

## Ecological Data in Integrated Coastal Zone Management: Case Study of *Posidonia oceanica* Meadows Along the Corsican Coastline (Mediterranean Sea)

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**Abstract** Integrated Coastal Zone Management (ICZM) contributes towards maximizing the benefits provided by the coastal zone and minimizing conflicts and the harmful effects of activities upon each other. The coastal zone includes highly productive and biologically diverse ecosystems, but ecological data (including structure and processes) seem to be neglected. The purpose of this article is to present a case study of *Posidonia oceanica* meadows (seagrass beds) along the Corsican coastline (Mediterranean Sea) in order to exemplify the usefulness of ecological data to Integrated Coastal Management programs. We will try to determine how the use of organisms could be enhanced. These investigations show the undoubted success of the Corsican *Posidonia oceanica* protection program, with a detailed description of the ICZM that precisely presents each component (e.g., mapping, assessment of water quality, implementation of a system to aid decision-making concerning the installation of new aquaculture units). This experience on the Corsican coasts could be used as an example in order to transfer to other locations in the Mediterranean Sea and/or to other target species.

**Keywords** Ecological data · ICZM · Mediterranean Sea · *Posidonia oceanica* · Resource base · Legislative aspects

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