ID: W2548210437

TITLE: Large marine protected areas represent biodiversity now and under climate change

AUTHOR: ['Tammy E. Davies', 'Sara M. Maxwell', 'Kristin Kaschner', 'Cristina Garilao', 'Natalie C. Ban']

ABSTRACT:

Abstract Large marine protected areas (>30,000 km 2 ) have a high profile in marine conservation, yet their contribution to conservation is contested. Assessing the overlap of large marine protected areas with 14,172 species, we found large marine protected areas cover 4.4% of the ocean and at least some portion of the range of 83.3% of the species assessed. Of all species within large marine protected areas, 26.9% had at least 10% of their range represented, and this was projected to increase to 40.1% in 2100. Cumulative impacts were significantly higher within large marine protected areas than outside, refuting the critique that they only occur in pristine areas. We recommend future large marine protected areas be sited based on systematic conservation planning practices where possible and include areas beyond national jurisdiction, and provide five key recommendations to improve the long-term representation of all species to meet critical global policy goals (e.g., Convention on Biological Diversity?s Aichi Targets).

SOURCE: Scientific reports

PDF URL: https://www.nature.com/articles/s41598-017-08758-5.pdf

CITED BY COUNT: 72

PUBLICATION YEAR: 2017

TYPE: article

CONCEPTS: ['Marine protected area', 'Convention on Biological Diversity', 'Marine biodiversity', 'Marine conservation', 'Biodiversity', 'IUCN protected area categories', 'Marine reserve', 'Geography', 'Range (aeronautics)', 'Marine species', 'Climate change', 'Conservation biology', 'Environmental resource management', 'Protected area', 'Marine spatial planning', 'Ecology', 'Habitat', 'Environmental planning', 'Environmental science', 'Biology', 'Materials science', 'Composite material']