



## Let's talk about Marine Biodiversity

📅 9 June 2025 – 10:30 am - 1:30 pm CEST

📍 Inspire Area – European Digital Ocean Pavilion

🌐 United Nations Ocean Conference 2025

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### Abstract

Over 400 citizens joined scientists at UNOC3 at the INSPIRE Marine Biodiversity Session in the Digital Ocean Pavilion with excitement and hope that UN nations will partner on advancing biodiversity monitoring and understanding to make predictions of marine biodiversity a reality to improve decision making.

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The main takeaway message of the marine biodiversity session held at UNOC3 Digital Ocean pavilion is that marine biodiversity conservation is about people. It takes all of us across many parts of society to conserve life from the mighty plankton to the majestic whales. All this while we try to secure food provisions, power our society, and fuel our economies.

During the session at UNOC3, we learned about the many benefits of Marine life and also about the many threats to biodiversity that, in the end, effectively are threats to us. Over the past 100 years, our knowledge of the physical, biogeochemical and geological environment has grown exponentially, and yet we are still behind in understanding life. Many examples of gaps in our knowledge, from the deepest ocean to our coasts, were outlined. We heard about the problem of bycatch, the efforts to map the shallowest to the deepest habitats and the water column in between, about offshore technologies to do aquaculture and energy harvesting, and the progress in our ability to forecast life and build good scenarios. We are making great progress in refining models to test management options, but there is still a need for improvement. We heard about networks to help us build knowledge more efficiently, so we can provide information to decision-makers.

A big challenge is simply public understanding about how much we depend on marine biodiversity. We heard that the public is interested in the stories that make all the technology, knowledge, and human challenges personal, and how we can better use the arts to win hearts, minds, and partnerships.

From a scientific point of view, we have incredible technologies that are becoming more accessible:





- Advances in sensors and platforms like profiling Argo floats , animal tracking and bio-logging, submersibles, and cameras that can reach deeper depths,
- Omics, imaging, passive and active acoustics, satellite remote sensing,
- Advances in computing.

Researchers are collaborating with different communities to increase measurements of biodiversity, especially with user communities like fishermen and other industries. A very important effort is education and capacity building at all levels.

But the key to making progress is to work together in a way we have not done before. We have multiple networks interested in similar goals. Some very significant challenges are to align efforts on monitoring, publishing data, and ensuring global coordination through outreach and collaborations. Working toward this challenge will allow answering questions about life at a scale not possible before.

There are also massive efforts to link social sciences and the natural sciences, the new methods to monitor biodiversity, and traditional ways of knowing. There are enormous efforts underway to work within different knowledge systems, including those of indigenous and local peoples.

There is also a need for innovation in financing and funding these many knowledge streams for conservation.

We also heard a strong call to update our laws; that we need to link the measurements we make to policy to make sure that laws are effective.

We can see all of these interlinked themes in the political meetings that took place in Nice at the UNOC3.

We are primed to have collaborations around marine biodiversity monitoring and modelling, and using this knowledge as we have not done before. We welcome all to join us as we link networks.

### **Organizers:**

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Frank Muller-Karger (University of South Florida, Marine Biodiversity Observation Network/MBON)

Joana Soares (AIR Centre, Marine Biodiversity Observation Network/MBON)

Henri Landes (Landestini)





## Speakers:

Antonio Novellino

Cooper Van Vranken

Cyrielle Delvenne

Francesco Tomasinelli

Frank Muller-Karger

Hervé Claustre

Laurence Fauconnet

Lea David

Marcial Bardolet

Marine Vernet

Paola Tepsich

Stefano Ciavatta

Thomas Capiten

Digital Ocean demonstration:

Fabrice Messal

Interview:

Lewis Pugh (United Nations Patron of the Ocean)

