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Contribution to the Themed Section: 'Marine recreational fisheries – current state and future opportunities'

A cross continental scale comparison of Australian offshore recreational fisheries research and its applications to Marine Park and fisheries management

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Recreational fishing is popular in Australia and is managed by individual states in consultation with the Commonwealth for those fisheries that they regulate and also for Australian Marine Parks (AMPs). Fishers regularly access both state and offshore Commonwealth waters but this offshore component of the recreational fishery is poorly understood. Our study tested the functionality of existing state-based surveys in Western Australia (WA) and New South Wales (NSW) to better inform Commonwealth fisheries and AMP managers about recreational fishing in their jurisdictions. Catch estimates for nine species of interest to the Commonwealth were developed and two case study AMPs [Ningaloo (WA) and The Hunter (NSW)] were also chosen to test the ability of the state survey data to be disaggregated to the park scale. As each state's fishery survey designs were contextual to their own management needs, the application of the data to Commonwealth jurisdictions were limited by their statistical power, however aspects of each states surveys still provided useful information. Continued evolution of state-wide survey methods, including collection of precise spatial data, and regional over-sampling would be beneficial, particularly where there are multiple stakeholder and jurisdictional interests. National coordination, to temporally align state surveys, would also add value to the existing approaches.

Keywords: cross-jurisdictional fisheries, Hunter Marine Park, marine protected areas (MPAs), marine recreational fisheries (MRFs), national survey, Ningaloo Marine Park, offshore fisheries.