



INSTITUTIONEN FÖR MARINA VETENSKAPER TJÄRNÖ MARINA LABORATORIUM

Fiskeridirektoratet

Toktrapport 17.12.2024, 30.01.2025-31.12.2025, Jnr. 24/15743

Cruise summary report RV Nereus 2025

Ship: RV Nereus, Call sign: SKTD
Type of ship: Research vessel

Cruise: 17.12.2024, 30.01.2025-31.12.2025, Jnr. 24/15743

Operating authority:
Tjärnö Marine Laboratory, Tjärnö, University of Gothenburg, Sweden

Owner: University of Gothenburg, Sweden

Name of master: Peter Nilsson

Scientist in charge: Ann Larsson

Principal investigator:
Susanna Strömberg (SS)

Cruise dates and activities at the Tisler reef:

Date	PI	Latitude	Longitude	Depth (m)	Fieldwork
2025-02-13	SS	58°49.2	11°04.7	82	Retrieval of settlement panel rack and deployment of camera on bottom stand
2025-05-05	SS	58°49.2	11°04.7	82	Retrieval of camera on bottom stand

Aim of the cruise

Data from the cruise activities have been used in the following projects:

LIFE Lophelia, Method development for cold-water coral reef habitat restoration with implementation in Kosterfjord-Väderöfjord, Sweden. 2019–2025, PI Ann Larsson.

Reproductive biology of cold-water corals: Insights from fertilisation kinetics, ultrastructural morphology, and histological analysis. PhD-project 2021–2026. Diego Moreno Moran, PI Rhian Waller.

The collected settlement rack was used to study settlement dynamics of reef associated fauna. The study was made within the LIFE Lophelia project where a method was developed to restore *Desmophyllum pertusum* corals and artificial reefs were deployed in the Koster–Väderö fjord. The camera was deployed within the PhD-project by Diego Moreno Moran to try to detect and record coral spawning *in situ*, something which have never been documented in *Desmophyllum pertusum*. All data collected and results obtained we aim to publish in peer-reviewed scientific articles.

Recent publications from these projects include:

Strömberg S M, Larsson A I (2025). Field trials testing material composition and surface complexity and the effects on benthic faunal recruitment at a Cold-Water Coral reef site. *Frontiers in Environmental Science* **13**:1561412. DOI: 10.3389/fenvs.2025.1561412

Strömberg S M, Rossi M, Vonderscher P, Larsson A I (2025). Settling assays testing the substrate preference of larvae of the cold-water coral *Desmophyllum pertusum* (syn. *Lophelia pertusa*). *Frontiers in Environmental Science* **13**: 1561433. DOI: 10.3389/fenvs.2025.1561433

Moreno-Moran D, Acevedo-Romo I, Häussermann V, Försterra G, Havenhand J N, Larsson A I, Waller R G (2026) In vitro experimentation shows species-specific fertilisation strategies in two structurally distinct *Desmophyllum* cold-water coral species. *Coral Reefs* <https://doi.org/10.1007/s00338-026-02908-w>

Tjärnö 2026-09-25

Ann Larsson