summary

Posidonia oceanica monitoring is a fundamental tool for measuring the status and trends of meadows and environmental conditions and it is crucial to detect early decline trends. Posidonia oceanica meadows in future Katich Marine Protected Area have been investigated in order to assess their conservation status and a monitoring plan has been designed to identify changes in seagrass meadows over time.

The first survey was carried out in the summer/autumn 2012 following standardized protocols based on informative and replicable actions which are, at the same time, achievable in a short time period and can be adopted with limited funding resources. This survey represents the baseline for periodical annual sampling to get reliable information and to ensure that habitat changes are monitored and managed appropriately. It is an important step in reaching a standardized approach for Posidonia oceanica ecosystems monitoring at a Mediterranean level.

Results should be critical to suggest decision makers with management tools for reducing human pressures on the meadows and promoting a sustainable approach to human activities in the future Katich MPA.

Conclusions

Findings of this project will allow to:

- transfer know-how on scientific methods for P. oceanica monitoring
- provide basic information on P. oceanica conservation status in future Katich MPA
- collect necessary data for charting and zoning in future MPA
- create a net of operators, scientists, managers of different Mediterranean countries all involved in studies, monitoring and protection of P. oceanica meadows

Materials and methods

Actions to be carried out

- Assessment of meadow shoot density and classification according to density and depth (Pergent et al. 1995; Buia et al. 2004)
- Assessment of % cover of live P. oceanica, dead matte and substrates (Blanch et al. 2004; Montefalcone et al. 2007)
- Assessment of Conservation Index (Moreno et al. 2001; Montefalcone et al. 2006)
- Laboratory analysis
- Comparison of various field data
- Development of Blue carbon study
- Making educational film about the Project

Relevant literature