

MiningImpact: “Ecological Aspects of Deep-Sea Mining”

Open stakeholder day and final scientific discussion meeting

18-20 October 2017

Flett Theatre, Natural History Museum, London



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MiningImpact - Final Meeting Agenda

This is the final meeting of the large collaborative project MiningImpact (25 research institutes from 11 countries, funded through JPI Oceans) on assessing the environmental impacts of deep-sea mining. MiningImpact has revisited several benthic impact experiments that have been carried out up to 40 years ago in the nodule areas of the eastern equatorial Pacific. This is an exclusive opportunity to learn about the latest scientific results.

18 October – Open Stakeholder Day, Press Q&A and Evening Reception

- 12:00 Light Lunch and Registration
(Flett Theatre, Natural History Museum)
Entrance to the Flett Theatre is on Exhibition Road.
- 13:00 Welcome Remarks
- 13:15 Introduction (*Dr. Matthias Haeckel*)
- 13:30 Highlights of New Scientific Results of the Project
- 14:30 Scientific Discussion on Deep-Sea Mining Impacts:
- Effects of mining on seafloor fauna
(*Prof. Dr. Ann Vanreusel*)
 - Do seafloor microbes care about mining? – and does it matter?
(*Dr. Felix Janssen*)
 - How far can a mining-related sediment plume spread?
(*Dr. Annemiek Vink*)
 - Management and monitoring
(*Dr. Daniel Jones*)
- 16:00 Break
- 16:30 Panel Event and Press/Stakeholder Q&A
“Deep-sea Mining: The Bigger Picture”
A panel event to discuss the broader implications of the JPI Oceans Deep-Sea Mining research including representation from science, regulators, industry and NGOs.
- Chair: Dr Adrian Glover, Natural History Museum Deep-Sea Research Group.*
- *Dr. Kristina Gjerde (IUCN & DOSI, Deep Ocean Stewardship Initiative)*
 - *Dr. Matthias Haeckel (GEOMAR)*
 - *Prof. Dr. Ann Vanreusel (Ghent University)*
 - *Dr. Gordon Paterson (NHM & member of the Legal and Technical Commission, ISA)*
 - *Chris Williams (UK Seabed Resources Ltd)*
- 18:00 Evening Reception in the Darwin Centre Atrium.
Invitation to all participants and guests.
Entrance to the evening reception is from Queensgate.

MiningImpact - Final Meeting Agenda

19 October (Flett Theatre, Natural History Museum)

09:00 Introduction and Data Management (Matthias Haeckel, Pina Springer)

09:30 WP1 (Daniel Jones & Jens Greinert)

Overview of WP1: what did we achieve (Jens Greinert)

News from BIIGLE: Fast image browsing and first results from deep - learning based object detection (Tim Nattkemper et al.)

AUV-based small scale quantitative predictive mapping of Mn-nodules (CCZ) (Timm Schoening et al.)

Habitat mapping with the OFOS camera system in the DISCOL region (Autun Purser et al.)

Scars in the abyss – reconstructing the initial impact of the DISCOL deep-sea plough experiment (Florian Gausepohl et al.)

First assessment of fauna inhabiting the seamounts at CCZ (Daphne Cuvelier et al.)

11:00 Break

11:30 WP2 (Ann Vanreusel & Pedro Martinez)

Introduction (Pedro Martinez Arbizu)

Biodiversity and distribution of abyssal scavengers (Tasnim Patel et al.).

Is COI overestimating species diversity in the abyss? The case of *Pseudotachidius bipartitus*. (Uwe Raschka et al.)

Deep-sea glass sponges (Hexactinellida) from polymetallic nodule fields in the Clarion-Clipperton Fracture Zone (CCFZ), NE-Pacific. (Daniel Kersken et al.)

Observations on faunal abundances and behaviours in the DISCOL Experimental Area 26 years after physical disturbance. (Autun Purser et al.)

Spatial variability of nematode assemblages in the East pacific. (Lara Macheriotou et al.)

High genetic diversity and connectivity in common CCZ taxa (Thomas Dahlgren et al.)

13:00 Lunch Break



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14:00 WP3 (Felix Janssen & Dick van Oevelen)

Introduction (Dick van Oevelen, Felix Janssen)

Long-term impacts of the DISCOL manganese nodule mining experiment on sediment and pore water geochemistry (Sophie Paul et al.)

Impact of mining activities on the composition and degradation rates of organic matter in benthic abyssal ecosystems of the Clarion Clipperton Fracture Zone (Pacific Ocean) (Roberto Danovaro et al.)

Update on stable isotope- and lipid based mapping of benthic food webs of nodule ecosystems with a focus on sponges and ophiuroids (Ana Colaço et al.)

Recovery dynamics of carbon flows in an abyssal food web following an experimental disturbance in the Peru Basin (Tanja Stratmann et al.)

Responses of meiobenthos to burial with toxic and non-toxic material (Lisa Mevenkamp et al.)

Wrap up and final discussion

15:30 Break

16:00 WP4 (Annemiek Vink & Henko de Stigter)

Quick overview of WP4 activities (A. Vink)

Thermistor chain results: Dynamics of the bottom boundary layer (H. de Stigter et al.)

Analyses of trace metals in plume samples (Sophie Paul et al.)

17:30 End

We are happy to welcome you to the

19:00 Joint Dinner

Comptoir Libanais on Gloucester Road
(registration and online payment mandatory)



MiningImpact - Final Meeting Agenda

20 October (Flett Theatre, Natural History Museum)

09:00 Day 2 continued (WP4)

Characterisation and hydrodynamic behavior of plume sediments from the CCZ (Laurenz Thomsen et al.)

Sediment plume transport in the deep Pacific Ocean caused by deep-sea mining: modelling scenarios at different output scales (Kevin Purkiani et al.)

10:30 Break

11:00 Wrap-Up MiningImpact I

12:00 Lunch (please find your own lunch)

13:00 – 15.30/16.00 Discussion on MiningImpact II

16:00 Meeting Ends

