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Uncovering social and ecological changes in recreational fisheries using popular media

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World-wide, millions of people take part in recreational fishing activities, but our understanding of recreational resource use, how this impacts upon marine ecosystems and what motivates recreational fishers' targeting choices remains incomplete, particularly when considering these questions from a historical perspective. In Australia, recreational fishing has a long history and forms a significant component of the total harvest for a number of coastal marine species; however, time series on catch and effort are limited. We examined government reports, popular books, newspaper and magazine articles published between 1870 and the present day, with the aim to source information on east coast recreational fishing activities over this period. Recreational catches and catch rates (n fish fisher⁻¹ unit of fishing effort⁻¹) were commonly reported in newspaper articles during the 20th century, enabling species and location-specific time series to be constructed. Locations fished were also reported, enabling us to chart spatial shifts in fishing effort over time. Rich qualitative detail also provided insights into the factors driving these changes, including changing social norms and attitudes among recreational fishers, thus aiding our interpretation of observed changes. However, popular media also presented hurdles to analysis, including uncertainty, reporting bias and missing information, which we dealt with using triangulation and imputation methods. In addition to providing a fuller understanding of ecological and social changes, popular media provides information in a form that resonates with stakeholder groups and the wider public, potentially providing an additional bridge between science and policy.

Keywords: ecological change, digital media, fishing, historical ecology

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