

Contribution of side scan sonar to the management of Mediterranean littoral ecosystems

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(Received 6 January 1998; in final form 7 December 1998)

Abstract. The bathymetric range of seagrass beds represents a valuable biological indicator of littoral water quality. In order to contribute to the management of this natural heritage, an attempt was made to determine the status of *Posidonia oceanica* seagrass beds along the Mediterranean Corsican coast. The manual interpretation of images obtained using side scan sonar was used to accurately determine the lower depth limit of *P. oceanica* (– 32 m) and this work confirms the overall good quality of the littoral waters in this region of the Mediterranean. Particular structures which are directly linked to various human activities were identified manually, however, as were differences in sonogram texture. An attempt was thus made to automate processing of the sonograms in order to accurately identify and quantify these different formations.