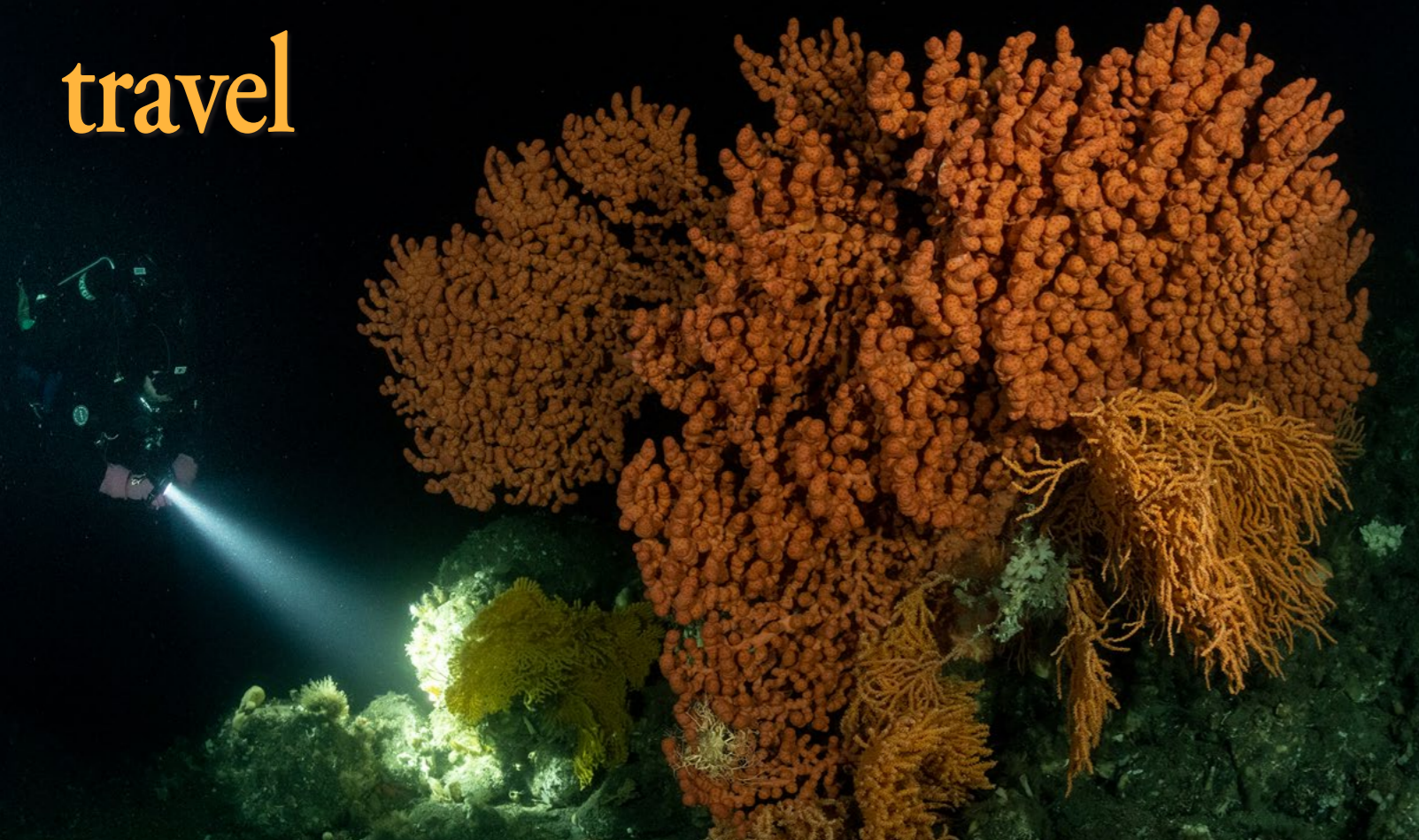
Reflections beneath the surface

Late into the night, we relived the dive, the reef, the creatures. The fjord had given us more than we imagined, with adventure, beauty and a glimpse into a world few ever see. And, as we planned our next visit, one thing was clear: Trondheim Fjord was not just a destination—it was a revelation. ■

Steffen Schmitt is a German technical diver, writer and underwater and nature photographer who has been diving for over 35 years, documenting remote underwater destinations around the globe, with a special interest in the Baltic Sea. For more information, visit: steffenschmitt.com

SOURCES:
SEAWATER.NO
WIKIPEDIA.ORG
DYRELIVHAVET.NO

Rabbit fish at Trondheim Fjord (left)



Panoramic view over Trondheim Fjord from Garten Island (above)



Flattened sea fan coral with Gorgon's head basket stars, Verrasundet (above); Diver with tree bubblegum coral, Skarnsundet (top left); Flattened sea fan coral with white stony corals and common sponges, Tautra Reef (top right)

FACT FILE: About Deep Sea Corals

Edited by Steffen Schmitt and G. Symes

There are several species of cold-water corals, all belonging to the phylum Cnidaria. Closely related to sea anemones, they live fixed in place, like sea anemones do, catching prey with their stinging tentacles as they feed.

Many cold-water coral species are widely distributed, found throughout many of the world's oceans. They are usually found below the photic zone, between 200m and 400m, but the shallowest found so far was at 40m, and the deepest at well over 1,000m.

Cold-water coral reefs take a long time to develop, normally hundreds of years. For the largest reefs, it can take thousands of years. It

is thought that several reefs on the Sula Ridge in Norway developed around 10,000 years ago at the end of the last ice age. As the deep sea is a low-energy environment, it is conducive to slow-growing corals. Indeed, the presence of a reef indicates an environment that is stable, with little disturbance.

The northeast Atlantic Ocean is where a majority of cold-water coral reefs have been found, with *Lophelia* being the dominant genus. The stony coral *Lophelia pertusa* is found in deep and dark waters. Its coral colonies are formed by thousands of polyps, and these can develop into large reef frameworks that provide homes for many other creatures. Thus, these cold-water coral reefs become local biodiversity hot spots. ■

SOURCES: LOPHELIA.ORG, CORALFORM.ORG