

Abstract

There exists a complex set of interactions between socioeconomic, biological and institutional factors that makes it difficult to predict whether the potential benefits of marine protected areas (MPAs) will be higher than the potential costs. In this paper we discuss those potential benefits and costs and review the bioeconomic literature on marine reserve design with the aim of guiding scientists and policymakers who are interested in understanding the tradeoffs associated with MPAs. We also propose agent based modelling approaches as promising frameworks for future analysis.