



MARISCO Project Recommendations

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Biodiversity assessments need multiple metrics; single metrics lead to false interpretations

Few commonalities exist between diverse organism groups and their responses to drivers of biodiversity <a href="mailto:change">change</a>

Biodiversity change happens in response to various biotic and abiotic factors that no one metric can quanitfy

Relying on single metrics can lead to false or incomplete conclusions and ultimately bad management practices

Continuous, high precision monitoring of multiple biodiversity metrics and its environmental drivers is required for more accurate interpretations

Tracking biodiversity change requires high frequency, continuous data

Each of the analyzed metrics offered different insights on the state of biodiversity and they should only be looked at in <u>unison</u>

The resulting, holistic, high precision view gained on biodiversity change will aid in determining best management strategies

All marine biodiversity management is multilevel from local to global scales, single level solutions will reinforce the observed implementation deficit

Implementation deficits occur in biodiversity management when policy measures are too broad for the challenges faced locally, or when local solutions are too small scale to make large impacts; management decisions must be holistic across scales

Marine ecosystems are inherently interconnected and neither pollution nor organisms abide by human made boundaries

Knowledge needs to be coproduced alongside local, regional, and global stakeholders

Abandon the idea that a policy threshold like the 2°C-climate target exists for biodiversity change - we need to look for alternatives to manage it

There are often time lags between environmental drivers (e.g. a pollution event) and the corresponding shifts in biodiversity

The creation of 'acceptable loss' targets creates the ethical dilemma of deeming some species dispensable

Unidimensional policy responses do more harm than good by attempting to influence one driver of change while ignoring others

Original Publications from the MARISCO Project

Dajka JC, Antonucci di Carvalho J, Ryabov A, Scheiffarth G, Rönn L, Dekker R, Peters K, Leberecht B, Hillebrand H (2022) Modelling drivers of biodiversity change emphasizes the need for multivariate assessments and rescaled targeting for management; Conservation Science and Practice