

Thursday, December 2, 2010

Workshop

From discovery to conservation of marine biodiversity

16:00 - 18:00

[Parallel Workshop](#) related to Plenary sessions 2

Oral presentation

Consequences of altered diversity of marine ecosystem processes

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Experimental evidence suggests that the human-induced alterations of biodiversity affect important processes in ecosystems and the ability of ecosystems to respond to global change. This represents a major paradigm shift as diversity is no longer seen as a descriptive trait of communities caused by abiotic and biotic factors but as an important driver for emergent properties of ecosystems. Despite the rapid theoretical and empirical advancement in this field, there is remaining uncertainty about the role of diversity in natural ecosystems compared to the defined settings of laboratory experiments and mathematical models. In this talk, I will summarize recent conceptual ideas about the importance of diversity for the functioning of natural ecosystems, focussing on multiple concurrent ecosystems functions and the importance of spatial scale and connectivity between habitats. I will address the question of whether diversity is mainly the response to external factors or the cause of internal processes in ecosystems. Finally, I will show recent data on cases where diversity increased due to the spread of exotic species.