

# 琉球大学学術リポジトリ

Assessing ecological and fisheries-related effects of marine protected areas on fishing communities: which methods for which indicators?

メタデータ	言語: English 出版者: 琉球大学21世紀COEプログラム 公開日: 2008-10-07 キーワード (Ja): キーワード (En): 作成者: Pelletier, Dominique, Claudet, Joachim, Ferraris, Jocelyne メールアドレス: 所属:
URL	<a href="http://hdl.handle.net/20.500.12000/7412">http://hdl.handle.net/20.500.12000/7412</a>

**Assessing ecological and fisheries-related effects of marine protected areas on fishing communities: which methods for which indicators?**

**Dominique Pelletier<sup>1</sup>, Joachim Claudet<sup>2</sup> & Jocelyne Ferraris<sup>3</sup>**

<sup>1</sup>Departement Ecologie et modeles pour l'halieutique. Ifremer. BP 21105. 44311 Nantes Cedex 03. France. email:

Dominique.Pelletier@noumea.ird.nc

<sup>2</sup> Fre 2935 CNRS-EPHE. Universite de Perpignan. 66860 Perpignan Cedex

<sup>3</sup> UR 128 Coreus-IRD. Universite de Perpignan. 66860 Perpignan Cedex

Marine protected areas (MPA) are becoming a major tool for biodiversity conservation and fisheries management. It is thus indispensable to monitor MPA and assess their performance with respect to management objectives. Two approaches are generally used to assess ecological and fisheries-related effects of MPA. 1- Statistical models based on field data, which yield a diagnosis of the impact of the ecosystem and resources, they are also necessary to define sampling strategies of monitoring program. 2- mathematical models which quantify the consequences of MPA on the dynamics of resources and fish communities, and enable exploring MPA design issues.

We review potential indicators of MPA effects obtained by each approach and we underline methodological problems that impede MPA assessment and subsequent indicator estimation. Recent methodological developments are presented. Indicators used for decision support are based on these two approaches and are designed in collaboration with MPA managers.

The poster presents the work of the Liteau/AMP project and includes a set of contrasted case studies, including New Caledonia.